

Discussion Points

1. Hurricane Irene made landfall in New Jersey on August 28, 2011 and disrupted service to 1.9 million of the State's 3.9 million electric customers with some not having their electricity restored for eight days. Two months later, an October 29, 2011 snowstorm caused 1.0 million customers to lose power with the most unfortunate being without electric service for seven days. The **power restoration performance of electric distribution companies** in the wake of the two storms attracted the scrutiny of the Board of Public Utilities (BPU). On December 14, 2011, the Board released its "Hurricane Irene Electric Response Report" in which it found that all electric utilities experienced challenges in their storm response and that some practices established in accordance with prior BPU actions were ineffective in the face of large-scale extreme weather situations. Accordingly, the BPU issued several directives so as to avert similar widespread and lengthy power outages in the future. They touched electric utility practices in the areas of communications, estimating outage restoration, supplemental crew mobilization, and mitigation of tree-related damages. The BPU also hired Emergency Preparedness Partnerships to review the electric utilities' performance in-depth. On August 9, 2012, the contractor submitted its final report. Its findings and recommendations led to the issuance of a January 23, 2013 Board Order containing 103 additional BPU directives New Jersey's electric distribution companies must implement, mostly, by September 2013 to improve their preparedness for and restoration efforts following large-scale extreme weather events (Board Order dated January 23, 2013 Docket number EO11090543). The measures fall into five categories: preparedness efforts, communications, restoration and response, post event, and underlying infrastructure issues.

In the Board Order, the BPU also reported that it was still reviewing the electric distribution companies' preparations for and responses to Hurricane Sandy, which made landfall in New Jersey on October 29, 2012. To that end, the BPU engaged Rutgers' Center for Energy, Economic and Environmental Policy to analyze four aspects related to the companies' performance: 1) infrastructure improvements, particularly the protection of substations from inundation and the selective undergrounding of critical infrastructure; 2) the expansion of distributed generation; 3) an evaluation of real capabilities and limitations of smart grid technologies; and 4) the identification of best practices in transmission system vegetation management.

In addressing BPU Discussion Point #12 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis, the Board described the methods it generally employs to assess the preparedness of electric utilities for widespread extreme weather situations. For example, its staff routinely review the utilities' storm plans. Moreover, