



**STATE OF NEW JERSEY**  
**Board of Public Utilities**  
**Two Gateway Center**  
**Newark, NJ 07102**  
**www.nj.gov/bpu/**

**CLEAN ENERGY**

IN THE MATTER OF COMPREHENSIVE ENERGY	)	Order Establishing
EFFICIENCY AND RENEWABLE ENERGY	)	2009 – 2012 Funding Level
RESOURCE ANALYSIS FOR THE 2009 - 2012	)	
CLEAN ENERGY PROGRAM	)	DOCKET NO. EO07030203

(SERVICE LIST ATTACHED)

BY THE BOARD:

This Decision and Order memorializes and provides the reasoning for the decisions rendered by the Board of Public Utilities ("Board" or "BPU") in this matter at its August 7, 2008 public agenda meeting. The structure of this Decision and Order is set forth in the following Table of Contents.

## TABLE OF CONTENTS

<b>I. BACKGROUND.....</b>	<b>3</b>
<b>II. PROCEDURAL HISTORY.....</b>	<b>4</b>
<b>III. OCE STRAW PROPOSAL.....</b>	<b>5</b>
A. Renewable Energy .....	9
Renewable Portfolio Standard Goals and the CRA .....	11
Proposed CRA Renewable Funding Levels .....	12
Potential RE Targets Related to Straw Funding Levels .....	13
Wind Market Development.....	15
Biomass Market Development .....	15
B. Energy Efficiency.....	16
Potential Energy Savings, Benefits and Avoided Costs and Impacts for EE Programs.....	20
Electric and Natural Gas Rate Impacts .....	23
<b>IV. SUMMARY OF COMMENTS TO THE STRAW PROPOSALS.....</b>	<b>24</b>
A. General Comments.....	24
B. Ratepayer Impacts .....	26
C. Renewable Energy .....	29
Funding .....	29
Solar.....	30
Wind .....	32
Biomass .....	34
Clean Energy Technology Fund.....	35
D. Energy Efficiency.....	36
General .....	36
Energy Efficiency - Setting Goals and Budgets .....	37
Energy Efficiency Portfolio Standard.....	38
On-Bill Financing Services .....	38
Caps on C&I Incentives.....	39
Allocation of EE Funds.....	40
E. Responses to Questions in Second Revised Straw .....	42
<b>V. OCE RECOMMENDATIONS .....</b>	<b>48</b>
A. 2009 – 2012 Funding Levels .....	48
B. Funding Allocation .....	50
C. Rate Impacts .....	52
<b>VI. DISCUSSIONS AND FINDINGS.....</b>	<b>55</b>

## **I. BACKGROUND**

On February 9, 1999, the Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 et seq. ("EDECA" or "the Act") was signed into law. The Act established requirements to advance Energy Efficiency ("EE") and Renewable Energy ("RE") in New Jersey through the societal benefits charge ("SBC"), at N.J.S.A. 48:3-60(a)(3). EDECA further empowered the Board to initiate a proceeding and cause to be undertaken a comprehensive resource analysis of energy programs, currently referred to as the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis ("CRA"). After notice, opportunity for public comment, public hearing, and consultation with the New Jersey Department of Environmental Protection ("NJDEP"), within eight months of initiating the proceeding and every four years thereafter, the Board is to determine the appropriate level of funding for EE and Class I RE programs, now called New Jersey's Clean Energy Program ("NJCEP"), that provide environmental benefits above and beyond those provided by standard offer or similar programs in effect as of February 9, 1999.

As required by the Act, in 1999 the Board initiated its first comprehensive EE and RE resource analysis proceeding. At the conclusion of this proceeding, the Board issued its initial Order, dated March 9, 2001, Docket Nos. EX99050347 et al. ("March 9th Order"). The March 9<sup>th</sup> Order set funding levels for the years 2001 through 2003, established the programs to be funded and budgets for those programs. By Order dated July 27, 2004, Docket No. EX03110945 et al., the Board set the funding level for 2004 and established the programs to be funded and budgets for those programs.

By Order dated December 23, 2004, Docket No. EX04040276 ("December 23, 2004 Order"), the Board concluded its second CRA proceeding, set funding levels for the years 2005 through 2008, and approved 2005 programs and budgets. The Board approved funding levels of \$140 million ("M") for 2005, \$165 M for 2006, \$205 M for 2007 and \$235 M for 2008.

On August 19, 2005, the New Jersey Department of the Treasury, Division of Purchase and Property ("Treasury") issued, on behalf of the Board, Request for Proposal 06-X-38052 for NJCEP Management Services. Honeywell International, Inc. ("Honeywell") was selected as the Market Manager for residential EE and RE programs and TRC Energy Services ("TRC") was selected as the Market Manager for commercial and industrial EE programs. On October 19, 2006, Treasury issued a contract to Honeywell and to TRC to provide program management services.

By Order dated September 14, 2006, Docket No. EX04040276, the Board approved final programs and budgets for NJCEP for 2006.

On March 20, 2007, Treasury issued, on behalf of the Board, Request for Proposal 07-X-38468 for NJCEP Program Coordinator Services. Applied Energy Group was selected to provide program coordinator services and a contract for these services was issued by Treasury on July 10, 2007.

By Order dated December 22, 2006, Docket No. EX04040276, the Board approved final programs and budgets for NJCEP for 2007. The Board noted in that Order that it is in the process of transitioning many of the EE and RE programs from the utilities and the Office of Clean Energy ("OCE") to the Market Managers. Since the issuance of the contracts by Treasury, OCE has worked closely with Honeywell, TRC and the utilities to transition the programs. Honeywell and TRC commenced management of all of the programs being

transitioned by April 1, 2007. By Order dated March 31, 2008, Docket No. EX04040276, the Board approved final programs and budgets for New Jersey's CEP for 2008.

As set forth at N.J.S.A. 48:3-60a(3), EDECA provides that after the eighth year, the Board shall make a determination as to the appropriate level of funding for EE and Class I programs. Furthermore, EDECA provides that the Board shall determine, as a result of a comprehensive analysis, the programs to be funded by the SBC and the level of cost recovery and performance incentives for old and new programs. As a result of the requirements in EDECA and the aforementioned Orders, by Order dated April 27, 2007, Docket No. EO07030203, ("April 27<sup>th</sup> Order"), the Board directed the OCE to initiate a third proceeding and to schedule public hearings on program funding and funding allocations for the comprehensive EE and RE resource analysis programs for years of 2009-2012.

The Board's April 27<sup>th</sup> Order requested comments on a number of issues set out in the Order that may impact NJCEP funding levels and programs for 2009 through 2012. Interested parties were provided with an opportunity to comment on any issue related to this proceeding, but were asked to also consider the issues outlined in the Order.

## **II. PROCEDURAL HISTORY**

The Board's April 27<sup>th</sup> Order scheduled public hearings in this proceeding for September 25 and October 16, 2007. However, due to delays in the release of the State's Draft Energy Master Plan ("EMP"), which the Board believes is integrally related to the CRA funding levels, the Board postponed these hearings.

On February 14, 2008, the Board issued a Public Notice regarding this proceeding that included scheduled hearing dates. The Public Notice was faxed to numerous publications to be published. Public hearings chaired by Commissioner Fiordaliso were held on April 22, 2008 in Newark, New Jersey and May 6, 2008 in Trenton, New Jersey. The notice also indicated that written comments would be accepted until May 6, 2008.

On January 11, 2008, the OCE posted an initial draft straw proposal on its website recommending funding levels for NJCEP for the years 2009 – 2012. The OCE's initial straw proposal was discussed at a meeting of the EE Committee of the Clean Energy Council ("CEC")<sup>1</sup> on February 28, 2008 and at meetings of the RE Committee on February 13, 2008 and March 11, 2008. Written comments on the initial OCE straw proposal were accepted by OCE staff through March 4, 2008.

Based on written comments received and comments made at the CEC Committee meetings, OCE issued a first revised straw proposal dated March 26, 2008. The first revised OCE straw proposal was presented to the CEC on March 27, 2008 and discussed at meetings of the RE and EE committees on April 8 and 15, 2008 respectively. Based on comments provided at these meetings concerning the first revised OCE straw proposal, the OCE issued a proposal dated April 15, 2008 that was posted on or about April 18, 2008 ("OCE Second Revised Straw" or "Proposal"). A summary of the OCE's Second Revised Straw as well as all of the comments received is provided below.

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<sup>1</sup> The CEC is a stakeholder process open to members of the public for discussion of Clean Energy programs and issues.

The CRA requires consultation with NJDEP as part of the decision process, and such consultation was provided by NJDEP through its participation in the EE and RE Committee meetings noted above and as a participant in the Clean Energy Council meetings. NJDEP has provided in writing on August 5, 2008 its confirmation of support of the proposed funding levels.

The Board engaged Rutgers Center for Energy, Economic, and Environmental Policy ("CEEEP") to perform a cost benefit analysis of the NJCEP. Summit Blue Consulting ("Summit Blue") completed an EE Market Assessment report for the Board in June 2006 that includes a number of proposed modifications to the existing programs. An assessment of the RE marketplace, also prepared by Summit Blue, was issued in March 2008. Also, CEEEP and Applied Energy Group prepared an update of KEMA's EE Market Potential Study that was issued in 2004 as part of the second comprehensive resource analysis proceeding. These reports are included as part of the record in this proceeding and were made available for comment prior to any public hearings. As reports were finalized and available they were distributed to the Clean Energy Council and Committees as well as posted on the Board and NJCEP websites.

### **III. OCE STRAW PROPOSAL**

The following sets out the main components of the OCE's Second Revised Straw:

As set forth in the Board's April 27<sup>th</sup> Order, the 2009 through 2012 funding levels must support and implement the goals and strategies of the Draft EMP. The OCE noted that the Board has engaged the Northeast Energy Efficiency Partnerships ("NEEP") to develop a proposed portfolio of EE programs designed to achieve the goals that have been set for the Draft EMP. The EE and RE goals set out in the Draft EMP are to:

1. Reduce electricity consumption 20% by 2020
2. Produce 22.5% of electricity demand through renewable resources by 2020.

The NJCEP 2009-2012 programs and savings goals must also be coordinated with energy savings measures proposed in the Draft EMP including Combined Heat and Power ("CHP") and Demand Response measures ("DR"). The Draft EMP goals for these initiatives are as follows:

1. 2,200 MW of DR by 2020, and
2. 1,500 MW of CHP by 2020.

The funding for the above initiatives and goals (including DR, CHP, EE and RE) must be developed in a coordinated and integrated manner, particularly in the delivery and marketing/education/communication of these specific programs and incentive measures.

The major objective of OCE's Second Revised Straw for the NJCEP 2009-2012 funding levels is to assist New Jersey customers in achieving the Draft EMP goals in the most efficient and effective manner. The proposed four year funding level is designed in part to begin to implement the Draft EMP goals to reduce energy use and demand, increase clean energy generation, reduce the environmental impacts of energy generation and use, increase energy related jobs, and lower energy costs. The energy infrastructure decisions that are made today should be designed to assist the State in achieving these energy reduction and clean generation goals.

It is important to commence the discussions of the next four year funding levels now, even though the Draft EMP and NEEP work is ongoing. It is likely that the final decisions made in these processes will influence the future funding levels, especially in the later years. However, in order to continue program momentum it is necessary to put in place the next four year funding level, while recognizing that it may be revisited based on the work currently being conducted.

The 2009 through 2012 funding level must also assist in achieving the Greenhouse Gas ("GHG") Emission requirements for 2020 and 2050, as set forth in the New Jersey "Global Warming Response Act", L. 2007, c. 112, (codified at N.J.S.A. 26:2C-51). The goals of this Act are as follows:

1. Achieve 1990 GHG emission levels by 2020, and
2. 80% reduction in 2006 GHG emission levels by 2050.

As initially estimated by the NJDEP in its GHG reporting pursuant to the Global Warming Response Act, approximately 80% of the anticipated savings in GHG emission levels needed to achieve the 1990 GHG reduction goal by 2020 will come from EE and RE measures. In order to meet the 80% reduction provision in 2006 GHG levels by 2050, New Jersey will have to approach a carbon neutral energy infrastructure in its transportation, electricity, and heating usage. The actions the Board takes by this Order have to begin to put us on the right track to achieve this goal.

It will take more than increased funding to reach these savings goals. Successful efforts to reach ambitious levels of savings share several common characteristics:

1. A long term, statewide plan for EE,
2. Programmatic approaches that leverage established standards and protocols,
3. A flexible and nimble implementation strategy that allows innovation and experimentation,
4. A stable administrative structure over time for EE services delivery,
5. Adequate and predictable resources - meeting the new goals will cost more than New Jersey is spending on EE now, and ramping up spending is difficult if funding is uncertain,
6. Some form of centralized, statewide administration to ensure consistent EE service delivery.

In its initial straw proposal OCE estimated that in order to achieve the EE Draft EMP goals, in the next year we would need to double the cumulative savings achieved through the NJCEP over the six year period from 2001 to 2006. This implied that the level of EE program savings would need to increase approximately six-fold to achieve the Draft EMP goals. This could be achieved by either additional NJCEP SBC funding in current programs or fully revising the program's incentive delivery mechanism.

However, the budgets and saving goals filed by the Market Managers for the 2008 EE programs are estimated to reduce electricity usage by approximately 0.67%. This implies that we would need to increase energy savings by about 2 to 3 times to achieve the Draft EMP goals as opposed to by about 6 times as estimated in the initial straw proposal. If the new estimates are correct, we can come much closer to achieving the Draft EMP goals utilizing the proposed funding levels.

The solar transition recently approved by the Board provides a potential roadmap for revisions to the EE programs.<sup>2</sup> The solar transition took over a year to develop and regulations fully implementing the changes will likely take another year to complete. It is anticipated that a similar time period would be needed to transition to a different model for advancing EE.

Since 2001 the NJCEP has achieved the following annual and cumulative lifetime savings and RE generation:

**Table 1: 2001 through 2007 NJCEP Results**

	Electric Savings	Natural Gas Savings	Renewable Energy Capacity	Renewable Energy Generation
	MWh	Dtherms	kW	MWh
<b>2001 – 2007</b>	<b>1,446,739</b>	<b>3,083,151</b>	<b>85,168</b>	<b>338,947</b>
<b>Annual average</b>	<b>206,677</b>	<b>440,450</b>	<b>12,166</b>	<b>48,421</b>
<b>Maximum</b>	<b>328,513</b>	<b>931,746</b>	<b>42,821</b>	<b>224,281</b>
<b>Minimum</b>	<b>50,683</b>	<b>243,146</b>	<b>8</b>	<b>11</b>
<b>Cumulative Lifetime 2001 - 2007</b>	<b>19,408,672</b>	<b>50,487,771</b>	<b>85,168</b>	<b>4,282,937</b>

The savings shown in the table above were updated from the OCE's initial straw proposal to reflect final 2007 program results. The above savings have been delivered by the following participants in the EE and RE programs:

**Table 2: NJCEP Participants\***

	2001	2002	2003	2004	2005	2006	2007
<b>Residential EE</b>	<b>23,388</b>	<b>28,873</b>	<b>55,109</b>	<b>62,589</b>	<b>50,227</b>	<b>41,498</b>	<b>43,218</b>
<b>Low income</b>	<b>5,848</b>	<b>5,937</b>	<b>6,661</b>	<b>6,706</b>	<b>6,403</b>	<b>8,552</b>	<b>8,484</b>
<b>C&amp;I EE</b>	<b>1,650</b>	<b>9,163</b>	<b>4,209</b>	<b>3,983</b>	<b>2,387</b>	<b>2,094</b>	<b>1,297</b>
<b>Renewable Energy</b>	<b>6</b>	<b>46</b>	<b>58</b>	<b>284</b>	<b>496</b>	<b>1,005</b>	<b>838</b>
<b>Total</b>	<b>30,892</b>	<b>44,019</b>	<b>66,037</b>	<b>73,562</b>	<b>59,513</b>	<b>53,149</b>	<b>53,837</b>

\*Number of rebates or grants issued

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<sup>2</sup> To assist in transitioning solar incentives from rebates to SRECs, the Board ordered an eight-year schedule of Solar Alternative Compliance Payments (SACPs), designed to allow the Solar Renewable Energy Certificates ("SRECs") to respond more flexibly to market pressures and to provide a measure of certainty to the financial markets. I/M/O Renewable Energy Portfolio Standards – Alternative Compliance Payments and Solar Alternative Compliance Payments. December 6, 2007 (Docket No. EO06100744) ("Solar Transition Order").

The Second Revised Straw also provided information on the estimated costs and benefits of the solar transition, the PSE&G Solar loan program, and the Regional Greenhouse Gas Initiative (“RGGI”) allowance auction as set forth in the RGGI amendments to the Global Warming Response Act.<sup>3</sup> The Proposal did not include information on the cost, benefits or value of the utility regulated EE and RE programs as provided in the RGGI amendments (hereinafter referred to as “RGGI Programs”), the GHG Portfolio Standards or the EE Portfolio Standards (“EEPS”) as provided for in the Global Warming Response Act, L. 2007, c. 340, section 13, (codified at N.J.S.A. 48:3-98.1), since no programs had been proposed pursuant to any of these initiatives as of the time the Proposal was prepared. Subsequent to the issuance of the Proposal, PSE&G submitted a carbon abatement filing pursuant to the RGGI amendments, Dkt. No. EO07120928, South Jersey Gas requested a pre-filing meeting with the NJBPU and Rate Counsel staff regarding an anticipated filing, and the Board approved the PSE&G Solar loan program. I/M/O the Petition of Public Service Electric and Gas Company for Approval of a Solar Energy Program and Associated Cost Recovery Mechanism, Dkt. No. EO07040278, (April 8, 2008).

The amendments to, L. 2007, c. 340, section 7, codified at N.J.S.A. 26:2C-51 (also referred to as “RGGI Amendments”), provide for the following uses for the RGGI CO<sup>2</sup> Allowance Auction funds after annual appropriations for administrative costs (hereinafter referred to as “RGGI Auction Programs”):

1. 60% by the New Jersey Economic Development Authority (“NJEDA”) for commercial, industrial and institutional entities to support end-use EE projects and new efficient electric generation facilities that are state of the art as determined by the New Jersey Department of Environmental Protection (“NJDEP”), including but not limited to EE and RE applications to develop CHP production and other high efficiency electric generation facilities, and to stimulate or reward investment in the development of innovative carbon emission abatement technologies with significant carbon emission reduction or avoidance potential. The NJEDA shall develop its grant or other forms of financial assistance programs in consultation with NJBPU and NJDEP.
2. 20% by the NJBPU to support programs that are designed to reduce electricity demand or costs to electricity customers in low-income and moderate-income residential sectors with a focus on urban areas, including efforts to reduce heat island effect and reduce impacts on ratepayers attributable to the implementation of the GWRA. The NJBPU shall develop its programs in consultation with NJEDA and NJDEP.
3. 10% by NJDEP to support programs designed to promote local government efforts to plan, develop and implement measures to reduce GHG emissions, including but not limited to technical assistance to local governments, and awarding grants and other forms of assistance to local governments to conduct and implement EE, RE and distributed energy programs and land use planning

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<sup>3</sup> During the pendency of this proceeding, many stakeholders referred to these amendments as the “RGGI amendments,” and to actions taken pursuant to these amendments as “RGGI filings” or “RGGI programs,” so this terminology has been retained for the sake of clarity; the Board notes, however, that the Regional Greenhouse Gas Initiative is an independent proceeding implemented by several states and that the amendments to the GWRA are the work of the New Jersey Legislature.

resulting in measurable reductions of GHG emissions. The NJDEP shall develop its programs in consultation with NJBPU and NJEDA.

4. 10% by NJDEP to support programs that enhance the stewardship and restoration of the State's forests and tidal marshes that provide important opportunities to sequester and reduce GHG.
5. The NJDEP can utilize up to 4% for administrative costs and NJBPU and NJEDA may use up to 2% for administrative costs.

It is estimated that the auction of RGGI CO<sub>2</sub> allowance will generate approximately \$70 M annually and will result in an average rate impact of 0.2% in 2009 and 0.7% in 2012, as modeled by the RGGI state work group. The requirements for RGGI CO<sub>2</sub> compliance will be on all New Jersey electric generation units over 25 MW as set forth in NJDEP rules.<sup>4</sup> The RGGI Auction Programs are not yet in place. It is anticipated that the first New Jersey RGGI Auction may occur at the end of the year and then quarterly thereafter.

#### **A. Renewable Energy**

The OCE believes that the solar transition, coupled with any additional securitization as needed and proposed changes in the net metering and interconnection requirements, will in large part assist in meeting the Draft EMP solar goals. However, the OCE believes there is still a need to promote and advance the following types of RE for development and operation in New Jersey:

1. Small scale PV
2. Biomass – grid connected and on-site systems
3. Offshore Wind
4. Onshore Wind – grid connected and on-site systems
5. Clean Energy Technology Fund

The Draft EMP goals for construction and operation of wind and biomass facilities in New Jersey are as follows:

1. 1,000 MW of offshore wind by 2020,
2. 200 MW of on-shore wind by 2020, and
3. 900 MW of sustainably grown and harvested biomass<sup>5</sup>.

The Board has issued a solicitation for funding assistance for offshore wind projects through a production credit that is provided after the facility is permitted, constructed and operational. It is estimated that the offshore wind funding will not be required until 2012 or later, except as described below. However, in order to provide offshore wind funding assistance through a grant solicitation, the funds for any project must be obligated or committed at this time. The current production related grant proposal provides up to \$19 M for a 350 MW pilot project. Ten percent of these funds may be used upfront for engineering and permitting with the remainder potentially needed as a production credit.

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<sup>4</sup> These regulations have yet to be adopted.

<sup>5</sup> The Draft EMP defined this quantity as the total biomass and assuming the total biomass were used to generate electricity. The Draft EMP also addressed the potential use of biomass as a fuel.

If the above Draft EMP RE goals are achieved on an annual basis between now and 2020, staff estimates the following annual energy production, avoided emissions and avoided environmental costs will be realized between 2009 and 2012. However, this would mean that 1/12<sup>th</sup> of the Draft EMP goal would have to be achieved every year starting in 2009 through 2020 and 4/12<sup>th</sup> of the Draft EMP goals would be achieved by 2012:

**Table 3: Class 1 RE Energy Production, Avoided Emission and Environmental Benefits from Draft EMP RE Goals 2009 - 2012<sup>6</sup>**

Class 1 Renewable Energy Technology	Estimated Annual Energy Production	Estimated Annual Avoided CO2 Emissions	Annual Avoided Environmental Cost
	MWh	tons	\$
Offshore Wind	2,628,000	1,666,152	\$52,560,000
Onshore Wind	438,000	277,692	\$8,760,000
Sustainable Biomass*	6,307,200	39,987,648	\$126,144,000
Total	9,373,200	41,931,492	\$187,464,000

\* CO2 emissions from sustainable biomass are not considered anthropogenic

Staff estimates the following annual energy production, avoided emissions and avoided environmental costs if the 2009 – 2012 goals are achieved, based on the MW that may be constructed using the RE funding 2009 through 2012. This does not include the additional Class I RE to be constructed from the solar transition/solar financing programs, the RGGI Programs, the RGGI Auction Programs or the revised New Jersey Renewable Portfolio Standards (“RPS”):

**Table 4: Energy Production, Avoided Emission and Environmental Benefits for RE 2009 through 2012 Funding Level**

	Estimated Annual Energy Production	Estimated Annual Avoided CO2 Emissions	Annual Avoided Environmental Cost
	MWh	tons	\$
Solar	30,000	19,020	\$ 600,000
Wind	262,800	166,615	\$ 5,256,000
Biomass	700,800	444,307	\$ 14,016,000
Total	993,600	629,942	\$ 19,872,000

<sup>6</sup> These figures reflect the assumption that Offshore Wind will come on line in 2012.

Table 5 below, from Summit Blue's RE Market Assessment Report, shows the estimated cost of SRECs needed to achieve the RPS goals:

**Table 5: Estimated Solar SREC Cost, Bill Cost and Rate Impact**

Year	Solar Transition SREC Cost	\$ Impact for Average Residential Customer	Incremental Rate Impact
<b>2009</b>	<b>\$ 42,239,133</b>	<b>\$ 4.37</b>	<b>0.39%</b>
<b>2010</b>	<b>\$ 74,114,936</b>	<b>\$ 7.57</b>	<b>0.65%</b>
<b>2011</b>	<b>\$160,735,705</b>	<b>\$11.77</b>	<b>0.98%</b>
<b>2012</b>	<b>\$268,480,781</b>	<b>\$15.96</b>	<b>1.28%</b>
<b>Total</b>	<b>\$545,570,555</b>	-	-

The solar transition costs are estimated using average SREC prices at \$100 below the established SACP values as set by the Board (i.e. \$611 for EY 2009). The SRECs may sell for more or less than the estimated average SREC price of the SACP minus \$100. The floor value set by PSE&G for the PSE&G Solar program is \$475.00 per MWh.

The cost of the PSE&G Solar program is \$100 M over two years. Program costs are recoverable as a separate non by-passable charge called the Solar Pilot Recovery Charge ("SPRC"). PSE&G would provide 10 to 15 year loans to customers that install solar systems. It is estimated the program's first year's net cost to ratepayers, defined as the difference between the SPRC minus the value from the sale of SREC through an auction, would be \$1.4 M. The remaining costs will be recovered from customers that participate in the program through the repayment of loans. The solar transition and the PSE&G Solar program will assist in achieving the Solar RPS and will result in avoided CO2 emissions as well as avoided environmental cost.

#### Renewable Portfolio Standard Goals and the CRA

New Jersey's Renewable Portfolio Standards ("RPS"), as embodied in the rules at N.J.A.C 14:8-2, provide clear targets against which alternative CRA renewable funding and development scenarios can be measured.

The OCE used these targets in its straw proposals to help frame the discussion on the appropriate CRA funding levels in the context of these Class I renewable and solar goals. Various proposals for CRA funding need to be considered in terms of how far they progress towards both the near (2009-2012) and longer term (2021) goals. The following two tables provide RPS target levels based on the percentage of retail sales requirements in the RPS rules and 2007 retail sales of approximately 83,300 GWh.<sup>7</sup>

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<sup>7</sup> Estimated retail sales for 2007 at the time of the initial OCE straw proposal, were based on preliminary Electric Suppliers reporting to PJM-GATS, reporting which was under review and verification by the Office of Clean Energy at that time. Note that consistent with general efficiency goals expected in the Energy Master Plan in the tables presented above, total retail sales are maintained at a constant level through 2021. Actual RPS targets will reflect any upward or downward trends in sales from this level.

**Table 6: Solar RPS Requirements**

<b>Energy Year (Ending May)</b>	<b>Solar RPS %</b>	<b>Estimated Required SRECs (Solar MWh)</b>
<b>2008</b>	<b>0.08%</b>	<b>68,056</b>
<b>2009</b>	<b>0.16%</b>	<b>133,280</b>
<b>2010</b>	<b>0.22%</b>	<b>184,093</b>
<b>2011</b>	<b>0.31%</b>	<b>254,065</b>
<b>2012</b>	<b>0.39%</b>	<b>328,202</b>
<b>2021</b>	<b>2.12%</b>	<b>1,765,960</b>

**Table 7: Class I RPS Requirements**

<b>Energy Year (Ending May)</b>	<b>Class I RPS %</b>	<b>Estimated Required RECs (MWh)</b>
<b>2008</b>	<b>2.92%</b>	<b>2,435,692</b>
<b>2009</b>	<b>3.84%</b>	<b>3,198,720</b>
<b>2010</b>	<b>4.69%</b>	<b>3,902,605</b>
<b>2011</b>	<b>5.49%</b>	<b>4,574,836</b>
<b>2012</b>	<b>6.32%</b>	<b>5,264,560</b>
<b>2021</b>	<b>17.88%</b>	<b>14,894,040</b>

#### Proposed CRA Renewable Funding Levels

The following table presents the OCE's proposed CRA funding levels for RE for 2009-2012 that were included in the Second Revised Straw. As discussed further below, OCE recommends changes to funding levels proposed in Second Revised Straw herein.

**Table 8: OCE Proposed RE Funding Levels from the Second Revised Straw Proposal**

<b>Year/ Program</b>	<b>Wind</b>	<b>Biomass</b>	<b>Clean Energy Technology Fund</b>	<b>Small Solar &lt; 20 kW</b>	<b>Total</b>
<b>2009</b>	<b>\$25 M</b>	<b>\$15 M</b>	<b>\$7.5 M</b>	<b>\$21.00 M</b>	<b>\$68.50 M</b>
<b>2010</b>	<b>\$25 M</b>	<b>\$15 M</b>	<b>\$7.5 M</b>	<b>\$13.50 M</b>	<b>\$61.00 M</b>
<b>2011</b>	<b>\$25 M</b>	<b>\$15 M</b>	<b>\$7.5 M</b>	<b>\$12.00 M</b>	<b>\$59.50 M</b>
<b>2012</b>	<b>\$25 M</b>	<b>\$15 M</b>	<b>\$7.5 M</b>	<b>\$ 6.75 M</b>	<b>\$54.25 M</b>
<b>Total</b>	<b>\$100 M</b>	<b>\$60 M</b>	<b>\$30 M</b>	<b>\$53.25 M</b>	<b>\$243.25 M</b>

A number of factors contribute to the proposed CRA funding levels presented above.

1. The market transition to financing solar through solar RECs coupled with additional solar securitization (as required), and potential changes in the net metering and interconnection requirements provide significant non-rebate revenue streams to support solar projects, thereby reducing reliance on rebates.<sup>8</sup>
2. This proposal assumes the continuation of the federal investment tax credits and vibrant Renewable Energy Credits (“REC”) /SREC trading markets.
3. New market offerings, such as the Solar Financing Program developed by Public Service Electric & Gas, are emerging to further supplement the funds proposed for the CRA. The allocation of CO2 allowance auction revenues to the NJDEP to support programs designed to promote local government efforts to reduce GHG emissions (including possible renewable project development) is another example of new funding that acts to reduce the direct need for CRA (SBC) support.
4. Given the current higher capital cost for off-shore wind, onshore wind and biomass compared to the marginal cost of fossil fuel electric generation facilities, OCE estimates that the funding levels listed above are needed in order to begin to meet the RPS and Draft EMP goals for wind and sustainable biomass Class I RE.
5. OCE is proposing, based on a comparative analysis performed by the NJEDA of other state funds used for similar purposes, \$15 M per year for the Clean Energy Technology Fund to promote and advance New Jersey EE and RE R&D and manufacturing businesses. The funds for this program would be derived from a 50 – 50 allocation from the EE and RE programs, or \$7.5 M per year for RE for 4 years.

OCE indicated that further development of the Energy Master Plan, and/or the implementation of legislative initiatives (such as implementation of N.J.S.A. 48:3-98.1) may further influence and impact the final CRA funding levels as proposed above.

It is also important to note that while the total renewable CRA funding levels for renewable energy presented above are lower than the renewable funding approved in the 2004-2008 CRA cycle, the overall funding levels for RE market support (combined SREC and REC revenues, CRA support, and other potential new sources, such as initiatives related to the RGGI amendments), are higher than 2004-2008 levels and are expected to continue robust growth to help meet the State’s goals. Along with this overall growth in support for RE markets, there is an increasing shift towards market based (SREC and REC) mechanisms, and additional resources to supplement the proposed CRA budget.

#### Potential RE Targets Related to Straw Funding Levels

Returning to the discussion of how far the proposed CRA funding levels will go towards meeting the RPS goals, the Second Revised Straw offered the following potential targets for discussion and review.

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<sup>8</sup> Based on the Summit Blue Solar Market Transition Analysis – SREC revenues (if valued at \$100 less than the SACP) will total more than \$545 M over 2009-2012. If SRECs (on average) trade at a lower value the total will be reduced accordingly (e.g. at an average value of \$250/MWh the total SREC value for 2009-2012 would be ~\$221 M). In either case, OCE indicates that looking forward, SREC revenues will be responsible for an increasingly larger share of the public resources supporting solar market development.

**Table 9: Installed Capacity vs Spending**

	4 Year Installed Capacity MW	Cumulative GWh/Yr from new 2009- 2012 rebate resources by end 2012	Average Installed Cost (\$/Watt)	Total CRA Incentives 2009-2012 (\$ million)	Incentives as % of Installed Costs	New Incentive Installed Capacity (2009-2012) as % of 2021 Capacity Target
Solar-OCE	30	33	\$ 7.00	\$ 53	25%	2%
Solar-MSEIA	50	55	\$ 7.00	\$ 107	31%	3%
Biomass -OCE	100	701	\$ 2.75	\$ 60	22%	11%
Wind - OCE	120	294	\$ 3.50	\$ 100	24%	10%

The table above includes both the initial OCE straw proposal for solar funding of \$53 M in CRA rebate funding for solar projects smaller than 20 kW, and the counter proposal from Mid Atlantic Solar Energy Industries Association for \$107 M of funding support.

The OCE and Mid-Atlantic Solar Energy Industry Association (“MSEIA”) proposals are estimated by OCE to result in 30 MW and 50 MW, respectively, of new solar capacity supported by rebates over the 4 year CRA horizon. These levels of new capacity represent roughly 13% and 21% of the new solar capacity that will be required during this time period in order to meet the RPS solar target in 2012. They represent a much smaller share (2%-3%) of the total installed capacity that will be required to meet the 2021 goal. The proposed funding levels and capacity targets imply that rebates would cover roughly 25% to 31% of the initial system installation costs.

The following table presents the OCE’s initial proposal for annual rebate funding levels for solar rebates (systems less than 20kW).

**Table 10: Proposed Customer On-Site Renewable Energy (“CORE”) Funding Level 2009 to 2012**

	CORE Rebates for Small Systems
	< 20 kW
<b>2009</b>	<b>\$21.00 M</b>
<b>2010</b>	<b>\$13.50 M</b>
<b>2011</b>	<b>\$12.00 M</b>
<b>2012</b>	<b>\$ 6.75 M</b>
<b>Total</b>	<b>\$53.25 M</b>

For wind and biomass, the proposed funding levels are estimated by OCE to provide roughly 100 MW of new biomass capacity and 120 MW of new wind capacity if they are assumed to cover 20% to 25% of the installed costs. This would attain roughly 10% of the installed capacity goals for 2021. The generation from these resources would be expected to provide about one third of the new generation required to meet the incremental Class I RPS requirements in 2012. Staff notes that the remaining two thirds of the incremental Class I RPS requirements by 2012 would need to be met by other resources (most likely out of state development). The off-shore wind solicitation is also expected to deliver an additional 350 MW of wind capacity which is not directly factored into the wind targets.

The targets of 100 MW new biomass capacity and 120 MW new on land wind capacity by 2012 would need to be increased if meeting more of the incremental RPS requirement is a near term objective. Based on project lead times, global market conditions, and experience in New Jersey

to date, OCE indicated that a more aggressive ramp up of the biomass and wind installed capacity might not be feasible, even if the proposed CRA funding levels were increased.

### Wind Market Development

Staff's proposed funding levels (\$100 M) and target (120 MW) for wind development over 2009-2012 anticipate a strong emphasis on community scale – cluster type developments (typically between 1 and 10 MW of capacity). Staff indicates that market experience from around the country and in New Jersey (Atlantic City Utility Authority) suggest strong potential for further development of New Jersey's on and near shore wind resources at this scale. Staff also suggests that financing strategies and mechanisms such as Community Renewable Energy Bonds ("CREBs"), and power purchase agreements are expected to make promising contributions to the growth of this market in New Jersey during the next four year period.

The proposal also expects more modest but continued growth of the customer sited, behind the meter, small scale wind market during the next four years. This market segment is expected to make modest (~ 5 MW total capacity) contributions to the overall target. Staff recommends continuing with the recently implemented Expected Performance Based Buy-down ("EPBB")<sup>9</sup> approach, allowing for modifications and refinements over time as experience is gained.

While more detailed program design and incentive planning remains to be completed after the CRA general funding levels are established, OCE believes on a preliminary basis that roughly 70% (\$70 M) of the funding available for wind will provide support for development of community scale projects with the remaining \$30 M available to support the customer sited – behind the meter market. Market development assistance is expected to include upstream activities such as feasibility, siting, pre-construction development as well as direct financial support for project development. Off shore wind development is expected to play a major contributing role to meeting the RPS standard requirements by 2021, but during the next four years, the CRA funding level of \$100 M proposed above is primarily targeted toward development of on-shore and near-shore resources. OCE notes that \$19 M of the 2008 budget has been set aside for an off-shore wind solicitation. OCE is recommending that \$17.1 M of this funding be earmarked to come from the 2009 funding so that this amount can be utilized in the 2008 budget for CORE rebates. Based upon the timing of funding for a project(s) to be awarded under the off-shore wind proposal, OCE further recommends that the \$17.1 M be revolved successively to years 2010-2012 if not needed to pay for the off-shore wind solicitation in 2009 or subsequent years.

### Biomass Market Development

Staff's proposed funding levels (\$60 M) and target (100 MW) for biomass development over 2009-2012 anticipates a mix of technologies relying on combustion, gasification and anaerobic digestion that will see active market growth in the next four years. The scale for biomass projects is expected to cover a broad range (from 250 kW or smaller customer on-site systems, potentially up to plants with regionally coordinated biomass supply on the order of 20-30 MW, or more). Prescriptive incentive designs, and/or competitive solicitations, that provide sufficient financial incentives to encourage project development will be matched with assistance for upstream development activity, such as feasibility (including supply chain) studies and

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<sup>9</sup> The Expected Performance Based Buy-down Approach bases incentive levels on expected energy production rather than installed capacity.

assistance for siting and permitting. Regional digesters, coordinated and/or collective yard waste collection, wastewater processing equipment, and biomass exchange networks are examples of supply chain development activities that can help catalyze project development at the scale that will be required.

Staff noted that for the wind and biomass market development targets listed above, the CRA funds are expected to be supplemented by robust Class I REC trading values in the range of \$20 to \$50/MWh driven by consistently increasing demand for both the New Jersey and other RPS standards.

The OCE straw also included several questions related to RE funding and program design that are discussed further at the Summary of Comments to the Second Revised Straw.

## B. Energy Efficiency

The Draft EMP goals for electric and natural gas energy savings through EE are:

1. 20,000 GWh per year of electric savings by 2020; and
2. 77.24 million dekatherms per year of natural gas savings by 2020.

Based on estimates included in the Draft EMP, 2,500 GWh of the 20,000 GWh savings goal will be achieved through EE appliance standards for residential and C&I appliances and equipment, and 2,300 GWh through advanced energy building codes for residential and C&I buildings. This leaves 15,200 GWh to be achieved through the NJCEP or other efforts by 2020. Assuming an average life of 10 years across all residential and C&I measures, OCE believes a reasonable target for 2020 is 1,500 GWh of annual savings achieved each year, or close to 2% of retail electricity sales.

The following table presents projected 2008 NJCEP EE program performance:

**Table 11: Projected 2008 Energy Efficiency Savings**

<b>Projected NJ 2008 Electric sales<sup>10</sup> (GWH)</b>	<b>81,817</b>
<b>Projected NJ Annual Residential 2008 Savings<sup>11</sup> (GWH)</b>	<b>340</b>
<b>Projected NJ Annual C&amp;I 2008 Savings<sup>12</sup> (GWH)</b>	<b>207</b>
<b>Total NJ Annual 2008 Electric Savings (GWH)</b>	<b>547</b>
<b>2008 Electric Savings as % of Projected Sales</b>	<b>0.67%</b>

The median savings goal for 2008 is about 0.67% of current NJ electricity sales. To increase savings to 2% of statewide annual electricity sales would then require closer to 3 times initially projected 2008 levels of savings.

Of the 77.24 million dekatherms, 7.27 million dekatherms are estimated to be achieved through advanced energy appliance standards for residential and C&I appliances and equipment, and

<sup>10</sup> EIA 2007 electric sales by state for NJ for 2007, inflated by growth rate for electric sales from 2006-2007.

<sup>11</sup> Projected annual savings at 120% of goal level contained in [New Jersey CEP Honeywell Program Plans for 2008](#).

<sup>12</sup> Projected lifetime savings at 120% of goal level contained in [New Jersey's CEP 2008 Program Descriptions and Budget Commercial & Industrial Energy Efficiency Programs Managed by TRC as C&I Market Manager](#).

9.83 million dekatherms are estimated to be achieved through advanced energy building codes for residential and C&I buildings. This leaves 59.48 million dekatherms to be achieved through the NJCEP.

Between 2001 and 2006 the NJCEP EE programs saved 1.2 million MWh of electricity and 2.8 million dekatherms of natural gas usage. 68.5% of the electricity savings was achieved through the C&I EE program and 31.2% was achieved through the residential EE program, while 77.3% of natural gas savings was achieved through the residential EE program and 27.4% through the C&I EE programs.

Between 2001 and 2006, 66.3% of the EE budget was expended on the residential program of which 28.9% was expended on the Low Income programs including Comfort Partners, the Department of Community Affairs Weatherization and Seniors Weatherization. The low-income programs achieved 11.1% of the residential electric savings and 1.8% of the residential natural gas savings. OCE notes that the utilities which manage Comfort Partners have indicated that the reported savings for the low-income programs were artificially low because the protocols that were in place prior to 2008 capped savings and the protocols approved in December 2007 should result in higher savings being reported for the low-income programs.

OCE notes that while these programs may not be as cost effective as other CEPs, they are necessary and needed programs from a societal perspective and are consistent with EDECA. Without the low-income programs the residential EE represents 58.6% of the EE expenditures between 2001 and 2006 and the C&I EE program represent 41.4% of the EE expenditures between 2001 and 2006.

OCE states that every dollar expended in the C&I EE program resulted in approximately \$11 in customer bill savings and every dollar expended in the residential EE program results in approximately \$4 in bill savings. This does not include the societal savings of avoided infrastructure and environmental impact.

OCE further opines that a one-to-one relationship between the budget and savings is not a correct assumption. In addition, even if it were, the NJCEP could not be ramped up to meet the increase in the EE budget from \$133 M in 2008 to \$393 M in 2009, a 300% increase, or to \$707 M by 2012, a 500% increase. It is not realistic to expect to triple the performance of the current NJCEP in one year. In addition, the incremental rate impact of this level of increase in funding would be approximately 3% of current revenues for the overall EE programs.

OCE notes that the cost and rate impact estimates are part of the reason NEEP is working to analyze other approaches to the delivery of EE that would lessen the impact on ratepayers. A key concept to further explore, in OCE's view, is whether more of the EE program can be funded from the customers that receive the benefits of the actual energy savings that occur through implementation of efficiency measures.

One option would be to maintain the overall 2008 funding level and to use the proposed reduction in the RE funding level to fund additional investments in EE programs. The 2008 RE funding level was \$133 M. Because of the solar transition, the 2009 RE program funding level is proposed to drop to \$68.5 M, a decrease of \$33.5 M. OCE states that this difference could contribute to an approximate 25% increase in the EE funding level for 2009, which is an achievable increase in annual performance.

Expanding the existing programs at an annual increase of 25% of the 2008 EE funding level would result in the following annual budgets:

**Table 12: Proposed EE Funding Level 2009 – 2012 from April 15, 2008 Straw Proposal<sup>13</sup>**

Year	Total EE Funding
2009	\$166.5 M
2010	\$208.0 M
2011	\$260.0 M
2012	\$325.0 M
<b>Total</b>	<b>\$958.5 M</b>

The incremental rate impact of the proposed funding levels would be less than 1% over the 4 years. The proposed funding level for 2012 would result in total SBC contributions for the NJCEP equaling less than 3% of revenues. OCE believes it may be necessary to revisit the proposed funding levels as the Draft EMP and NEEP work is completed.

OCE noted in the Second Revised Straw that it believes that the funding allocation should shift additional funding towards the C&I programs such that by 2011, 60% of the funding is allocated to C&I programs and 40% for residential programs. This allocation is based on an approximation of the level of funding contributed by each customer class and takes into consideration both current budgets and the ability to ramp up new C&I programs. The proposed annual EE budgets must also fund the low-income programs (\$30 M per year) and the Clean Energy Technology Fund (\$7.5 M per year (EE portion)). The following table sets out the proposed allocation of the EE budget taking these factors into consideration that was included in the Second Revised Straw:

**Table 13: Proposed Allocation between C&I and Residential Markets Segments**

	C&I	Residential	Low Income	Clean Energy Technology Fund	Total
2009	\$ 62.4 M	\$ 66.6 M	\$ 30.0 M	\$ 7.5 M	\$ 166.5 M
2010	\$92.3 M	\$ 78.2 M	\$ 30.0 M	\$ 7.5 M	\$ 208.0 M
2011	\$133.5 M	\$ 89.0 M	\$ 30.0 M	\$ 7.5 M	\$ 260.0 M
2012	\$172.5 M	\$115.0 M	\$ 30.0 M	\$ 7.5 M	\$ 325.0 M
<b>Total</b>	<b>\$460.7 M</b>	<b>\$348.8 M</b>	<b>\$120.0 M</b>	<b>\$ 30.0 M</b>	<b>\$ 959.5 M</b>

In order to meet the goals in the Draft EMP, existing buildings - including both C&I and residential buildings - will have to be retrofitted and upgraded to meet significantly higher energy efficiencies than those currently in place. There are approximately 3.2 million residential homes and 500,000 C&I buildings in New Jersey. In order to achieve the Draft EMP goals, most of the State's existing building stock will have to be upgraded on a whole building or integrated building approach.

Achieving the energy reduction goals in the Draft EMP, and in part meeting the GHG reduction requirements in the Global Warming Response Act, provides New Jersey with significant and substantial economic potential and job growth opportunities. On average, the EE program

<sup>13</sup> Further review of Table 12 has revealed that the amount shown for total proposed Energy Efficiency funding should be \$959.50 M.

provides approximately 45,000 rebates per year for high performance lighting, furnaces, boilers, chillers, AC units, motors and drivers. To meet the Draft EMP's energy reduction goals, the number of installation jobs will need to significantly increase. This work will be performed by trained energy professionals and installers with an increased demand for the products and services of equipment manufacturers, energy engineers, and architectural design professionals.

OCE notes that the proposed model is an integrated whole building approach. The first step of this approach is to rate a building based on an energy assessment of the performance of the building's energy usage compared to an average baseline. NJCEP is proposing to use the Home Energy Rating System ("HERS") for rating residential buildings and the USEPA Energy Star Portfolio Management system for rating C&I buildings. OCE also believes that Energy Savings Performance Contracts can contribute to achieving Draft EMP goals and should be considered as part of the portfolio of programs.

The next step is to deliver an integrated whole building upgrade within a set plan, including:

1. Building shell upgrades
2. Energy systems upgrades including CHP
3. Appliance and fixture upgrade
4. Demand response
5. Renewable Energy

The proposed model would provide the building owner with a report of the cost effective measures needed to accomplish the EE/RE/DR upgrade. The final step is developing a system to monitor/verify the savings tied to the overall financing of the upgrade.

The OCE proposal for the EE programs would include a whole building approach and individual appliance/equipment upgrades or replacements to address worn-out equipment both separately and within the integrated whole building approach. OCE estimates that approximately one third of the upgrades could be available through an individual upgrade or replacement of an appliance or equipment, while the other two thirds would be allocated through the integrated whole building approach. OCE states that this model highlights a key issue: that rebates or incentives alone cannot provide for the sole means of upgrading the overall EE or reduced energy usage to meet the goals of the Draft EMP. In Staff's view, this means that changes to the NJCEP need to focus on market transformation, which must include getting manufacturers to increase the supply of products and encouraging retailers to increase the availability (and thereby lower the cost) of EE appliances and equipment without upfront rebates or incentives. Staff also submits that the other component to be considered in this proposed transition is a shift from upfront incentive rebates to an EE financing program, as was accomplished with the solar transition.

The following table provides a summary of the OCE's proposed 2009-2012 funding levels for both EE and RE included in its Second Revised Straw. The 2008 funding level for EE and RE is included as a point of reference.

**Table 14: Proposed 2009 through 2012 NJCEP Funding Level for EE and RE from April 15, 2008 Straw Proposal<sup>14</sup>**

Year	EE	RE	Total
2008	\$133.00 M	\$102.00 M	\$235.00 M
<b>2009</b>	<b>\$166.50 M</b>	<b>\$68.50 M</b>	<b>235.00 M</b>
<b>2010</b>	<b>\$208.00 M</b>	<b>\$61.00 M</b>	<b>269.00 M</b>
<b>2011</b>	<b>\$260.00 M</b>	<b>\$59.50 M</b>	<b>\$319.50 M</b>
<b>2012</b>	<b>\$325.00 M</b>	<b>\$54.25 M</b>	<b>\$379.25 M</b>
<b>Total 2009 – 2012</b>	<b>\$958.50 M</b>	<b>\$243.25 M</b>	<b>\$1,202.75 M</b>

Potential Energy Savings, Benefits and Avoided Costs and Impacts for EE Programs

Based on the energy savings achieved from the C&I, Residential HVAC, Energy Star Products, and Residential New Construction programs for 2001 through 2006, Staff estimates the following natural gas and electricity savings for 2009 through 2012. It should be noted that the savings, avoided costs, and environmental benefits set forth below are based on past performance and it is assumed that program performance will be equal or better than the past performance given the completion of the transition to the Market Managers in 2007.

**Table 15: Estimated C&I Annual and Lifetime Energy Savings**

	Proposed Funding Level	Annual Electric Energy Savings	Lifetime Electric Energy Savings	Annual Natural Gas Savings	Lifetime Natural Gas Savings
	\$	MWh	MWh	Dtherms	Dtherms
<b>2009</b>	<b>\$ 62.4 M</b>	<b>329,000</b>	<b>4,910,158</b>	<b>245,672</b>	<b>4,092,895</b>
<b>2010</b>	<b>\$92.3 M</b>	<b>485,166</b>	<b>7,262,553</b>	<b>363,461</b>	<b>6,055,264</b>
<b>2011</b>	<b>\$133.5 M</b>	<b>701,730</b>	<b>10,504,905</b>	<b>525,727</b>	<b>8,758,625</b>
<b>2012</b>	<b>\$172.5 M</b>	<b>906,730</b>	<b>13,573,754</b>	<b>679,311</b>	<b>11,317,325</b>
<b>Total</b>	<b>\$460.7 M</b>	<b>2,422,626</b>	<b>36,251,370</b>	<b>1,814,171</b>	<b>30,224,109</b>

<sup>14</sup> Further review of Table 14 has revealed that the amount shown for total proposed Energy Efficiency funding should be \$959.50 M.

**Table 16: Estimated Residential Annual and Lifetime Energy Savings**

	<b>Proposed Funding Level</b>	<b>Annual Electric Energy Savings</b>	<b>Lifetime Electric Energy Savings</b>	<b>Annual Natural Gas Savings</b>	<b>Lifetime Natural Gas Savings</b>
	\$	MWh	MWh	Dtherm	Dtherm
<b>2009</b>	<b>\$ 66.6 M</b>	<b>78,110</b>	<b>1,224,400</b>	<b>1,187,979</b>	<b>21,361,336</b>
<b>2010</b>	<b>\$ 78.2 M</b>	<b>91,715</b>	<b>1,461,618</b>	<b>1,395,012</b>	<b>25,084,188</b>
<b>2011</b>	<b>\$ 89.0 M</b>	<b>104,381</b>	<b>1,662,926</b>	<b>1,587,550</b>	<b>28,546,195</b>
<b>2012</b>	<b>\$115.0 M</b>	<b>134,875</b>	<b>2,148,736</b>	<b>2,050,835</b>	<b>36,579,981</b>
<b>Total</b>	<b>\$348.8 M</b>	<b>409,081</b>	<b>6,497,680</b>	<b>6,221,376</b>	<b>111,571,700</b>

**Table 17: Estimated Low-Income Annual and Lifetime Energy Savings**

	<b>Proposed Funding Level</b>	<b>Annual Electric Energy Savings</b>	<b>Lifetime Electric Energy Savings</b>	<b>Annual Natural Gas Savings</b>	<b>Lifetime Natural Gas Savings</b>
	\$	MWh	MWh	Dtherm	Dtherm
<b>2009</b>	<b>\$ 30.0 M</b>	<b>14,288</b>	<b>249,428</b>	<b>131,824</b>	<b>2,571,878</b>
<b>2010</b>	<b>\$ 30.0 M</b>	<b>14,288</b>	<b>249,428</b>	<b>131,824</b>	<b>2,571,878</b>
<b>2011</b>	<b>\$ 30.0 M</b>	<b>14,288</b>	<b>249,428</b>	<b>131,824</b>	<b>2,571,878</b>
<b>2012</b>	<b>\$ 30.0 M</b>	<b>14,288</b>	<b>249,428</b>	<b>131,824</b>	<b>2,571,878</b>
<b>Total</b>	<b>\$120.0 M</b>	<b>57,152</b>	<b>997,712</b>	<b>527,296</b>	<b>10,287,512</b>

Based on the estimated annual and lifetime savings in Tables 15 through 17, Table 18 is an estimate of the potential avoided emissions that would result from the 2009 through 2012 proposed C&I and residential funding level. The avoided emissions factors are those provided by NJDEP in the Rutgers CEEEP 2006 Cost Benefit Analysis that was distributed with the initial straw and posted on the NJCEP website. The lifetime projected avoided emissions utilize these same emission factors. The majority of avoided emissions are from the C&I sector energy savings.

**Table 18: Estimated Potential Avoided Emissions based on the Annual and Lifetime Energy Savings**

	<b>Annual Electric Emission Reductions</b>	<b>Lifetime Electric Emission Reductions</b>	<b>Annual Natural Gas Emission Reductions</b>	<b>Lifetime Natural Gas Emission Reductions</b>
	<b>Tons</b> <b>(Hg in lbs)</b>	<b>Tons</b> <b>(Hg in lbs)</b>	<b>Tons</b>	<b>Tons</b>
<b>CO2</b>	<b>1,859,979</b>	<b>28,075,424</b>	<b>44,971</b>	<b>793,869</b>
<b>NOx</b>	<b>4,396</b>	<b>66,359</b>	<b>11</b>	<b>626</b>
<b>SO2</b>	<b>16,218</b>	<b>246,440</b>		
<b>Hg</b>	<b>103.5</b>	<b>1,381.5</b>		

Based on the estimated annual and lifetime savings in Tables 15 through 17, Table 19 is an estimate of the potential avoided transmission and distribution (“T&D”) cost and environmental benefit (avoided environmental cost) that would result from the 2009 through 2012 proposed C&I and residential funding levels. The avoided T&D cost and environmental benefits are those factors provided in the Rutgers CEEEP 2006 Cost Benefit Analysis that was distributed with the initial straw and posted on the NJCEP website. The avoided T&D cost is estimated at \$15 per MWh and the avoided environmental cost (environmental benefit) is estimated at \$0.02 per kWh and \$0.95 per MM Btu. The lifetime projected avoided emissions utilize these same factors.

**Table 19: Estimated Potential Avoided T&D and Environmental Costs based on the Annual and Lifetime Energy Savings<sup>15</sup>**

	Annual Electric Avoided Cost	Lifetime Electric Avoided Cost	Annual Natural Gas Avoided Cost	Lifetime Natural Gas Avoided Cost
	\$	\$	\$	\$
<b>Environmental C&amp;I</b>	<b>\$51,060,720</b>	<b>\$764,378,960</b>	<b>\$1,817,067</b>	<b>\$30,272,349</b>
<b>Environmental Res</b>	<b>\$7,595,220</b>	<b>\$121,001,840</b>	<b>\$5,486,079</b>	<b>\$98,646,710</b>
<b>Environmental Total</b>	<b>\$ 58,655,940</b>	<b>\$ 885,380,800</b>	<b>\$ 7,303,146</b>	<b>\$128,919,060</b>
<b>T&amp;D C&amp;I</b>	<b>\$38,295,540</b>	<b>\$573,284,220</b>		
<b>T&amp;D Res</b>	<b>\$5,696,415</b>	<b>\$90,751,380</b>		
<b>T&amp;D Total</b>	<b>\$43,991,955</b>	<b>\$664,035,600</b>		
<b>Total</b>	<b>\$101,647,895</b>	<b>\$1,549,416,400</b>	<b>\$ 7,303,146</b>	<b>\$128,919,060</b>

Based on the annual and lifetime savings in Tables 15 through 17, Table 20 is an estimate of the potential avoided energy costs that would result from the 2009 through 2012 proposed C&I and residential funding level. The avoided energy costs are those cost provided in the Rutgers CEEEP 2006 Cost Benefit Analysis that was distributed with the initial straw and posted on the NJCEP website. The lifetime projected avoided energy costs utilize the average cost over 15 years. The majority of avoided costs and benefits are from the C&I sector energy savings at approximately 87%.

**Table 20: Potential Avoided Energy Costs based on the Annual and Lifetime Energy Savings**

	Annual Electric Avoided Cost	Lifetime Electric Avoided Cost	Annual Natural Gas Avoided Cost	Lifetime Natural Gas Avoided Cost
	\$	\$	\$	\$
<b>C&amp;I</b>	<b>\$268,324,083</b>	<b>\$5,553,213,144</b>	<b>\$17,941,154</b>	<b>\$367,410,725</b>
<b>Res</b>	<b>\$ 47,887,862</b>	<b>\$968,619,729</b>	<b>\$78,537,552</b>	<b>\$1,734,105,338</b>
<b>Total</b>	<b>\$ 316,211,945</b>	<b>\$6,521,832,873</b>	<b>\$96,478,706</b>	<b>\$2,101,516,063</b>

<sup>15</sup> Further review of Table 19 has revealed that the amount shown for total estimated electric avoided cost should be \$102,647,895 M. Also, the amount shown for the lifetime natural gas avoided cost, both the environmental total and the total figure, should be \$128,919,059 M.

As shown in the tables above, the anticipated benefits of the proposed funding levels over the life of the measures installed exceed the costs of the programs by a factor of over 10 to 1.

#### Electric and Natural Gas Rate Impacts

In the last CRA proceeding, the Board allocated 69% of the total funding, including both EE and RE, to electric customers and 31% to natural gas customers. In this proceeding, OCE proposed allocating 60% of the proposed EE funding levels and 100% of the proposed RE funding levels to electric customers and 40% of the proposed EE funding to natural gas customers.

The following tables that were included in the Proposal to show the rate impacts that would result from OCE's proposed allocation of funding:

**Table 21: Electric Rate Impact<sup>16</sup>**

	Proposed Electric EE Funding	Proposed Electric RE Funding	Total Proposed Electric Funding	Total Retail Electric Revenues	Proposed Funding as a Percent of Revenues	Incremental Rate Impact
2009	\$ 99.90 M	\$68.50 M	\$168.40 M	\$10,895.3 M	1.5%	0%
2010	\$124.80 M	\$61.00 M	\$185.80 M	\$11,411.7 M	1.6%	0.1%
2011	\$156.00 M	\$59.50 M	\$215.50 M	\$11,952.7 M	1.8%	0.2%
2012	\$195.00 M	\$54.25 M	\$249.25 M	\$12,519.4 M	1.9%	0.3%
<b>Total/Average</b>	<b>\$574.90 M</b>	<b>\$243.25 M</b>	<b>\$818.95 M</b>	<b>\$46,779.1 M</b>	<b>1.75%</b>	<b>0.15%</b>

**Table 22: Natural Gas Rate Impact**

	Proposed Natural Gas EE Funding	Total Retail Natural Gas Revenues	Proposed Funding as a Percent of Revenues	Incremental Rate Impact
2009	\$ 66.6 M	\$ 7,819.1 M	0.85%	0.0%
2010	\$ 83.2 M	\$ 7,822.9 M	1.06%	0.21%
2011	\$ 104.0 M	\$ 7,747.3 M	1.34%	0.49%
2012	\$ 130.0 M	\$ 7,627.4 M	1.70%	0.85%
<b>Total/Average</b>	<b>\$ 383.8 M</b>	<b>\$ 31,016.7 M</b>	<b>1.24%</b>	<b>0.52%</b>

<sup>16</sup> Further review of Table 21 has revealed the amount shown for the total/average proposed electric EE funding should be \$575.70 M.

**Table 23: Total Customer Bill Impact per Year to the Average Residential Electric Customer**

	Residential Electric Usage	Residential Retail Electric Rate	Total Bill Cost per Year for EE and Renewable	Percent Bill Cost Impact
	kWh	\$/kWh	\$/Year	%
2009	8,706	\$ 0.1515	\$ 19.78	1.5%
2010	8,755	\$ 0.1542	\$ 21.60	1.6%
2011	8,804	\$ 0.1570	\$ 24.88	1.8%
2012	8,853	\$ 0.1596	\$ 26.85	1.9%
<b>Total</b>	-	-	<b>\$ 23.28</b>	<b>1.75%</b>

**Table 24: Total Customer Bill Impact per Year to the Average Residential Natural Gas Customer**

	Residential Natural Gas Usage	Residential Retail Natural Gas Rate	Total Bill Cost for EE	Percent Bill Cost impact
	therms	\$/therm	\$	%
2009	912	\$ 1.798	\$ 13.93	0.85%
2010	908	\$ 1.820	\$ 17.52	1.06%
2011	904	\$ 1.813	\$ 21.96	1.34%
2012	900	\$ 1.791	\$ 27.40	1.70%
<b>Total</b>	-	-	<b>\$ 20.20</b>	<b>1.24%</b>

The Second Revised Straw also included a number of questions related to funding and program design that are discussed further below.

#### **IV. SUMMARY OF COMMENTS TO THE STRAW PROPOSALS**

The following summarizes the comments provided regarding the OCE straw proposals and questions set forth in the Second Revised Straw, as well as the oral comments presented at the public hearings and the written comments submitted to the Board. OCE's responses are also included.

##### **A. General Comments**

Rate Counsel generally supports the policy decisions and funding levels reflected in Staff's Second Revised Straw Proposal ("Straw Proposal"). Rate Counsel agrees with the Straw Proposal's focus on expanding the New Jersey Clean Energy Program and enhancing its effectiveness in order to achieve the Draft Energy Master Plan's goal of 20% reduction in energy use by 2020.

As a general comment, the New Jersey Utilities Association ("NJUA") states that direct utility involvement will promote better attainment of the goals of the Draft EMP, the Second Revised Straw, and the recent legislation addressing the State's energy use.

The New Jersey Large Energy Users Coalition (“NJLEUC”) supports the Draft EMP goals to foster the aggressive implementation of EE and conservation measures, and appropriate RE projects to reduce demand, increase reliability, lower energy costs and combat global warming. The New Jersey Business and Industry Association (“BIA”) also supports the Draft EMP goals.

NJLEUC agrees with the Draft EMP’s approach to incentivize key stakeholders like large energy users to reduce demand and operate in a more energy efficient manner, and thereby assist the state in achieving its various energy goals. The Draft EMP, RGGI and related energy bills signal a necessary movement away from the BPU’s historic approach to advance its goals through programs that have been largely rebate-driven and heavily subsidized by the business community. The commenter notes that if the many studies and key assumptions that support current programs prove to be erroneous or overly optimistic, the adverse ramifications to New Jersey consumers and our economy could be very significant.

NJLEUC and BIA believe that Staff’s Second Revised Straw budget for the years 2009 through 2012 takes a step backward and seeks to continue the regressive and inefficient policies of the past with regard to funding and cost recovery for these programs. NJLEUC questions whether the manner in which the Proposal seeks to implement its objectives are the most equitable, efficient and cost-effective, and whether it is consistent with the Governor’s important economic development initiatives.

**Response:** The OCE Staff believes that its Straw Proposal is consistent with the goals of the Draft EMP, RGGI and related legislation. The Proposal recognizes the need to move forward away from rebate based programs towards a more market based approach. The Proposal notes that the Board recently adopted policies related to RE programs that move in this direction and requested comments regarding moving EE programs in this direction as well. However, a transition to a market based approach cannot occur overnight.

In OCE’s view, if the State is to achieve its aggressive goals for EE and RE it must continue to increase the levels of savings achieved now. This requires a continuation of rebate based programs while the Board explores alternative methods of financing EE projects. The OCE Staff does not believe that the Board’s policies are regressive or inefficient as discussed in more detail below.

#### *Market Potential Study*

Rutgers Center for Energy, Economic and Environmental Policy and Applied Energy Group reviewed a 2004 KEMA study of EE market potential in the context of the CRA proceeding and the Draft Energy Master Plan, focusing on electricity and natural gas efficiency measures. CEEEP/AEG submitted to the Board a report dated April 2008 entitled “*Review and Update of Energy Efficiency Market Assessment for the State of New Jersey*.”

KEMA’s 2004 analysis assessed the technical potential, economic potential, and achievable potential. CEEEP/AEG reviewed KEMA’s assumptions and other more recent market potential studies performed in other jurisdictions, and compared KEMA’s results with the actual performance of the NJCEP between 2004 and 2007. In addition, CEEEP/AEG reviewed program design alternatives.

CEEEP/AEG’s conclusions included a recommendation that the Board should continue to rely on the KEMA study, which shows considerable technical and economic potential in the EE market. CEEEP/AEG found KEMA’s results to be in the normal range of results, with savings

as a percentage of use consistent among the various state programs. CEEEP/AEG noted that greater efficiencies than found by KEMA are possible because of the following changes in the market: ongoing technological improvements since the time of the KEMA study increase EE potential; increasing cost of conventional energy and the increased focus on GHG impacts economic assumptions; and the more recent "synergistic" method of designing programs produces more results than the individual measures analyzed in 2004.

CEEEP/AEG recommended that the Board consider initiating a detailed updated comprehensive EE market potential study in the 2011 time frame and that going forward, the Board should attempt to make all studies for both the CEP and the Draft EMP consistent in terminology, units of measurement, and definitions, so that over time the two processes may be better coordinated/united. CEEEP/AEG noted that the OCE's proposed energy savings goals for 2009 through 2012 are substantially less than the Energy Master Plan goals.

Dr. Felder of CEEEP discussed the "rebound" effect, whereby the consumer who saves \$200 on his electric bill due to EE measures could then spend the savings on other items that utilize more energy. Dr. Felder stated that in his opinion, substantial financial incentives are necessary to change behavior.

**Response:** The OCE Staff considered the findings and recommendations included in the updated market potential report prepared by CEEEP and AEG in its recommendations as discussed further below.

#### **B. Ratepayer Impacts**

NJLEUC believes that the stated need to increase funding of the OCE programs by about two to three times current levels to achieve the goals of the Draft EMP will have more than a *de minimus* rate impact and will not be largely offset by energy savings projected to be derived from these programs.

**Response:** OCE Staff notes that the Board strives to balance the impact of the program costs on rates with the benefits realized from implementation of the programs. Specifically, OCE Staff asserts that while rates may increase as a result of the additional funding allocated to the NJCEP, it is important to note that energy costs will be reduced for customers that participate in the programs as a result of lower usage. OCE Staff further notes that the Board strives to create opportunities for all customers to lower their energy bills by participating in a program, including commercial and industrial customers. As noted in NJLEUC's comments, for each dollar in program costs spent, C&I customers reduce their energy costs by eleven dollars.

In addition to the benefits realized by participating customers through lower energy costs that result from reduced usage, all customers receive other benefits that result from the programs including: reduced emissions, lower overall energy costs that result from reductions in the cost of power at times of system peak, and job and related tax benefits. The Draft EMP notes that even small reductions in peak usage can have a significant impact on lowering the overall incremental cost on the PJM grid. The NJCEP has reduced peak demand by over 500 MW over the past six years, which has had a downward effect on prices, offsetting some of the costs of these programs.

The OCE Staff believes that the proposed funding levels must also be put in the context of the alternatives. Specifically, not investing in EE and RE would increase the need to site, construct and operate traditional power plants and/or transmission facilities. As noted in the Draft EMP,

investing in EE and RE as an alternative to constructing additional power plants is expected to reduce overall energy costs to the State and significantly reduce greenhouse gases and other harmful emissions.

NJLEUC comments that the SBC is now only one of several significant usage-based charges that are or will soon be passed through to end-use customers, including the RGGI cap and trade program, the SREC program, and PSE&G's Solar program. It asserts that the "pancaking" of these costs poses a considerable financial burden to residential and business customers alike. BIA submitted similar comments on this issue.

NJLEUC also states that each of the increases in the SBC to date has been equivalent to the additional costs that result from major rate cases. In light of the current and projected magnitude of these costs, the commenter urges the Board to exercise great caution when considering the Proposal and its likely impact on the State's already-high energy costs.

NJLEUC comments that all utility investment in energy conservation, EE, and RE programs under the RGGI law may be eligible for "rate treatment approved by the board, including a return on equity, or other incentives or rate mechanisms that decouple utility revenue from sales or electricity and gas."

NJLEUC also states that the rate impacts will be worse for large users because these charges are usage-based. NJLEUC argues that a 2% total rate increase to an "average" residential customer will be a much higher increase to a large customer because of their significantly higher levels of usage.

Rate Counsel asserts that the Board should establish a maximum EE program cost to be recovered from ratepayers, which can be adjusted annually to decrease the amount as funds are recovered from the Global Warming Solutions Fund, any utility-specific EE programs authorized, and any EE portfolio standard established.

Rate Counsel also comments that the Board should continue to recover EE costs from ratepayers through a single charge applied equally to all ratepayers and no ratepayer class (including specifically large C&I customers) should be exempted.

Rate Counsel further comments that the SBC is not a "bottomless pit" for RE funding and should be used as judiciously, cautiously and efficiently as possible. It asserts that customers already feel substantial pain from other portions of their bill as well as recent changes in our economy.

**Response:** OCE Staff notes that the Board shares the concern regarding the impact of "pancaking" costs for the various initiatives aimed at promoting EE and RE. OCE Staff notes that the Board, as discussed further below, will carefully consider the overall impact on rates of all of the programs in determining the final CRA funding level under consideration herein.

NJLEUC claims that several of its members currently contribute up to \$2 M annually in SBC charges. While the OCE Staff shares NJLEUC's concerns regarding the impact of energy costs on the State's businesses, OCE Staff notes that the SBC includes charges for various other costs such as nuclear plant decommissioning, manufactured gas plant remediation, uncollectable costs, and universal service costs. The appropriateness of these costs as well as the allocation of these costs to the various customer classes was litigated in rate cases and are outside of the scope of the CRA proceeding. Adoption of the OCE's recommendations in the Second Revised Straw would result in less than a 1% increase in rates over four years (0.04% in the first year and average approximately 0.33% per year in the last three years) and, as noted

above, the OCE Staff believes the benefits of these programs will far exceed the costs, will assist the State's businesses in reducing their energy costs and will result in lower overall energy costs.

NJLEUC also comments that during the past several years, some former NJLEUC members have gone bankrupt, relocated elsewhere, or closed down segments of their operations, downsized, or lost business opportunities to those situated where production costs are lower. It argues that energy costs are very much a part of the reason why New Jersey manufacturing facilities are significantly more expensive to operate—and therefore far less competitive-- than those located elsewhere.

**Response:** The OCE Staff shares NJLEUC's concerns on the impacts of energy costs on businesses in the State. However, as noted above, the OCE Staff believes that the collection of SBC funds to invest in EE and RE will lower overall energy costs compared to a business as usual scenario. The NJCEP programs provide an opportunity for struggling businesses to become more competitive by helping to reduce their energy costs. In addition, these funds will create new jobs and will greatly expand existing jobs in the energy sector. The new Pay-for-Performance program, approved by the Board in the 2008 Program and Budget Order, offers incentives to large customers that have high energy usage in order to significantly lower their energy use and help them stay competitive.

NJLEUC comments that ratepayers will pay all of the Draft EMP, RGGI and SREC program costs, directly or indirectly. It maintains that therefore, the costs of these various programs must be made subject to reasonable limitations.

NJLEUC also comments that the Board should impose an "overall" cost cap that represents the outer financial boundaries of cost responsibility for the various Draft EMP-related programs and assures that program costs will be limited to a certain and pre-defined level, and that the cap should be implemented in a manner that applies equally to all rate classes. NJLEUC notes that other states have adopted various cost-capping mechanisms for charges similar to the SBC.

**Response:** OCE Staff notes that the Board will consider the overall impacts of the costs of the various programs noted above in determining the CRA funding level for the years 2009 through 2012. OCE Staff further notes that the Board shares NJLEUC's concern regarding the impact on rates of all of the State's efforts to promote EE and RE and will take these impacts into consideration herein. The costs associated with the NJCEP programs under consideration herein are fixed, and hence capped by definition. Therefore, the OCE Staff does not believe any additional mechanism to cap CRA costs is necessary. OCE will be reviewing the NJCEP-SBC costs as the RGGI Utility Program and RGGI Auction Program cost increases to determine if monies received or disbursed through these programs would enable a decrease in NJCEP funding.

NJLEUC comments that the Board should adopt financial measures and options that will encourage large users to undertake additional EE and conservation initiatives consistent with the Draft EMP, as the RGGI law does for utilities.

NJLEUC also comments that the Board should provide, as an alternative to commercial and industrial ratepayers that satisfy the requisite criteria (to be established), an opt-out exemption from the SBC, and any related or successor charges that fund programs within the Draft EMP. NJLEUC suggests that the opt-out, which could allow for appropriate contributions to low-income programs, would apply to a "self-managed" customer that can demonstrate that the EE,

conservation and renewables programs implemented by the customer provide the State with more savings or efficiencies than would be derived from other Draft EMP programs funded by the SBC.

**Response:** While not addressing the issue of whether an opt-out provision is legally permissible, the OCE Staff does not believe that an opt-out provision is warranted. As noted above, all customers benefit from the programs through reduced energy costs, reduced emissions and elimination of the need to site, build and construct new power plants and transmission facilities. Therefore, the OCE believes that all customers should contribute to the programs. Further, participation in the programs can help to reduce the upfront costs for businesses that invest in EE and RE.

## C. Renewable Energy

### Funding

In terms of State policy and direction, Remix Energy, a New Jersey-based venture interested in developing biofuels, recommends that State assistance and agency coordination with permitting RE projects be offered.

Rate Counsel recommends restricting RE funding to smaller projects which have more difficulty accessing capital through financial markets (as opposed to, for example, offshore wind).

Relative to funding, PowerHouse Energy (“PHE”) recommends that the NJCEP provide funding based on power produced by a facility rather than capacity. PHE recommends that more funding should be allocated for forms of energy which can be depended on for grid planning purposes relative to the proposed \$25 M per year for wind.

PHE proposes the \$7.5 M projected for Other Funding as a potential source for the funding of a State guarantee or securitization of investment in RE generation. PHE argues that the value of Class I RECs varies tremendously and must be supplemented in some way to provide the securitization required for investment in a \$10 M to \$20 M project.

Ramapo College Institute for Environmental Studies proposes supporting a change in consumer culture that is not narrowly cost-driven and embraces such mechanisms as strategically located education centers and “education events” at which information can be disseminated and collected and “key constituencies” cultivated.

**Response:** OCE Staff concurs with Remix Energy’s comment above and notes that the OCE has been coordinating with the Department of Community Affairs (DCA), municipalities and others to address permitting issues related to RE facilities. OCE Staff generally agrees with Rate Counsel’s comment that RE funding should be restricted to smaller projects. OCE Staff also agrees that in general funding should be based on the power produced by a facility rather than capacity as proposed subject to development of guidelines on a program and technology specific basis.

With regard to PHE’s comment concerning using SBC funds to securitize investments in RE, the OCE Staff notes that in the Solar Transition Order, the Board directed the OCE to initiate a proceeding to explore whether additional securitization is warranted, and if so, to provide specific recommendations regarding methods and costs of providing such securitization. At its July 30, 2008 Agenda Meeting, the Board directed the State’s four Electric Distribution

Companies ("EDCs") to propose programs or revisions to existing programs facilitating the State's transition to more competitive market-based approach to financing solar, I/M/O the Renewable Portfolio Standard (RPS) Decision and Order Regarding Solar Financing - Long Term Contract, Docket No. EO06100744 and I/M/O the Electric Public Utilities and Gas Public Utilities Offering Energy Efficiency and Conservation Programs Investing in Class I Renewable Energy Resources, and Offering Class I Renewable Energy Programs in Their Respective Service Territories on a Regulated Basis Pursuant to N.J.S.A. 48:3-98.1 – Addition to Minimum Filing Requirement, Docket No. EO08030164. The Board also directed that annual monitoring and review of these programs be conducted to ensure progress. The lessons learned from these programs will provide a potential model for securing the finance of other Class I renewables.

The OCE agrees with the comments submitted by the Ramapo College Institute for Environmental Studies that consumer education needs to be a critical component of efforts to promote RE. Program design issues will be considered by the Board later in the year when detailed 2009 proposed programs and budgets are submitted to the Board for review and approval.

### Solar

Regarding RE, Rate Counsel supports Staff's proposed funding levels, reflected in the amounts and types of funding recommended, to decrease funding and move away from direct subsidies and toward greater responsiveness to market forces. Thus, Rate Counsel does not support any increase in the solar energy rebate funding proposed by OCE at this time.

The Mid-Atlantic Solar Energy Industry Association and Eastern Energy Systems ("Eastern Energy") criticized the OCE Straw proposal for what they refer to as overly severe cuts of funding for small systems. MSEIA proposed a reduction of "small PV market segment" from the current 22% to 14%, versus roughly 7% in the Straw, while Eastern Energy argued that the proposed budget will not cover the existing under 10 kW queue of approximately 450 projects, much less the "supplemental queue" of over 400 projects and will not cover projects between 10 kW and 20 kW. MSEIA believes that small projects (less than 40 kW) should constitute 20% or 12.6 MW of the RPS goals for the next CRA period. MSEIA proposed that the 12.6 MW should be divided into 9.0 MW for systems less than 10 kW and 3.6 MW for systems between 10 kW and 40 kW. MSEIA proposes different and lower rebates for small commercial systems than for residential systems. MSEIA states that if federal tax credits improve, rebates should be reduced accordingly. Eastern Energy argued for increased funding to less than 10 kW systems, 10-20 kW systems, and commercial systems 10-40 kW. Both entities included tables in their comments that demonstrate resulting numbers. MSEIA proposed that the CORE program begin accepting applications for 2009 rebate program in August 2008.

MSEIA and Eastern Energy supported their proposals by pointing to various attributes of small solar systems versus larger systems including the fact that, in their view, the new SREC financing system is complex and difficult for a small system to take advantage of and a small residential system typically gets a federal tax credit of only about 4% to 5%. They claim that many small solar companies have gone out of business or are threatened by closure. They argue that small systems have produced the majority of new businesses and new jobs in the State in recent years. Additionally, they argue that the installation of small systems spreads the direct economic benefits of solar generation more equitably among rate classes, which they assert is particularly important since the residential sector provides 39.5% of total electric

revenues, support of small systems is more popular politically, and small systems maximize the benefits of distributed generation.

Renewable Energy Consultants (“RE Consultants”) criticizes the Second Revised Straw for allocating nearly 80% of a \$1.2 billion budget to EE. RE Consultants recommend that \$260 M be moved from residential EE to RE. With the additional funding, the residential solar grant budget could be increased by \$60 M. The other \$200 M should be allocated to the building of community based solar or solar farms.

In addition, RE Consultants maintains that the Second Revised Straw admits that funds in the low-income sector may not be as cost-effective as others and recommends moving \$100 M or \$25 M per year, out of the low-income EE sector and adding those funds to RE community based solar/solar farms, for a total budget of \$300 M. It claims that the State could take advantage of economies of scale to drive down the cost of 1 MW of solar from above \$6 M to under \$5 M.

In addition, PHE proposes that solar systems be mandated for new beach homes. PHE asserts that most of these homes are built by people who can afford to build them, and they are primarily used in the summer, when electric demand is greatest on New Jersey’s barrier islands and the most sunshine is available. It argues that the building codes should be updated to reflect a requirement of at least 2 kW of solar capability for each 1,000 square feet of home starting with homes of 2,000 square feet. An incentive already exists in the form of the Solar Class I RECs.

The NJ Green Homes Office (“Green Homes”) division of the NJ Housing and Mortgage Finance Agency (“HMFA”) references several RE and EE initiatives of its own and makes a number of specific recommendations regarding funding for both the RE and EE programs. Green Homes argues that the proposed CRA decreases funding just as solar is gaining momentum and points to its proposal for two multi-family zero-energy projects. It recommends increasing the CORE solar rebate program by \$4 M, claiming that this level of funding is necessary to achieve an 8-year payback period for for-profit developers and a 12-year payback for non-profit developers and referring the Board to its SUNLIT 2009 Transition program proposal for multifamily installations. Green Homes believes this level of funding is necessary to support the two Microload projects it proposes.

Spiezle Architectural Group (“Spiezle”) proposes maintaining or increasing CORE rebates for public school projects in order to maintain the growth in participation by this sector.

Seabright Solar comments that the rebate program, which ran from 2001 to 2007, was successful and recommends that another rebate program be implemented in 2009. Specifically, Seabright Solar suggests that the increase in the SACP be used to create funding for solar residential installations <10 kW in the same dollar per watt format as the original program and that the “SREC value increase should be implemented ASAP.” However, Seabright Solar states that the financial burden of carrying a loan of \$50,000 - \$60,000 is not feasible for many households, even with a payback time “equal to systems installed under the rebate program.” In support of continuing the solar rebate program, Seabright Solar cites the customer inquiries they receive each week, the fact that 90% of inquiries at trade shows mention the State’s rebate program, growing public interest in taking action to reduce emissions, and the recognition of the benefits of the past program’s benefits included in the earlier Staff Straw.

**Response:** With the exception of Rate Counsel, the majority of the comments regarding solar argue for additional funding for solar over and above the levels proposed by the OCE. Alternatively, Rate Counsel supports the decision, reflected in the amounts and types of funding recommended, to decrease funding and move away from direct subsidies and toward greater responsiveness to market forces. Thus, Rate Counsel does not support any increase in solar energy rebate funding at this time over and above the level proposed by the OCE.

OCE Staff notes that in the Board's Solar Transition Order cited above, the Board established revised policies intended to start a transition away from rebates towards a more market based approach. The Board established an 8 year SACP schedule and significantly increased the SACP level from \$300 to \$711. The increase in the SACP is intended to increase the value of SRECs to enable financing of larger solar projects without the need for rebates. The Board also directed Staff of the OCE to initiate a proceeding to explore whether additional securitization is warranted, and if so, to provide specific recommendations regarding methods and costs of providing such securitization. Finally, the Board recently approved a solar loan program for PSE&G that will make available over \$100 M in loans available to solar projects including a specific carve out for residential systems. Thus, the OCE notes that the Board remains firmly committed to achieving the RPS solar goals.

The Board noted in its Solar Transition Order the need to continue, albeit at a lower level, rebates for smaller solar systems even though small solar systems are more expensive than larger systems. As is evident from these decisions, it is the Board's intent to balance its desire to minimize impacts or rates with the goal of continuing to provide sufficient incentives to ensure the RPS goals are met.

OCE Staff disagrees with RE Consultants' proposal to reallocate \$260M from residential EE to solar. The OCE notes that investments in EE are currently cost effective, meaning that every dollar invested in EE produces more than a dollar in benefits, and deliver significant benefits for the State and for participating customers at a significantly lower cost than is required to subsidize solar. The Board has also significantly increased other incentives for solar as set out in the Solar Transition Order discussed above. The OCE strongly disagrees that funds should be reallocated away from low-income customers since this class of customers is most affected by rising energy costs and notes that while the low-income program is less cost effective than other EE programs, it is more cost effective than the RE programs. In addition, lowering energy usage for low-income can also reduce Universal Service Fund (USF) benefits to these customers. As the USF is paid for by ratepayers, a reduction in USF costs is beneficial to all ratepayers.

### Wind

Rate Counsel expresses concern that the proposed funding for wind and biomass is not decreasing over time. Rate Counsel posits either a determination that installed costs are not expected to decrease as per the RPS or an "underlying proposal" to increase support for these technologies, in capacity or rebate, over time. Rate Counsel would like to see OCE's efforts with wind and biomass focused on issues of securitization, provided it is secured through a competitive process, rather than on direct funding. Rate Counsel notes that the OCE has provided no documented support for the capacity and energy goals for wind.

Rate Counsel states that it seems that some of the funding proposals for the non-solar RE resources are an attempt to play catch-up because so much attention has been focused on

solar. In Rate Counsel's view, the rebate approach is simply "buying your way into the RE business" and may be unsustainable given increasing cost over time.

With regard to wind projects under 100 kW, Spiezle Architectural Group finds the existing State and federal incentives uncertain and inadequate to support development except by those positioned to take advantage of a power purchase agreement.

To promote growth for small-scale developers and owners, Spiezle recommends that the OCE adjust the REC rates proportionate to the recent adjustment in the solar REC rate so that it reflects a similar or equal value. Such an incentive would reflect the stated goal of increasing small scale wind installations throughout New Jersey.

Skylands Renewable Energy ("Skylands") expanded upon comments submitted on the First Revised Straw. Skylands criticizes the Second Revised Straw's RE allocation as a reallocation of wind electric funding and grant money toward other RE segments that will in its view effectively stifle any substantial growth in the wind electric market in New Jersey, arguing that the CRA should maintain or preferably increase funding levels for wind in the near future. Skylands believes that wind energy faces more significant barriers to implementation than other renewables, including siting and the lack of adequate financial incentives.

Skylands identifies three sectors within the wind industry that would benefit from segmented funding: residential and small commercial from 5 kW-100 kW, municipalities from 50 kW to 2-3MW, and larger commercial applications from 500 kW to 2-3 MW.

Skylands also recommends support for offshore wind, including specifically the Board's 360 [sic] MW project, referencing Navigant Consulting's RE Market Assessment Report target for offshore wind of 1000 MW by 2020. In this connection, Skylands cites costs of \$1,800-\$2,000 per kW for utility scale wind and \$3,000-\$5,000 per kW for small scale wind.

Michael Mercurio of IslandWind recommends that "Small Wind funding levels" receive a larger share of the budget than other renewables because other energy sources have not been as controversial and most development will be by local government and business. Municipalities, municipal utility authorities, and schools should be targeted for on-shore wind development because success for these entities will produce interest by other towns and businesses.

The City of Cape May proposes maintaining or increasing funding for wind energy and marketing to the government and C&I sectors, on the ground that RE for any public facility represents a savings to the taxpayer. Cape May argues that \$25 M for wind energy, with a 20% rebate, will produce only 178.5 units in three years and that this is insufficient. Cape May also proposes other incentives such as statutory amendments waiving down payments on RE bonds and a simpler permitting process.

**Response:** OCE Staff concurs in theory with Rate Counsel's comment that funding for wind and biomass should be reduced over time and that funding for wind and biomass focus on issues of securitization. However, the market for the development of wind and biomass projects is at a different stage than the market for solar projects. For example, as of the end of April 2008, the CORE program had outstanding commitments for 1,025 solar projects totaling 24.2 MWs but only 3 biomass projects totaling 1.4 MW and 23 wind projects totaling 0.3 MW.

The OCE believes that its proposed level of funding of \$100 M for wind projects is reasonable given the current state of wind development in New Jersey and is sufficient to meet the wind

energy goals set out in the Draft Energy Master Plan. Many of the other comments regarding wind focused on the specific details of future wind rebate programs, which will be considered by the Board in the annual detailed program and budget filings.

#### Biomass

Rate Counsel is concerned that the proposed funding for wind and biomass is not decreasing over time. Rate Counsel posits either a determination that installed costs are not anticipated to decrease as per the RPS Order or an “underlying proposal” to increase support for these technologies, in capacity or rebate, over time. Rate Counsel would like to see OCE’s efforts with wind and biomass focused on issues of securitization, provided it is secured through a competitive process, rather than on direct funding. Rate Counsel notes that the OCE has provided no documented support for the capacity and energy goals for biomass.

Stakeholders participating in the Biopower Technical Working Group, a subcommittee of the CEC’s Renewable Energy committee, provided the following comments on the First Revised Straw proposal:

1. Ridge Solutions, a New Jersey-based developer of waste-to-energy projects, produces diesel but would produce electricity if the wholesale rate paid was profitable. It also needs help with “seed funding” during early planning stages.
2. Bayonne Plant Holding recommends supporting existing plants and states that biodiesel could be an option for its peaking plant if a subsidy were available to make using biodiesel profitable. It also would like to see: air permit modifications ruling allowing biodiesel from any feedstock if it meets ASTM Standard D6751; RECs awarded for testing or a subsidy for R&D to cover potential need to switch from one feedstock source to another; and funding for certain entities to do testing of feedstock.
3. Morris Energy Group recommends supporting existing plants by making biofuel an economically attractive option through guaranteeing a price per MWh for generation above the price paid for alternatives. Under its proposal, ratepayers would only pay the cost of the subsidy when prices for conventional alternatives are low.
4. Mentor Business Group in Connecticut argues for support of the anaerobic digester business versus wind, and proposed regulatory support to provide a transparent market with low transaction costs and easy access to buyers/sellers, as well as a detailed economic model from the perspective of the project developer. Mentor also argues for price supports to make the economics attractive to developers.
5. Concerned in Camden argues for allocating more funding to biomass versus wind, pointing to the transformation of a liability into an asset and claiming that only short-term support would be needed.
6. Western Monmouth Utilities Authority proposes making rebates available for digester improvements made at the same time as the addition of power generation equipment since upgrades increase digester gas production.
7. Comment: recommends allocating \$500k to \$1M of biomass funding for 2008 to fund an RFP soliciting co-firing projects as providing the greatest return in the shortest time frame. The commenter further recommends allocating highest possible percentage of

\$15M annual allocation toward funding co-firing projects, possibly during development stage, on basis of estimate that 2-4% of biomass co-firing in the State's coal firing boilers could result in 50-100 MW of capacity reaching the grid within 6-18 months.

With regard to specific funding, Remix Energy ("Remix") proposed low interest loans for projects up to \$50 M and loans/grants up to \$500,000 through the CORE program. Remix cited Connecticut as a state which has successfully implemented several of the Remix ideas through legislation.

Dave Specca, who participated in the New Jersey Agricultural Experiment Station ("NJAES") research team that produced a report on biomass energy potential, recommends funding for development of biomass supply cooperatives to allow consolidation of available biomass for a long-term supply contract; for equipment that enables the use of biomass for biopower such as wood shredders and solid waste separation equipment; and for pilot-scale demonstrations of emerging technologies for the production of biopower to test this equipment in real world New Jersey conditions.

The Director of the Union County Utilities Authority ("UCUA") recommends that the CRA add incentives for energy from waste ("EfW") rather than for landfill gas and anaerobic digestion. The UCUA Director recommends significantly increased funding for EfW. The Director notes that the Second Revised Straw subsidizes landfill gas and biogas from anaerobic digestion, yet 1 ton of municipal solid waste ("MSW") dumped in a landfill generates only enough "landfill gas" to produce 20 – 30 kW-hr of electricity. The same ton of MSW generates 500 – 600 kW-hr of electricity in an EfW process with less environmental impacts and net positive GHG impacts. Subsidizing the former undermines the State's goals with respect to development of EfW in the Draft EMP, and instead, the Board should consider a "significant increase" to funding for EfW.

Babu Metgud of Innovation Technology Enterprise Development Center ("ITED") proposes an increase in funding for biopower. He recommends a State investment in biopower of \$75 M/year for R&D in biomass feedstock and equipment, and \$25 M per year for feasibility studies, for a total investment of \$100 M/year for the next four years. In his view, these investments are necessary to overcome the greatest obstacle to financing, the need for a reliable supply of raw materials, without which investors will not commit the funds necessary to develop 900 MW of biopower at an estimated cost of \$3.3 M per MW.

**Response:** The majority of the comments regarding biomass concern the specific program components that will be utilized to promote biomass. OCE Staff encourages the interested stakeholders to coordinate with the OCE through participation in the Biomass Working Group to develop innovative solutions for promoting the development of biomass projects. OCE Staff notes that the Board will consider program design issues further when it reviews specific programs to be implemented in 2009. The OCE believes the funding level for biomass it recommended represents a reasonable level of funding for the next four years. NJCEP financial incentives are limited by EDECA to qualifying Class I RE sources, and the statute does not define Class I RE to include combustion of MSW.

#### Clean Energy Technology Fund

Rate Counsel notes that the OCE has provided no documented support for the capacity and energy goals for the clean technology fund, and proposes specific issues, including amount of capacity and funding to be offered, and dollar support per installed kW or payment per kWh, to be addressed in future straw proposals. Rate Counsel would prefer to see those resources

allocated to actual renewable projects, preferably community-based solar energy or a solar schools and public building program.

Rate Counsel recommends the development of criteria to govern the applications of the Clean Energy Technology Fund, in particular a strong link to the overarching goal of reducing the State's energy use 20% by 2020. Rate Counsel suggests in particular that applications of the Fund directly or indirectly increase the scale, speed, or cost-effectiveness of implementing EE measures and realizing savings from EE.

PHE objects to the use of NJCEP funds for the proposed Clean Energy Technology Fund on the ground that ratepayers should not have to pay for the development of new technology.

**Response:** The OCE is currently in discussions with EDA to develop program details for the Clean Energy Technology Fund, to be embodied in a compliance filing. The Clean Energy Technology Fund is one of two programs to be managed by EDA with financial support from the NJCEP, the other being the Clean Energy Manufacturing Fund.<sup>17</sup> The OCE concurs with Rate Counsel that there should be a strong link between these programs and achieving the State's EE and RE goals. The Board approved a Memorandum of Understanding with EDA for the Clean Energy Manufacturing Fund at its July 30, 2008 Agenda meeting and for the Clean Energy Technology Fund at its August 7, 2008 Agenda meeting.

## D. Energy Efficiency

### General

Rate Counsel agrees that the majority of targeted savings must come from utility customers and believes that the NJCEP must be the foundation of efforts to encourage energy savings.

**Response:** The OCE Staff concurs.

### New Jersey Utilities Association

It is critically important that baseline data among the CRA, the Draft EMP, the Global Warming Response Act, and the RGGI legislation be consistent in order to better achieve the 20/20 policy goal and points out an inconsistency in energy savings data between the Draft EMP and the Second Revised Straw. The Draft EMP starts the baseline for electricity, distillate fuel, and natural gas at the Year 2005 (see Tables 5, 6, and 7 on pages 85, 86, and 87 respectively). However, the CRA funding proposal establishes EE savings projections based upon savings from the years 2001 – 2006 (See page 26 of the Staff Straw Proposal).

NJUA maintains that reliance on any one year of data to estimate future program needs, such as the Straw Proposal's use of 2007 program costs, is not advisable, and it suggests that the analysis make clear that the ability to produce a hard estimate given the goals and necessary expansion of the programs is difficult, at best. NJUA stated in oral testimony that it would work with the Board to establish a better source of data.

The NJUA indicates that the natural gas utilities do not believe that the residential gas heating and pricing data reflected in Table 28 of the Straw is an accurate representation of anticipated usage or prices currently in effect. Each of the gas utilities provided updated normalized data

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<sup>17</sup> Formerly known as the Edison Fund.

for the average residential heating customer and current prices, and the NJUA argues that this data is the closest comparison to the eventual rate impacts that the utilities will need to file for public notice purposes when the SBC rates are increased to accommodate the higher funding levels. NJUA suggests relying upon the utility data.

Given the concerns with the accuracy of the gas data, NJUA encouraged Staff to revisit the baseline data for the electric projections as well. NJUA also proposes adding the tracking of normalized usage at the residential customer level to capture any progress made through all channels, within and without the NJCEP.

Rate Counsel notes that the figures used by the OCE in projecting the 20% reduction in use are different from and smaller than those used in the Draft EMP.

**Response:** The OCE concurs that the data utilized needs to be consistent with the projections used in the Draft EMP and notes that it was the OCE's intent that the projections in both be consistent. Updated data was provided by the utilities and the Draft EMP projections have been updated accordingly to reflect this data and be consistent with the Proposal.

#### Energy Efficiency - Setting Goals and Budgets

Rate Counsel proposes a percentage increase in energy savings, rather than the linear model used in support of the Draft EMP process, as more achievable and affordable. A goal of 11.7 percent annual increase for electricity savings and a 26 percent annual increase for gas savings should be adopted, in its view. It maintains that the NJCEP budget for achieving these efficiency goals should be based on the median program cost found in a survey of the utilities or program administrators that achieved the largest EE goals or \$170 per annual MWh of electricity saved and \$15.40 per annual million Btu of gas saved. This produces a cumulative budget for electricity savings of \$520,472,000 and for gas of \$93,632,000.

**Response:** OCE Staff concurs in theory with this comment. The OCE utilized a linear approach for simplicity only in developing projections out to 2020. However, the OCE believes that it should develop a percent increase in savings goal for gas and electric in developing program budgets and goals for 2009.

The Housing and Mortgage Finance Agency and its Green Homes Office indicate they hope that more funds are made available in the following 4 years specifically for multifamily applications and low-income multifamily applications. The NJ ENERGY STAR Multifamily and the Pay-for-Performance pilot programs have a limited number of openings and HMFA is especially interested in expanding the Pay-for-Performance program to include a process just for multifamily buildings with a corresponding list of energy upgrade companies that have sufficient experience with multifamily buildings. HMFA hopes that the recent change to Home Performance with ENERGY STAR program will start to address rental rehabilitation affordable housing development projects.

Green Homes comments that this year, the program is working on a Micro-Load Homes Pilot. They are excited to see the results and design guidelines learned from the NJ ENERGY STAR Homes program in order to set the groundwork for an NJHMFA & BPU Zero-Energy Home Pilot.

**Response:** The OCE continues to support funding for subsidized housing projects and plans to work with HMFA to develop recommendations for 2009 for consideration by the Board as has been done in past years.

BIA comments that a building retrofit costs more than switching out equipment on an individual basis. It maintains that there must be incentives ready to compensate for the price differential. In addition, the Board should continue with specific rebates for certain equipment.

**Response:** The OCE concurs and anticipates continued rebates for building retrofit projects.

#### Energy Efficiency Portfolio Standard (“EEPS”)

Rate Counsel stated that EEPS is best seen as a possible supplement to the NJCEP and not as a substitute, at least in the 2009-2012 timeframe. Rate Counsel does not consider the development of an EEPS urgent in the near term. If an EEPS is adopted by the Board, Rate Counsel discusses two main ways in which the utilities may be required to cause more energy savings: utility-based customer programs, in the context of the RGGI legislation, or a trading system based on energy savings certificates or “white tags.”

Rate Counsel comments that the Board’s first priority should be to expand the NJCEP and aggressively enhance its effectiveness; the CRA Order should not presume any new utility programs that have not been explicitly authorized by the Board.

**Response:** OCE Staff agrees with Rate Counsel’s comment that it needs to expand the NJCEP but also feels that the consideration of an EEPS must continue.

Regarding the role of new utility programs, the OCE Staff notes that the NEEP has been engaged by the Board to develop a portfolio of programs aimed at achieving the EE goals set out in the Draft EMP. As part of this project NEEP will propose for consideration an administrative structure for ensuring consistency between the NJCEP and any programs proposed by the utilities, as well as with any programs that result from RGGI funds. The OCE anticipates an open public process for comments prior to consideration of any proposals submitted to the Board for consideration.

#### On-Bill Financing Services

Rate Counsel stated that a broad on-bill financing program—with all utilities participating—would increase NJCEP participation without adding significant program costs. Rate Counsel recommends a financing system whereby the utilities or third-party lenders advance the money needed by the customer to invest in qualifying EE measure and the customer repays these monies through the utility bill, typically with interest. The repayment schedule should allow the customer to “come out ahead” each month.

Rate Counsel also comments that one existing financing system is the Pay-As-You-Save system, which enables building owners or tenants to obtain and install money saving efficiency products with no up-front payment. Those who benefit from the resulting savings pay for the products through a tariffed charge on their utility bill. The obligation to pay remains with the account meter, so the customer’s obligation ends if the customer relocates.

NJUA comments that utilities may consider on-bill financing options in the context of their specific situations, but it would not be appropriate for third-party programs over which the utility has no control or involvement to be included on the utilities’ bills.

**Response:** The OCE Staff notes that the Board will not make any determinations regarding on-bill financing in this proceeding. The OCE will continue to coordinate with the stakeholders to determine the best methods for delivering EE to the State's customers, including the potential for on-bill financing.

Rate Counsel proposes that funding and priority should be increased for the new "performance contracting" program, whereby energy service companies are paid for measured and verified energy savings from efficiency projects at host facilities. Rate Counsel comments that this may be a major way additional EE can be obtained at lower than average program cost to ratepayers.

**Response:** The OCE Staff notes that the Board will consider funding levels for the Direct Install and Pay-for-Performance Programs in the context of consideration of 2009 programs and budgets. The OCE is currently coordinating with the Market Managers and the Energy Efficiency Committee of the Clean Energy Council, which is open to participation by all stakeholders, to develop 2009 programs and budget recommendations for consideration by the Board and encourages all interested stakeholders to provide further input to the OCE in developing these recommendations.

#### Caps on C&I Incentives

Rate Counsel states that the EE rebate cap for large C&I customers should be increased to at least \$500,000.

BIA states the Board should remove the caps on program benefits a C&I ratepayer can receive. A residential customer has no cap on the amount of incentives it can apply for regardless of how small the amount that customer contributes to the fund. It argues that, thus, many large users are subsidizing other rate classes without being able to take full advantage of the funds they contribute. It also claims that the cap means that the State is missing out on its most cost-effective opportunities to achieve EE savings.

NJLEUC states it is not unusual for certain commercial and industrial customers to contribute millions of dollars to the SBC each year only to receive, at most, \$100,000 in benefits in return because of existing program restrictions. NJLEUC urges that such caps be eliminated or, in the alternative, made performance-based to afford large end users with significant EE and conservation opportunities access to adequate funding to enable them to pursue all available energy savings opportunities. In oral testimony, the NJUA supported removal of caps on C&I program benefits.

**Response:** The OCE concurs that existing caps on C&I program incentives should be revisited and that a performance-based program that provides large end users with significant EE and conservation opportunities access to adequate funding to enable them to pursue energy savings opportunities should be developed. OCE Staff notes that the 2008 NJCEP budget approved by the Board included funding for a new C&I Pay-for-Performance program. The OCE anticipates this program will commence operation later in 2008. While final details of this program are still under development, this program is aimed at large, comprehensive C&I efficiency programs that will require substantial financial incentives. The OCE Staff anticipates that the incentives for this program will significantly exceed the current cap on incentives for the SmartStart program. The OCE has also commenced discussions with TRC, the C&I Market Manager, and the EE Committee of the Clean Energy Council to increase the existing \$200,000 cap per meter on

SmartStart incentives. The OCE anticipates consideration of any recommended changes to the cap as part of its deliberations regarding 2009 programs and budgets.

The OCE Staff notes that NJLEUC's assertion that large C&I customers are limited to \$100,000 in benefits is incorrect. For the first three years of the program no cap existed on incentives for the C&I program and numerous projects received rebates in excess of \$100,000. A \$100,000 cap on incentives for the C&I SmartStart program was imposed in 2004 as applications for rebates exceeded available budgets. The cap on C&I incentives was raised to \$200,000 per account in 2007, where it currently stands. The OCE Staff notes that the cap is for the SmartStart program only. Multiple C&I customers have received rebates up to \$1 M for CHP projects, multiple C&I customers have received multi-million dollar rebates for RE systems, some up to the program cap of \$5 M, and several C&I customers have received rebates for fuel cells well in excess of \$100,000.

The OCE Staff reiterates that only a portion of the SBC is attributable to the NJCEP. The current electric rate attributable to the NJCEP is approximately 0.21 cents per kWh. A large customer using 50 million kWh per year, assuming an average rate of ten cents per kWh, would pay \$5 M per year for electric of which \$105,000 would be the contribution to the SBC attributable to the NJCEP. OCE's proposal would increase the contribution attributable to the NJCEP for the customer in this example to \$157,500 by 2012, or about 3% of rates.

The OCE Staff also disagrees with NJBIA's assertion that there is no cap on the level of incentives a residential customer can receive. While it is true that no specific cap exists for residential programs, the highest rebate available to a residential customer is \$450 and is limited by the number of heating or cooling units that can be installed in a home. Residential customers are also limited to rebates for solar systems up to 10 kW.

#### Allocation of EE Funds

NJLEUC comments that the Proposal and Draft EMP underscore that no other NJCEP expenditures made to date even approximate the significant returns that have consistently been obtained from C&I EE and conservation programs.

NJLEUC also comments that, in its view, the historic approach to funding the NJCEP penalizes large end users with inordinate subsidies, thus discouraging self-investment in EE programs that clearly provide the most "bang for the buck" towards the achievement of the goals of the Draft EMP.

NJLEUC notes that the SBC, as a usage-based charge, has caused large users to pay disproportionate and steadily increasing contributions. It indicates that several of its members currently contribute almost as much in SBC charges as they pay for distribution charges. It argues that program implementation and cost recovery should occur in an enlightened and equitable manner that fairly spreads program costs to those who benefit from the programs, and provides appropriate incentives to ratepayers to be energy efficient.

NJLEUC also notes that the Proposal acknowledges, as did the Draft Energy Master Plan (at p. 52), that the most "bang" for the EE and conservation dollar has consistently been obtained from investments made by commercial and industrial customers. It is acknowledged that 68.5% of the 1.2 million MWh of electricity saved as a result of the NJCEP's EE programs between 2001 and 2006 were achieved through the C&I EE program. It notes that the Proposal

concludes that every dollar expended in the commercial and industrial EE program has resulted in approximately \$11 in customer savings. (Proposal, at pp. 21-22, see also Draft EMP at p. 52).

NJLEUC contends that the SBC should be bifurcated by rate class, while providing a separate fund, supported by all rate classes, to benefit low-income residential customers. It suggests that the Board could establish separate EE, Clean Energy and RE Program Funds for residential, small commercial and large commercial and industrial customers, in proportion to the amount of revenue remitted to the Board in the preceding State fiscal year and that the funds would then be disbursed exclusively to the members of the rate class that contributed the funds.

NJBIA comments that it does not support increasing the SBC to cover State policies. Instead of increasing the SBC to meet current funding levels for residential programs, it asserts that the Board should shift the 60 percent of funding to C&I, which return more savings for potentially less money. It asserts that the Board should allocate 60 percent of the existing Clean Energy funding towards the C&I programs, reduce funding for current residential EE programs that do not result in as great a return as EE programs in the C&I, and base funding provided on the level of funding contributed by each customer class. It notes that OCE's data shows that the NJCEP spent less than half on programs for C&I customers than it did on residential programs but achieved over twice the MWh savings and over three times the reduction in carbon dioxide ("CO2").

Rate Counsel states that a gradual increase of C&I EE funding relative to residential makes sense but should be used as a guideline in the annual budget-setting process rather than as a rigid prescription.

**Response:** The OCE's straw proposal directly addresses this issue by proposing that a higher percentage of the EE budget be allocated to the C&I EE programs, specifically, 60% by 2011.

The OCE believes it would be administratively burdensome and inefficient to establish multiple budgets by type of program and rate class as suggested by NJLEUC. The OCE Staff notes that the Board currently has the flexibility to allocate funding to programs based on various factors including the level of funding allocated to each rate class, program participation levels, changes in the market place such as the introduction of new products, and new minimum appliance efficiency standards or building codes. NJLEUC's proposal would add additional administrative costs related to tracking collections from each rate class, establishment of multiple budgets and accounts and tracking expenses within each budget category as well as inhibit the flexibility the Board now has to modify budgets based on changes in programs or the marketplace.

BIA comments that some residential outreach and education funding should be redirected to education for C&I customers. The commenter notes that the budgeted amount for C&I education has not been fully used in recent years, and believes that this is due to insufficient outreach to these customers. In its view, funding for the Clean Power Choice program, which has not met its customer goals and causes customers to pay more for power, should be redirected towards EE education for C&I customers. It also suggests that the Cool Cities program should be eliminated, given what BIA refers to as its poor record of achieving carbon reductions.

BIA also comments that increased outreach and education to the C&I ratepayer must complement any RE program designed by the Board. For example, funds must be in place to assist with audits and implementation if a business must become more efficient before it could qualify for a renewable grant.

**Response:** The OCE Staff concurs with BIA's comment that additional education is required in the C&I market. The Draft EMP has recommended the development of Best Practices Manuals for up to ten industry sectors featuring recommendations for EE improvements. The OCE has directed the C&I Market Manager to coordinate with the BPU's Business Ombudsperson in the development of these Best Practices Manuals, to develop proposals for marketing these manuals to the various industry sectors, and to develop specific programs to assist C&I customers in implementing the recommendations set out in the manuals. The Market Manager will be directed to propose a contract modification if necessary. The OCE Staff anticipates recommendations regarding development and promotion of the Best Practice Manuals as part of the 2009 program recommendations.

#### **E. Responses to Questions in Second Revised Straw Proposal**

1. *Should program design provide strong incentives or mandate that customer-generators implement energy efficiency measures in order to be eligible for renewable energy rebates?*

Solar Alliance comments that funding levels must incorporate ongoing discussion of issues in Draft EMP and RGGI's Energy Portfolio Standard. The Solar Alliance endorses EE measures as the first and most responsible approach to achieving State's goals, but believes incentives for EE and RE should continue to be separate. In its view, the SREC payment structure, in essence, operates as a rebate to customers who maximize efficiency.

Rate Counsel comments that further analysis is needed before adopting any mandate, which may actually discourage participation by adding another cost to the process. Rate Counsel would support "strongly encouraging" the adoption of EE concurrent with adoption of RE.

NJUA comments that the Program design should focus on incentives, rather than mandates. It states that strong incentives can be used to lead the market; for example efficiency measures combined with a renewable system can be granted a higher level of incentive, while mandates could stifle creative solutions that could be developed by the market. It asserts that currently the NJCEP provides a disincentive to efficiency by limiting the eligibility of efficiency rebates in new construction almost entirely to Smart Growth areas only. It argues that the CORE program has no such limitation and that the lack of an efficiency rebate does not provide an appropriate signal to customers regarding the importance of maximizing efficiency, which is inconsistent with the State's overall energy policy goals.

Green Homes does not recommend linking EE requirements to RE installations, claiming that an additional requirement and resulting outlay of funds would deter participation, that projects currently applying for HMFA funds are already required to meet NJ ENERGY STAR Homes or an acceptable equivalent, and that HMFA projects are generally either already implementing many energy-saving items or are looking for programs and ways to reduce their energy costs. Green Homes urges providing opportunities for multifamily energy saving programs and relying on market forces to produce the implementation of EE measures prior to RE installations.

**Response:** The OCE Staff concurs with the comments that at this time strong incentives are preferable to mandates. The issue of requiring or providing incentives for energy efficiency when installing renewables will continue to be evaluated by OCE and the EE and RE Committees.

*2. Are the capacity targets and spending levels for wind, biomass and solar presented in this version of the straw proposal reasonable and achievable?*

Solar Alliance states that the 2.12% goal, capped at 1.7M MWh in the Solar Transition Order, is modest and achievable. The experience of the New Jersey solar market shows that demand is far in excess of currently available rebate budget exists. The Solar Alliance proposes that the Board raise the solar RPS goal to 5%, such that the 1700 MWh cap on rebates remains in place but private funding of additional solar can be encouraged to the maximum extent. In addition, the OCE should reconsider the co-mingling of residential with small commercial systems in the under-20 kW market segment. Solar Alliance proposes continuing rebates for residential systems and allocating a larger portion of the budget to these rebates. It supports the Second Revised Straw's proposal of a larger budget for such rebates in earlier years.

Skylands includes maps of wind potential in New Jersey, and states that "any area that is not white" is a candidate for small to medium-size wind (approximately 40-45% of the State). Skylands extrapolates the State's potential wind energy resource by applying the 40-45% to the numbers of municipalities and schools and assuming an average installation size of 1MW. Skylands believes that there are 90-100 municipalities that could install wind electric for approximately 100 MW of wind and assuming that half of the 616 school systems install wind, an additional 150 MW, in addition to perhaps 5,000-10,000 residential installations of 10-20 kW.

IslandWind states that if tidal bay areas are utilized for on-shore wind development the goal of 200 MW from wind energy can easily be reached. It indicates that offshore wind has the greatest potential and could reach 4,000 MW in the next twenty years depending upon the policy formed by Mineral Management Services ("MMS").

**Response:** The OCE believes the proposed capacity targets and spending levels for wind, biomass and solar presented in the Straw proposal are reasonable.

*3. How should the RGGI mechanisms for funding for RE be coordinated with the SBC funding for RE? Should those programs be in addition to or part of the overall total?*

Solar Alliance states that RGGI and the SBC should work hand-in-hand to deliver a more robust RE market, neither supplanting the other. Solar Alliance notes that New York has proposed an Energy Efficiency and Clean Energy Technology Account to hold the proceeds of the RGGI auction, the proceeds to supply RE alternatives such as solar.

Rate Counsel believes all funding from all sources should be pooled to support a fixed level of RE development and does not support continued increases in funding because of the increased cost to ratepayers. In verbal testimony, Rate Counsel stated that any ratepayer money collected within the SBC should be targeted to RE programs that will spur private investment and competitive markets. In addition, continued rebates would run counter to the policy goal of developing competitive RE markets. As a general comment, Rate Counsel noted that all things being equal, the net lost revenue recovery and utility performance incentive mechanisms authorized by recent legislation would be more costly for ratepayers than the societal benefits charge.

NJUA comments that utility-run programs as envisaged by the Legislature in enacting the RGGI bill should not need to undergo the NJCEP review and approval process for funding like existing State-managed or State-mandated programs. NJUA maintains that the Legislature expected that the Board would evaluate the program merits and funding in one step and coordinate

internally to ensure cost containment and non-duplication of programs between those run by utilities and those under the NJCEP. RGGI programs can and should be coordinated with CRA programs as an internal management function of the Board that can be accommodated by the utilities, as PSE&G has proposed in its discovery responses for its Carbon Abatement filing. To do otherwise creates unnecessary barriers to program delivery.

NJUA stated in oral testimony that it is necessary to coordinate utility programs with NJCEP programs to avoid wasteful duplication. Utilities are attempting to use billing systems to make customers aware of NJCEP and federal programs so that a holistic approach is achieved and the optimum amount of incentive is provided.

BIA comments that the Board should utilize the proceeds of the RGGI allowances, of which 20 percent is allocated for residential programs, to provide the programming for the residential sector.

Green Homes recommends that the RGGI mechanisms for RE funding be coordinated with the SBC funding for RE such that the total OCE budget includes the funds and allocations for programs that pull from RGGI funds, those between state agencies with RGGI or SBC funds, those managed by the OCE with SBC funds, and those initiated by utility companies and recovered through the SBC. Green Homes asserts that it would defeat the purpose of the public CRA process not to discuss other related programs that also affect customer utility bills.

**Response:** As noted above, the Board has engaged NEEP to develop a portfolio of programs for achieving the Draft EMP goals. As part of that project NEEP will provide recommendations regarding how to best coordinate SBC, RGGI and other efforts. The OCE Staff notes that the Board will consider this issue further after receipt of the NEEP recommendations and an opportunity for public comment.

4. *What types of pilots or innovative programs should be developed and funded through the SBC four year funding level for RE? Or through the other RGGI mechanisms?*

Solar Alliance: Solar Alliance encourages other utilities to adopt solar incentive programs as PSE&G has done and strongly encourages inclusion of a significant solar component in the Clean Power Choice program. The OCE's alternative proposal for 2 MW Capacity Incentive Blocks within the solar rebate program should be considered. Blocks would provide critical program continuity if managed correctly; there should be blocks of decreasing incentives coupled with a "heads-up" mechanism so market participants can project time of the next decrease. The OCE should consider how to disincentivize applications if a project is unlikely to proceed and whether 2MW is the optimum size.

Rate Counsel: Rate Counsel believes that the Board should pursue a securitization proceeding early in the next 4-year funding cycle. Without securitization, the Board will have a difficult to impossible time meeting its RPS goals, particularly with respect to wind and biomass.

In verbal testimony, Rate Counsel stated that its reason for supporting some degree of securitization has to do with the regulatory risks that are reflected in all RE markets, not just solar, which carry real costs and these real costs are passed along to everyday households and business through higher RE costs needed to meet the RPS. Rate Counsel encourages the Board to think more holistically about RE markets and not in a piecemeal fashion focusing on one type of resource like solar or wind alone.

The New Jersey Corporation for Advanced Technology (“NJCAT”), a non-profit organization made up of members from technology-based businesses, industry, government agencies, and others, recommends funding for a RE Technology Assessment program, building upon the experience of the NJCAT Technology Verification Program implemented with the DEP. NJCAT proposes an energy technology assessment which would provide the Board with sound scientific information to be used in its decision-making processes. Projects would be assessed on the basis of potential for commercialization, contribution to the wider development and diversification of New Jersey’s RE industry, and the reduction of GHG.

**Response:** The OCE Staff believes that it is appropriate to consider these comments further in the development of detailed 2009 program plans.

5. *Should there be a rebate based component for behind the meter and grid supply wind and biomass?*

Solar Alliance: Solar Alliance does not support a rebate based component for these resources.

Rate Counsel: Rate Counsel submits that there should be no new behind the meter subsidies other than the special case of small solar. Money for wind and biomass would likely be sunk fighting local opposition in any case.

**Response:** The OCE Staff believes that it is appropriate to consider these comments further in the development of detailed 2009 program plans.

6. *Is there a need for additional New Jersey and resource specific carve outs in the RPS targets (i.e., in-state wind and biomass resources)?*

Solar Alliance: Solar Alliance does not believe that such a need exists.

**Response:** The OCE Staff believes that it is appropriate to consider this further as part of any future RPS rulemaking.

7. *What further rule changes (e.g. co-firing eligibility, group net metering for wind) are required to enable significant progress toward RPS goals?*

Solar Alliance comments that community aggregation (net metering) would enable multi-unit facilities to access benefits of investing in solar and other projects. New policy solutions are needed to address the under-10 kW segment and the reluctance of electricity suppliers to enter into contracts. Solar Alliance suggests that one solution is in Maryland and Colorado legislation and calls for suppliers to enter into contracts to purchase the credits expected to be generated by a small system with a single initial payment.

To further the growth of wind for municipalities and larger commercial applications, Skyland urges three alterations in the Board’s regulations: the addition of aggregated net metering, the recognition of community wind, and the elimination of the 2 MW limit on eligibility for grid-connected net metering.

PHE also recommends Class I Renewable status for two RE sources: gasification of landfill waste and biodiesel fuel. PHE argues that landfill gas is already classified as Class I, and that gasification of the waste is one step more efficient. For biodiesel, PHE believes that a

requirement for the producer to show that the source was produced in a sustainable manner would be easily determined in New Jersey and is a feasible mandate for out-of-state sources.

LS Power Associates, LP (“LS Power”), an independent power generation developer owner and operator headquartered in New Jersey, supports the proposed funding levels for the biopower portion of the NJCEP but recommends the specific technology of co-firing as the only practicable near-term means of using that funding to achieve the Draft EMP goal of 900 MW biomass power by 2020, while requiring very little public expenditure or ratepayer risk. LS Power points to co-firing’s use of existing conventional generators as a means of providing a reliable supply of biopower which would in turn enable developers to obtain long-term power purchase agreements. LS Power argues that the RPS rules foreclose the use of energy-rich and readily available mixed waste and recommends amendments to the RPS which would bring wood contained in mixed or construction and demolition waste into the definition of Class I or II resources.

Mr. Specca recommends allowing the co-firing of sustainable biomass with coal to qualify as RE for the portion of the fuel that is from sustainable biomass. He comments that this method is the lowest cost option for the production of renewable biomass-based energy and the quickest to implement. Mr. Specca also recommends redefining the term “sustainable biomass” to include biomass that is not necessarily grown in a sustainable manner or source separated. In support of this change, he points to the avoided GHG emissions from not transporting solid waste to a far-off landfill and also the fact that the landfill gas produced by the same waste is already considered a “sustainable biomass.”

Covanta Energy (“Covanta”), an owner and operator of three facilities producing energy from waste in New Jersey and thirty-four states nationwide, criticizes the draft CRA for recognizing only sustainably grown and harvested biomass as a Class I renewable and recommends that the CRA also recognize landfill waste, or at least the fraction of it representing biomass, and provide funding for it. Covanta argues that recognizing landfill gas as a Class I renewable and not solid waste is inconsistent. Covanta cites 2005 DEP numbers to claim that New Jersey is currently exporting up to 4.1 million tons of solid waste per year and that turning these tons into energy would potentially generate 280 MW of capacity or 2500 GWh of generation annually, equating to up to 4.1 MM tons of reduction in CO<sub>2</sub> generation. Covanta also argues that including solid waste as a Class I renewable would be an effective tool in reaching the 2020 goals for RE. Covanta also notes that the Draft EMP combines the energy generation from solid waste with landfill gas generation in its CO<sub>2</sub> inventory, suggesting to Covanta that the energy from waste GHG profile is being evaluated as a stationary CO<sub>2</sub> point source, whereas Covanta argues that this energy should be shown to generate CO<sub>2</sub> credits when the avoided fossil consumption, recycling benefits, and avoided methane production at landfills are considered.

The Union County Utilities Authority, owner of a 44 MW energy-from-waste generating facility, criticizes the Second Revised Straw for what it submits is a disconnect with the policy directives of the Draft EMP and internal inconsistency and recommends that the CRA clarify that “biomass” includes municipal solid waste and energy-from-waste. Specifically, the UCUA Director points to Goal 3, Action Item 3 in the Draft EMP and to a goal in the Implementation Strategies document (p. 37) of about 800 MW of biomass production capacity from burning MSW. He asserts that the Second Revised Straw errs in citing the Draft EMP as advocating 900 MW of sustainably grown and harvested biomass; that term is not defined in the Draft EMP or the straw proposal. Elsewhere, the Second Revised Straw talks of “100 MW” from biomass development (p. 17) and proposes a \$60 M funding level to encourage this development. He

asserts that the Second Revised Straw does not recognize the energy-from-waste goal he claims is contained in the Draft EMP and that the draft EMP's failure to define the term "sustainably grown and harvested biomass" means, in his opinion, that that document does not support the emphasis placed on sustainable biomass by the Second Revised Straw.

PowerHouse Energy states that building codes should require all new homes to attain an Energy Smart rating. It submits that building homes that are more energy efficient is a great way to start meeting the EE goals and that the slight additional cost in construction will be repaid in lower energy costs. He states that if needed, an incentive can be developed. PHE thinks all public buildings should be required to attain an energy smart rating. Any public office building or school of 40,000 square feet or larger and any public building of any type larger than 60,000 square feet should, in its view, require a CHP system with an overall efficiency of 60% or greater. PHE wants to see preferential gas rates for CHP systems. New York City and other locales have instituted preferential tariffs for CHP systems that burn consistent amounts of gas throughout the year and are not winter peaking. PHE comments that the Board should establish such a tariff for New Jersey's gas utilities and mandate that this be made available, and that this rate should be tied to a minimum efficiency of 60% for the CHP system.

Remix Energy recommends a number of measures to provide significantly stronger support for the development of RE in general and biofuels in particular. Remix believes that the rate paid by utilities for electricity should be brought from the level at which Remix currently places it, \$0.035 to \$0.06 per kWh, closer to \$0.12 to \$0.014 per kWh. Remix proposes that it be made faster and easier for biomass providers to secure power purchase agreements, and that the Board includes municipal waste, tires, and/or wood construction debris as Class I renewables. In addition, Remix would like utilities to be required to buy all of the electricity it produces, typically 20 MWH per plant.

**Response:** The OCE Staff believes that it is appropriate to consider these comments further in the context of the current efforts to revise the related regulations.

8. *Should funding be available to support upstream development and non-generation assets such as feasibility, siting, and permitting, risk mitigation in S/REC markets, and biomass exchange network?*

Solar Alliance: Solar Alliance believes that funding should be used for market incentives to deploy as much generation as possible.

**Response:** The OCE Staff believes that it is appropriate to consider this comment further in the context of developing detailed 2009 programs and budgets.

9. *What additional market development activities will help reach RPS goals?*

Solar Alliance: Solar Alliance supports the facilitation of long-term solar contracts, with 15 years being an optimal period. Lower SREC prices will be needed and the impact on ratepayers will be less than under the current 8-year SACP schedule.

**Response:** The OCE Staff notes that the Board addressed this issue at its July 30, 2008 Board meeting. In the Matter of the Renewable Energy Portfolio Standard (RPS)-Alternative

Compliance Payments (ACP) and Solar Alternative Compliance Payments (SACP) - Decision and Order Regarding Solar Financing- Long Term Contract, Docket No. EO08030164.<sup>18</sup>

## V. OCE RECOMMENDATIONS

### A. 2009 – 2012 Funding Levels

As discussed above, OCE issued an initial straw proposal on or about January 11, 2008. Based on informal comments presented at the EE and RE Committee meetings, written comments and comments from the CEC, OCE issued a First Revised Straw Proposal dated March 26, 2008 and a Second Revised Straw Proposal dated April 15, 2008. Thus, OCE has addressed the majority of the comments received in its Second Revised Straw Proposal. However, based on additional comments received subsequent to the release of the Second Revised Straw, and at the public hearings, OCE recommends the following changes to its proposal set out in the Second Revised Straw Proposal as follows.

OCE proposed a four year funding level for small solar of \$53.25 M. Numerous comments proposed increasing this amount based on the belief of the solar industry that OCE's proposed cuts would have harmful effects on the small solar industry as discussed above.

OCE notes that the Board has consistently reiterated its commitment to achievement of the solar RPS goals at the lowest cost to ratepayers. The Board's Solar Transition Order was the first step in achieving the Board's stated desire to transition from a rebate based incentive approach to a more market based approach. This Order established an 8 year schedule of Solar Alternative Compliance Payments ("SACP") intended to facilitate long-term contracts for the purchase of SRECs to enable solar project financing without rebates. The Board directed the OCE to initiate a proceeding to investigate the need for and means to provide additional securitization of SRECs to enable project financing. On July 30, 2008 the Board directed the four electric utilities to submit filings to undertake renewable energy improvements by facilitating SREC-based financing of solar electric generation projects, in a manner that supports the transition to a market-based approach of delivering incentives for solar electric generation. Specifically, the Board stated that SREC-based financing should be founded on a competitive long-term contract model, under which EDCs would periodically enter into long-term contracts to purchase SRECs, with the contracts awarded based on the price at which the seller offers to sell SRECs over the contract term. The Board also recently approved PSE&G's solar loan program which will make over \$100 M available for financing solar projects including 6 MW of small solar projects. I/M/O Petition of Public Service Electric & Gas Company for Approval of a Solar Energy Program and an Associated Cost Recovery Mechanism, Docket No. EO07040278 (April 8, 2008).

OCE's proposed four year funding level for small solar projects took into consideration all of these factors including: the Board's desire to transition to a more market based approach; the Board's desire to minimize rate impacts; that small solar systems are more expensive to build than larger systems due to economies of scale; and, that the success of the programs in New Jersey has resulted in all of the available funding being utilized which led to projects waiting in queues for additional funding. Based on further consideration of the comments, and given the recent difficulties faced by small solar installers due to the creation of queues and uncertainties regarding whether or not federal tax credits for solar will be extended, OCE agrees that additional funding for small solar systems in the next four year funding cycle is needed.

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<sup>18</sup> The Board's actions were memorialized in an Order dated August 7, 2008.

However, rather than increasing the proposed RE funding level, OCE believes that it would be more appropriate to provide this additional funding from the Solar Alternative Compliance Payments , pursuant to N.J.A.C. 14:8.2-10, which provides for use of SACP monies for solar energy projects through the Clean Energy Program. A preliminary analysis of the projected SREC shortfall for Energy Year 2009 (June 1, 2008 – May 31, 2009), prepared by OCE, estimates that approximately \$28 M in SACP monies will be required. Dedicating these monies to the small solar rebates will provide adequate funding for an expanded program.

The 2008 programs and budgets included \$10 M that, pursuant to the Appropriations Act L. 2007, C. 117, for the State fiscal year ending June 30, 2008, was appropriated and required to be paid, as a matter of law, from the Clean Energy Fund as an Interdepartmental Capital Appropriation (“ICA”) for EE projects in State facilities. The fiscal year 2009 Appropriations Act appropriated another \$10 M from the Clean Energy Fund. OCE has revised the proposed 2009 funding level to include an additional \$10 M to cover this appropriation.

Based on the above, OCE recommends the following funding levels for the years 2009 to 2012 which include the additional funding for State facilities discussed above.

**Table 25: OCE Final Recommendation for 2009 to 2012 EE Funding (\$M)**

Year	C&I	Residential	Low Income	Clean Energy Technology Fund	State Facilities	Total
2009	\$62.40	\$66.60	\$30.00	\$7.50	\$10.00	\$176.50
2010	\$92.30	\$78.20	\$30.00	\$7.50	\$0.00	\$208.00
2011	\$133.50	\$89.00	\$30.00	\$7.50	\$0.00	\$260.00
2012	\$172.50	\$115.00	\$30.00	\$7.50	\$0.00	\$325.00
<b>Total</b>	<b>\$460.70</b>	<b>\$348.80</b>	<b>\$120.00</b>	<b>\$30.00</b>	<b>\$10.00</b>	<b>\$969.50</b>

**Table 26: OCE Final Recommendation for 2009 to 2012 RE Funding (\$M)**

Year	Wind	Biomass	Clean Energy Tech Fund	Small Solar < 20 kW	Total
2009	\$25.0	\$15.0	\$7.5	\$21.00	\$68.50
2010	\$25.0	\$15.0	\$7.5	\$13.50	\$61.00
2011	\$25.0	\$15.0	\$7.5	\$12.00	\$59.50
2012	\$25.0	\$15.0	\$7.5	\$6.75	\$54.25
<b>Total</b>	<b>\$100.0</b>	<b>\$60.0</b>	<b>\$30.0</b>	<b>\$53.25</b>	<b>\$243.25</b>

**Table 27: OCE Final Recommendation for 2009 to 2012 Total Funding (\$M)**

	2009	2010	2011	2012	Total
<b>EE</b>	<b>\$176.50</b>	<b>\$208.00</b>	<b>\$260.00</b>	<b>\$325.00</b>	<b>\$969.50</b>
<b>RE</b>	<b>\$68.50</b>	<b>\$61.00</b>	<b>\$59.50</b>	<b>\$54.25</b>	<b>\$243.25</b>
<b>Total</b>	<b>\$245.00</b>	<b>\$269.00</b>	<b>\$319.50</b>	<b>\$379.25</b>	<b>\$1,212.75</b>

## **B. Funding Allocation**

In its Second Revised Straw, the OCE proposed allocating 60% of the EE funding levels and 100% of the RE funding levels to electric customers and 40% of the EE funding to natural gas customers. OCE noted that in the second CRA proceeding the Board allocated 69% of the total funding, including both EE and RE, to electric customers and 31% to natural gas customers.

OCE stated in its Second Revised Straw that in theory it believes electric and natural gas customers should contribute equally as a percentage of total revenue. However, in the previous CRA proceeding OCE recommended a higher percentage for electric customers in order to mitigate rate impacts on gas customers. OCE also believes that natural gas customers benefit from the installation of RE measures and should therefore contribute to funding RE programs.

In the Second Revised Straw, OCE requested comments on the allocation of EE and RE funding to electric and natural gas customers prior to developing a revised allocation proposal. Rate Counsel stated its belief that electric ratepayers should contribute to the program costs for achieving electric EE goals, and gas ratepayers should contribute to the program costs for achieving gas EE goals. No other comments were received from any participants regarding this topic.

The OCE performed additional analysis regarding several options for allocating the proposed funding levels between electric and natural gas customers and among the electric and gas utilities. On or about July 2, 2008, OCE circulated a request for additional comments on the following three proposed options for allocating funding between electric and gas ratepayers:

1. Utilizing the same methodology and inputs that were used to set 2008 funding levels. This methodology allocated 69% of the total funding to electric utilities and 31% to gas utilities and used 2003 kWh or therm sales levels for allocating the funding to the individual utilities.
2. Utilizing the OCE's methodology set out in the Second Revised Straw which would allocate 60% of the EE funding and 100% of the RE funding to electric utilities and 40% of the EE funding to gas utilities.
3. Utilizing a methodology that allocates funding based on estimated 2009 revenues set out in the Draft State Energy Master Plan.

The results of these three methodologies are as follows, with 2008 included as a point of reference:

**Table 28: Results of Methodologies for Funding Allocation**

**2008 Funding = 69% of Total Funding to Electric and 31% to Natural Gas:**

Total	Electric	Gas
\$235,000,000	\$162,150,000	\$72,850,000

**1. Same as 2008 = 69% of Total Funding to Electric and 31% to Natural Gas**

	Total	Electric	Gas
2009	\$245,000,000	\$169,050,000	\$75,950,000
2010	\$269,000,000	\$185,610,000	\$83,390,000
2011	\$319,500,000	\$220,455,000	\$99,045,000
2012	\$379,250,000	\$261,682,500	\$117,567,500
Total	\$1,212,750,000	\$836,797,500	\$375,952,500

**2. OCE Proposal = 60% EE + 100% RE to Electric, 40% EE to Natural Gas**

	EE	RE	Electric	Gas
2009	\$176,500,000	\$68,500,000	\$174,400,000	\$70,600,000
2010	\$208,000,000	\$61,000,000	\$185,800,000	\$83,200,000
2011	\$260,000,000	\$59,500,000	\$215,500,000	\$104,000,000
2012	\$325,000,000	\$54,250,000	\$249,250,000	\$130,000,000
Total			\$824,950,000	\$387,800,000

**3. As a % of Estimated 2009 Revenues (\$000)**

Electric Revenues	\$10,895,300	Electric Revenues as % of Total	Gas Revenues as % of Total
Gas Revenues	\$7,819,100	<b>58.22%</b>	<b>41.78%</b>
Total Revenues	\$18,714,400		
Funding Levels		Electric	Gas
2009	\$245,000,000	\$142,636,072	\$102,363,928
2010	\$269,000,000	\$156,608,585	\$112,391,415
2011	\$319,500,000	\$186,009,081	\$133,490,919
2012	\$379,250,000	\$220,794,817	\$158,455,183
Total	\$1,212,750,000	\$706,048,555	\$506,701,445

OCE noted in the Second Revised Straw that it believed that in theory gas and electric customers should contribute equally as a percentage of total revenue (Option 3 above). However, based on the analysis set out above, doing so would increase the amount paid by gas customers in 2009, as compared to the amount paid in 2008, by approximately \$30 M while reducing the amount contributed by electric customers by approximately \$20 M. OCE's proposed methodology set out in the straw proposal (Option 2 above) would reduce 2009 contributions made by gas customers relative to 2008 levels.

Comments on the three options discussed above were received from Rate Counsel and New Jersey Natural Gas Company ("NJNG"). Rate Counsel stated that it does not share OCE's belief that electric and gas customers should contribute equally as a percentage of total revenue. Alternatively, Rate Counsel reiterated its earlier comments that electric ratepayers should contribute to the program costs for achieving electric EE goals, and gas ratepayers should contribute to the program costs for achieving gas EE goals. Rate Counsel questioned whether gas ratepayers should continue to fund renewable electricity generation.

NJNG stated that it does not believe it is appropriate to use total revenues from a single year to set four year funding cycles due to the volatility in commodity pricing from year to year. NJNG stated that since it is extremely difficult and time consuming to try to develop precisely how the State might attempt to quantify what an appropriate benefit ratio might be to apply to RE funding, NJNG supports OCE proposal #1 discussed above which would allocate funding to electric and gas customers using the same ratios used in 2008.

OCE does not support Rate Counsel's proposal that natural gas customers should not contribute to RE programs. Gas customers benefit from the development of a RE industry in many ways including reduced emissions and reduced natural gas usage which is used to generate electricity. Reduced emissions will contribute to meeting the goals of the RGGI legislation which requires reductions in green house gas emissions.

Based on the above, and taking into consideration the comments submitted, OCE recommends that the Board approve option #1 above, which maintains the allocation approved in the second CRA proceeding which is 69% of the total EE and RE funding to electric customers and 31% to natural gas customers.

In addition to the allocation between electric and natural gas customers, the funding must also be allocated among the electric companies and gas companies and monthly payment schedules need to be developed which set out the amount due each month from each utility. OCE recommends that the Board use the same methodology utilized in the second CRA proceeding but utilizes updated sales data.

The utilities provided the OCE with 2007 kWh or Dtherm retail sales data. OCE prepared a table that allocates the proposed electric and natural gas funding levels recommended above to each utility in each month based on each utility's proportional share of total statewide kWh or Dtherm sales. The utilities have reviewed the sales data and confirmed its accuracy. The specific monthly payments due from each utility that result from this allocation is shown in the tables included in Appendix A of this order.

### C. Rate Impacts

The OCE has prepared revised estimates of the rate impacts based upon the revised proposed funding levels and allocations recommended above. The following tables show the proposed funding levels as a percentage of estimated electric and natural gas revenues and the incremental rate impact which shows the difference between the proposed funding level in each year and the 2008 funding level, as a percentage of estimated revenues:

**Table 29: Electric Rate Impacts**

Year	Electric Funding	Estimated Retail Electric Revenues	Funding as a % of Revenues	Incremental Rate Impact
2008	\$162,150,000			
2009	\$169,050,000	\$10,895,300,000	1.55%	0.06%
2010	\$185,610,000	\$11,411,700,000	1.63%	0.15%
2011	\$220,455,000	\$11,952,700,000	1.84%	0.29%
2012	\$261,682,500	\$12,519,400,000	2.09%	0.33%
Total/Average 2009-2012	\$836,797,500	\$46,779,100,000	1.79%	0.80%

**Table 30: Gas Rate Impacts**

<b>Year</b>	<b>Natural Gas Funding</b>	<b>Estimated Retail Natural Gas Revenues</b>	<b>Funding as a % of Revenues</b>	<b>Incremental Rate Impact</b>
<b>2008</b>	<b>\$72,850,000</b>			
<b>2009</b>	<b>\$75,950,000</b>	<b>\$7,819,100,000</b>	<b>0.97%</b>	<b>0.04%</b>
<b>2010</b>	<b>\$83,390,000</b>	<b>\$7,822,900,000</b>	<b>1.07%</b>	<b>0.10%</b>
<b>2011</b>	<b>\$99,045,000</b>	<b>\$7,747,300,000</b>	<b>1.28%</b>	<b>0.20%</b>
<b>2012</b>	<b>\$117,567,500</b>	<b>\$7,627,400,000</b>	<b>1.54%</b>	<b>0.24%</b>
<b>Total/Average 2009-2012</b>	<b>\$375,952,500</b>	<b>\$31,016,700,000</b>	<b>1.21%</b>	<b>0.59%</b>

As shown in the table above, the proposed increases in funding levels will result in less than a 1% increase in rates over the four year period. Electric rates will increase by an average of approximately 0.20% per year and natural gas rates will increase by approximately 0.15% per year over the four year period. By 2012, the proposed level of CRA funding is estimated to be 2.09% of electric revenues and 1.54% of natural gas revenues.

Many of the comments concerned the issue of the total cost of all of the Board's EE and RE efforts including RECs and SRECs, PSE&G's solar loan program, RGGI allowance costs, and other potential programs that may be proposed by the utilities. Specifically, concerns were raised regarding "pancaking" the costs of the various efforts to promote clean energy and the overall impact on rates.

OCE estimates the costs of these other efforts as follows:

1. RGGI Compliance: It is estimated that the auction of RGGI CO2 allowance will generate approximately \$70 M annually which would result in an approximate rate impact of 0.20% in 2009 and 0.70% in 2012 as modeled by the RGGI state working group. This is based on an estimated allowance price of \$2.00 in 2009 and \$2.50 in 2012.
2. PSE&G Solar Loan Program: The value of the PS Solar program is approximately \$100 M over two years. Program costs are recoverable as a separate non by-passable charge called the Solar Pilot Recovery Charge. The PS Solar program would provide 10 to 15 year loans to customers that install solar systems. OCE estimates the first year's net cost to ratepayers, defined as the difference between the SPRC minus the value from the sale of SREC through an auction, would be \$1.4 M. The remaining costs will be recovered from customers that participate in the program through the repayment of loans. Staff estimates future program costs at \$1.4 M per year as well. The SPRC rate for the new component is presently set at zero. There will be no immediate change in the customers' electricity delivery bills. Although the exact amounts of any increase and the subsequent impact on a customer's bill are not known at this time, the maximum expected charge to the SPRC for the first year of recovery for a residential customer is \$0.000326 per kWh, for a total average annual residential bill impact of \$2.29.

3. Other Utility Programs: At the time of the issuance of the OCE straw proposal, no utilities had any pending requests for additional EE or RE programs proposed pursuant to the RGGI legislation. However, PSE&G recently filed with the Board for approval several new carbon abatement programs with an estimated cost of \$45.9 M over four years, and pursuant to a July 1, 2008 Board Order the electric utilities have filed demand response programs under N.J.S.A. 48:3-98.1 with a preliminary cost estimate of approximately \$100 M. OCE believes it is premature at this point to draw any conclusions regarding these programs which were just recently filed. OCE recommends that the Board consider the incremental impacts of PSE&G's proposed programs in the context of the proceeding in which that filing will be reviewed.
4. REC/SRECs: The following table from the Summit Blue RE Market Assessment estimates the costs and rate impacts of the SRECs needed to meet the RPS solar goals:

**Table 31: Costs and Rate Impacts of the SRECs Needed to Meet RPS Solar Requirements**

Year	Solar Transition SREC Value	Bill Cost	Rate Impact
2009	\$ 42,239,133	\$ 4.37	0.39%
2010	\$ 74,114,936	\$ 7.57	0.65%
2011	\$160,735,705	\$11.77	0.98%
2012	\$268,480,781	\$15.96	1.28%
Total	\$545,570,555	-	-

The OCE notes that the Board, in its Solar Transition Order regarding the transition to a more market based approach for funding solar systems, imposed a cap of 2% of rates on the costs of SRECs.

The estimated cost and impact on rates of all of the programs identified above on electric rates in 2009 is as follows:

**Table 32: Impact on Electric Rates**

RGGI Compliance	\$70,000,000
PSE&G Solar Loan	\$1,400,000
Other Utility Programs	\$0
SRECs	\$42,239,133
CRA (electric funding level)	\$169,050,000
Total	\$282,689,133
Estimated 2009 Revenues	\$10,895,300,000
Estimated Costs as a % of 2009 Revenues	2.59%

OCE notes that while the total impact on electric rates of all of the programs in the table above is estimated to be approximately 2.59% in 2009, the incremental rate impact in 2009 is less than 1%. Further, as shown in Tables 19 and 20 above, OCE estimates that the benefits of the CRA funding alone over the four year funding cycle will exceed \$1.5 billion over the life of the measures installed and reduce customer's energy bills by over \$6 billion. As discussed above and further below, OCE believes the costs of these programs are more than offset by the

benefits and that business as usual would result in costs that exceed the costs of these programs.

## **VI. DISCUSSION AND FINDINGS**

The issues being decided in this Order require the Board to balance several competing interests that will impact the long-term energy future of the State. The Board has a long history of supporting programs that promote the installation of EE measures and RE systems to reduce the need to site and build additional non-renewable electric generation plants and transmission and distribution facilities. The Board has acknowledged that investments in EE and RE can help lower energy costs over the long-term and produce significant benefits to customers including:

1. Lowering energy costs for customers that install EE systems by lowering usage of electricity and natural gas.
2. Lowering energy costs for customers that install RE systems by lowering usage of electricity from the grid.
3. Lowering electricity costs for New Jersey customers overall by reducing usage of electricity from the grid at times of peak demand, because reducing peak demand reduces the generation, transmission, and distribution infrastructure needed to provide reliable supply for the peak, and because wholesale electricity prices tend to be at their highest during times of peak demand.
4. Lowering natural gas costs for New Jersey customers overall, because greater efficiency reduces peak demand for natural gas and therefore reduces the infrastructure needed to provide reliable supply for the peak.
5. Reducing demand for natural gas and resultant economic and environmental benefits..
6. Making New Jersey businesses more competitive by reducing their reliance on expensive fossil fuels and the electricity generated using those fuels..
7. Reducing emissions of air pollutants that cause global warming and endanger the health of our residents.

The programs have their costs as well which must be balanced against the benefits of the programs. The Board is well aware that the costs of these programs are recovered from customers and could result in an increase in rates. However, the Board expects the benefits of these programs to offset the costs. These programs can also have a dampening effect on overall energy costs. CEEEP has estimated that even a small reduction in on-peak usage can produce significant reductions in the cost of electricity, a benefit that flows through to all ratepayers. Furthermore, customers who reduce their energy usage by participating in these programs can also reduce their energy costs. Thus, customer bills can go down if customers use less energy as a result of the programs funded through the CRA, as hundreds of thousands of residential, governmental, and business customers have over the past 8 years.

The Draft EMP provides a plan for meeting the State's long-term energy needs in a cost effective manner. The Draft EMP relies heavily on significant increases in the levels of EE and RE to achieve these goals. The Draft EMP proposes a road map to guide us toward a future with adequate, reliable energy supplies that are both environmentally responsible and competitively priced. As Governor Corzine stated in the prelude of the Draft EMP, "A business as usual energy policy risks enormous economic and environmental consequences. In contrast, energy policy that focuses on producing and using energy as wisely as possible greatly reduces these consequences and positions us to be a strong competitor in the global economy."

The Draft EMP estimates that if nothing is done to address the energy challenges facing the State, by 2020 the State will consume 100,000 GWh of electricity and 590 trillion Btus of natural gas or heating oil. This total energy consumption will cost customers 60% more than 2005 energy expenditures. The alternative scenario proposed in the Draft EMP, which relies heavily on EE and RE, is estimated to reduce total electric expenditures in 2020 by 26%.

The benefits of these programs were also quantified by OCE in its Second Revised Straw. OCE noted that expenditures on EE produce \$11 in benefits for every dollar spent on commercial and industrial programs and \$4 on every dollar spent on residential customers. The programs also help the State's neediest low-income customers reduce their energy costs.

CEECP and AEG submitted an update of a market potential study prepared by KEMA in 2004 as part of the Board's second CRA proceeding. The CEECP/AEG study concluded that the level of economic EE potential exceeds the goals established by the OCE in its Second Revised Straw. Economic potential is defined as cost effective efficiency measures which means the benefits of the measures exceed the costs. Thus, the EE goals can be achieved by tapping cost effective resources which will reduce the overall cost of energy in the State.

The Board has considered the concerns of NJBIA and NJLEUC that the costs of these programs will increase rates for business customers. The Board notes that Staff has proposed, and the Board will further consider, increases in the C&I EE budget for 2009 in this Order, and for years 2010-2012 in the proceedings in which the Board considers the annual programs and budgets. Such funding levels, if approved, will provide significant assistance to business in reducing its energy costs. However, the Board is convinced that a business as usual approach would result in even higher rates. Further, the Board is convinced that the benefits of these programs will more than offset the costs and result in New Jersey businesses becoming more competitive, not less, by lowering their energy usage and costs.

The OCE has proposed increasing the allocation of funding for C&I customers and the Board supports this proposal. The Board notes that it is currently awaiting the implementation of two new programs that target C&I customers that were approved for 2008, the Direct Install and Pay-for-Performance programs. The Board will also consider proposals to increase the current cap on the C&I Smart Start program as part of its consideration of detailed 2009 programs and budgets later this year.

Many of the comments provided to the Board concerned details related to program design. Issues related to program design and budgets will be considered later this year when the Board further considers 2009 programs and budgets.

The Board agrees with OCE's responses to comments as set forth in Section IV of this Order, with the exception of any changes made by the Board in Section VI.

The majority of the comments supported the general approach proposed by the OCE in the Second Revised Straw. Rate Counsel supported the funding levels proposed by OCE and opposed increasing the RE funding levels proposed by many industry participants.

As noted above, the Board has initiated the transition from a rebate based approach to promoting solar energy to a more market based approach. The Board has indicated its desire for a smooth transition and has recognized that the transition will take time, particularly for the small solar projects. The Board concurs with OCE's recommendation to maintain the funding level at \$53.25 M and, pursuant to N.J.A.C. 14:8.2-10(e), to allocate the SACP from at least

Energy Year 2009 to small solar projects. The Board believes using the SACP provides an appropriate means to balance the Board's desire to continue to promote the development of small solar with its desire to minimize the impact on rates.

The Board believes that the funding levels proposed by the OCE in its straw proposal, as revised above, are reasonable and will continue the State on the right path for achieving the goals set out in the Draft EMP. Therefore, the Board **HEREBY APPROVES** the following funding levels for the years 2009 through 2012<sup>19</sup>:

**Table 33: Funding Levels for Years 2009 through 2012**

**Total Funding (\$M)**

	2009	2010	2011	2012	Total
<b>EE</b>	<b>\$176.50</b>	<b>\$208.00</b>	<b>\$260.00</b>	<b>\$325.00</b>	<b>\$969.50</b>
<b>RE</b>	<b>\$68.50</b>	<b>\$61.00</b>	<b>\$59.50</b>	<b>\$54.25</b>	<b>\$243.25</b>
<b>Total</b>	<b>\$245.00</b>	<b>\$269.00</b>	<b>\$319.50</b>	<b>\$379.25</b>	<b>\$1,212.75</b>

In addition, the Board **HEREBY APPROVES** the following allocation of the 2009 EE and RE funding levels<sup>20</sup>:

**Energy Efficiency (\$ M)**

Year	C&I	Residential	Low Income	Clean Energy Technology Fund	State Facilities	Total
2009	\$62.40	\$66.60	\$30.00	\$7.50	\$10.00	\$176.50

**Renewable Energy (\$M)**

Year	Wind	Biomass	Clean Energy Technology Fund	Small Solar < 50 kW	Total
2009	\$25.0	\$15.0	\$7.5	\$21.00	\$68.50

A more detailed breakdown of the EE and RE funding for the years 2010-2012, as proposed by staff, is set forth in Tables 25 and 26 above which should be considered as guidance in developing the detailed program descriptions and budgets for years 2010-2012. The Board notes that the funding approved for Renewable Energy includes \$17.1M for the Off-Shore Wind Solicitation.

The Board concurs with OCE's conclusion that it is important to determine the 2009-2012 funding levels now, even though the Draft EMP and NEEP work is ongoing. It is likely that the final decisions made in these proceedings will influence the future funding levels, especially in the later years. However, in order to continue program momentum it is necessary to put in place the next four year funding levels, while recognizing that it may be revisited based on the work currently being conducted. The allocation for 2009 RE Wind Programs shall include, at a

<sup>19</sup> These funding levels are from the SBC only and such funding levels are subject to State Appropriations Law.

<sup>20</sup> The Board approved allocation of the 2009 EE and RE funding levels is subject to State Appropriations Law.

minimum, the \$17.1 M for the Off-shore wind solicitation and shall not be subject to change as a result of the final EMP or the NEEP study.

The Board concurs with OCE's recommendations regarding the allocation of the approved funding levels between electric and natural gas customers and to the individual utilities. The Board believes that OCE's proposal to maintain the current allocation of 69% of the funding to electric customers and 31% to natural gas customers is a reasonable approach that minimizes the impact on rates. The Board concurs that it is appropriate to utilize updated 2007 sales data provided by the utilities to further allocate the funding levels to each utility and to each month.

Based on the above, the Board **HEREBY APPROVES** the funding level for the years 2009 through 2012 recommended by the OCE and the monthly fiscal agent payment schedule, which are set out in Appendix A of this Order. The Board **FURTHER APPROVES** the allocation of the funding to program sectors within the 2009 RE and EE funding levels.

The utilities will continue to make monthly payments to the fiscal agent or its successor consistent with the procedures set forth in the Board's Order I/M/O Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for 2005-2008: 2008 Programs and Budgets: Compliance Filings, Docket No. EX04040276 (March 31, 2008).

The OCE is currently developing, with input from the Market Managers and stakeholders, proposed detailed 2009 program plans and budgets for consideration by the Board. The Board **HEREBY DIRECTS** each program manager and the OCE to submit to the Board by September 30, 2008, detailed program descriptions and budgets consistent with this Order. The Board approved programs for 2008 shall be continued until the detailed program plans and budgets for 2009 as approved by the Board become effective. Each program manager and the OCE shall also file detailed program plans and budgets consistent with this Order by September 30 of each subsequent year that set out how the following year's funding level is proposed to be utilized, consistent with the specific funding allocations set out in this Order.

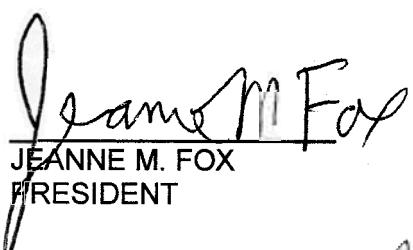
The detailed program plans and budgets shall include, at a minimum, the following components:

1. A description of the program
2. Identification of the target market and of customer eligibility
3. A description of the program offerings and customer incentives
4. A description of the program delivery methods
5. A description of the quality control provisions
6. Detailed budgets that include at a minimum a breakdown of costs by the following categories, if applicable:
  - a. Administration and program development
  - b. Sales, call centers, marketing and website
  - c. Training
  - d. Rebates, grants and other direct incentives
  - e. Rebate processing, inspections and other quality control
  - f. Performance incentives
  - g. Evaluation and related research

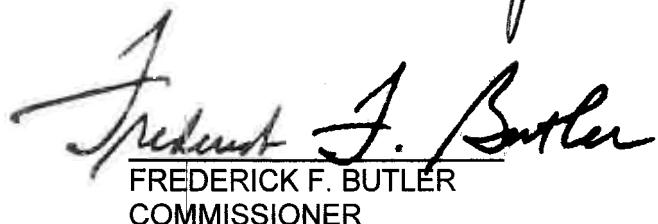
The filings shall also include any proposed changes to the protocols for measuring energy savings or generation or proposed new protocols for any new programs or program components. The filings shall also include any proposed contract amendments required to implement the programs, if applicable. The Board **FURTHER DIRECTS** that stakeholders and interested members of the public shall be provided an opportunity to comment on the detailed program plans and budgets prior to the Board's review.

DATED: 9/30/08

BOARD OF PUBLIC UTILITIES  
BY:



JEANNE M. FOX  
PRESIDENT



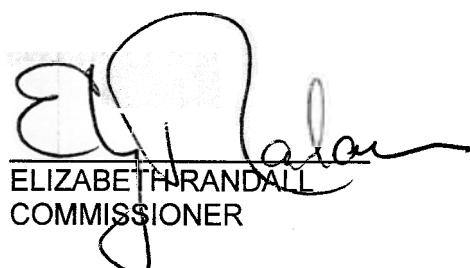
FREDERICK F. BUTLER  
COMMISSIONER



JOSEPH L. FIORDALISO  
COMMISSIONER

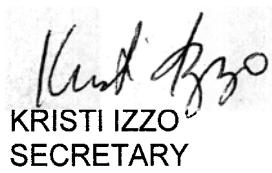


NICHOLAS ASSETTA  
COMMISSIONER



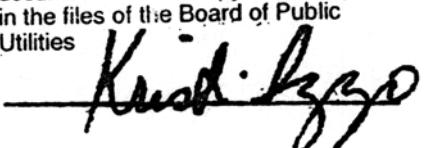
ELIZABETH RANDALL  
COMMISSIONER

ATTEST:



KRISTI IZZO  
SECRETARY

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



Agenda Date: 8/7/08  
 Agenda Item: 8B

## Appendix A: Monthly Fiscal Agent Payment Schedules

2009	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ACE	\$1,707,133	\$1,731,850	\$1,744,276	\$1,568,573	\$1,580,980	\$1,781,407	\$2,110,538	\$2,349,169	\$2,236,930	\$1,799,538	\$1,495,141	\$1,606,249	\$21,711,784
JCP&L	\$3,829,750	\$3,876,497	\$4,165,020	\$3,593,014	\$3,499,403	\$4,091,899	\$4,571,703	\$4,895,011	\$4,450,777	\$3,880,986	\$3,593,661	\$3,752,380	\$48,191,101
PS-Electric	\$7,735,603	\$7,260,709	\$7,525,665	\$7,015,329	\$7,455,492	\$8,356,275	\$9,513,050	\$9,673,295	\$7,892,149	\$7,941,216	\$7,293,607	\$7,744,847	\$95,507,239
RECO	\$287,607	\$286,054	\$277,403	\$256,960	\$252,131	\$316,278	\$361,481	\$379,593	\$348,951	\$306,337	\$276,333	\$290,748	\$3,639,876
NJN	\$1,534,072	\$1,732,660	\$1,266,348	\$934,006	\$539,581	\$349,522	\$282,876	\$302,499	\$293,325	\$591,353	\$873,890	\$1,569,109	\$10,269,241
Etown	\$983,288	\$1,503,476	\$1,313,509	\$968,075	\$710,432	\$605,567	\$564,737	\$562,217	\$518,052	\$646,274	\$789,065	\$1,161,484	\$10,326,176
PS-Gas	\$6,246,961	\$6,947,618	\$6,766,740	\$3,868,035	\$2,914,533	\$1,633,680	\$2,021,400	\$1,645,426	\$1,778,279	\$2,780,880	\$3,922,184	\$6,444,690	\$46,970,426
SJG	\$1,096,358	\$1,215,529	\$911,263	\$712,875	\$520,019	\$385,251	\$396,008	\$438,113	\$318,558	\$577,953	\$689,210	\$1,123,020	\$8,384,157
Total	\$23,411,772	\$24,554,393	\$23,970,226	\$18,916,866	\$17,472,572	\$17,519,879	\$19,821,792	\$20,245,325	\$17,937,020	\$18,524,537	\$18,933,091	\$23,692,527	\$245,000,000

2010	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ACE	\$1,874,382	\$1,901,501	\$1,915,144	\$1,722,229	\$1,735,851	\$1,955,912	\$2,317,284	\$2,579,292	\$2,456,058	\$1,975,819	\$1,641,604	\$1,763,595	\$23,838,653
JCP&L	\$4,195,027	\$4,256,235	\$4,573,022	\$3,944,982	\$3,842,202	\$4,492,738	\$5,019,543	\$5,374,522	\$4,886,771	\$4,261,164	\$3,945,693	\$4,119,960	\$52,911,862
PS-Electric	\$8,493,377	\$7,971,962	\$8,262,874	\$7,702,545	\$8,195,826	\$9,174,849	\$10,444,941	\$10,620,883	\$8,775,053	\$8,719,131	\$8,008,082	\$8,503,526	\$104,863,051
RECO	\$315,781	\$314,075	\$304,578	\$282,132	\$276,829	\$347,260	\$396,892	\$416,778	\$383,133	\$336,345	\$303,402	\$319,230	\$3,996,435
NJN	\$1,684,348	\$1,902,390	\$1,390,399	\$1,025,501	\$592,438	\$383,761	\$310,586	\$332,132	\$322,059	\$649,281	\$959,495	\$1,722,817	\$11,275,208
Etown	\$1,079,610	\$1,650,756	\$1,442,180	\$1,062,905	\$780,025	\$664,888	\$620,058	\$617,291	\$568,800	\$709,583	\$866,361	\$1,275,262	\$11,337,720
PS-Gas	\$6,858,908	\$7,628,201	\$7,429,805	\$4,246,944	\$3,200,039	\$1,793,714	\$2,219,415	\$1,806,611	\$1,952,478	\$3,053,292	\$4,306,398	\$7,076,006	\$51,571,610
SJG	\$1,203,757	\$1,334,602	\$1,000,529	\$782,708	\$570,960	\$422,989	\$434,800	\$481,030	\$349,764	\$634,569	\$756,724	\$1,233,030	\$9,205,462
Total	\$25,705,170	\$26,959,722	\$26,318,330	\$20,769,947	\$19,184,171	\$19,236,112	\$21,763,519	\$22,228,540	\$19,694,116	\$20,339,185	\$20,787,761	\$26,013,427	\$269,000,000

2011	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ACE	\$2,226,241	\$2,258,474	\$2,274,678	\$2,045,548	\$2,061,727	\$2,323,100	\$2,752,313	\$3,063,509	\$2,917,139	\$2,346,744	\$1,949,787	\$2,094,679	\$28,313,939
JCP&L	\$4,982,569	\$5,055,268	\$5,431,527	\$4,685,583	\$4,563,508	\$5,336,170	\$5,961,874	\$6,383,494	\$5,804,177	\$5,061,123	\$4,686,428	\$4,893,410	\$62,845,130
PS-Electric	\$10,087,858	\$9,468,558	\$9,814,082	\$9,148,562	\$9,722,571	\$10,897,265	\$12,405,794	\$12,614,766	\$10,422,414	\$10,355,994	\$9,511,458	\$10,099,913	\$124,549,237
RECO	\$375,063	\$373,037	\$361,757	\$335,097	\$328,799	\$412,452	\$471,401	\$495,021	\$455,060	\$399,488	\$360,361	\$379,160	\$4,746,695
NJN	\$2,000,555	\$2,259,530	\$1,651,421	\$1,218,020	\$703,658	\$455,806	\$368,893	\$394,484	\$382,520	\$771,172	\$1,139,624	\$2,046,246	\$13,391,929
Etown	\$1,282,288	\$1,960,656	\$1,712,923	\$1,262,448	\$926,461	\$789,709	\$736,463	\$733,177	\$675,582	\$842,795	\$1,029,005	\$1,514,670	\$13,466,177
PS-Gas	\$8,146,547	\$9,060,261	\$8,824,382	\$5,044,233	\$3,800,789	\$2,130,452	\$2,636,070	\$2,145,770	\$2,319,021	\$3,626,494	\$5,114,848	\$8,404,401	\$61,253,270
SJG	\$1,429,741	\$1,585,150	\$1,188,361	\$929,647	\$678,147	\$502,398	\$516,426	\$571,335	\$415,425	\$753,698	\$898,786	\$1,464,510	\$10,933,625
Total	\$30,530,862	\$32,020,933	\$31,259,132	\$24,669,138	\$22,785,660	\$22,847,352	\$25,849,235	\$26,401,556	\$23,391,339	\$24,157,508	\$24,690,296	\$30,896,989	\$319,500,000

2012	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ACE	\$2,642,572	\$2,680,833	\$2,700,068	\$2,428,087	\$2,447,292	\$2,757,545	\$3,267,026	\$3,636,418	\$3,462,676	\$2,785,611	\$2,314,418	\$2,486,407	\$33,608,955
JCP&L	\$5,914,365	\$6,000,659	\$6,447,282	\$5,561,839	\$5,416,934	\$6,334,092	\$7,076,810	\$7,577,277	\$6,889,621	\$6,007,608	\$5,562,841	\$5,808,531	\$74,597,858
PS-Electric	\$11,974,398	\$11,239,282	\$11,649,423	\$10,859,443	\$11,540,798	\$12,935,173	\$14,725,814	\$14,973,866	\$12,371,520	\$12,292,678	\$11,290,205	\$11,988,708	\$147,841,308
RECO	\$445,204	\$442,799	\$429,409	\$397,764	\$390,288	\$489,585	\$559,558	\$587,595	\$540,161	\$474,197	\$427,752	\$450,067	\$5,634,379
NJN	\$2,374,681	\$2,682,086	\$1,960,255	\$1,445,803	\$835,250	\$541,046	\$437,880	\$468,257	\$454,055	\$915,390	\$1,352,747	\$2,428,916	\$15,896,367
Etown	\$1,522,090	\$2,327,320	\$2,033,259	\$1,498,540	\$1,099,719	\$937,393	\$874,190	\$870,289	\$801,924	\$1,000,406	\$1,221,440	\$1,797,929	\$15,984,499
PS-Gas	\$9,670,040	\$10,754,629	\$10,474,638	\$5,987,560	\$4,511,579	\$2,528,870	\$3,129,044	\$2,547,053	\$2,752,703	\$4,304,688	\$6,071,381	\$9,976,116	\$72,708,302
SJG	\$1,697,118	\$1,881,590	\$1,410,598	\$1,103,501	\$804,968	\$596,352	\$613,003	\$678,181	\$493,115	\$894,647	\$1,066,869	\$1,738,389	\$12,978,332
Total	\$36,240,468	\$38,009,198	\$37,104,932	\$29,282,537	\$27,046,828	\$27,120,057	\$30,683,325	\$31,338,936	\$27,765,775	\$28,675,227	\$29,307,652	\$36,675,064	\$379,250,000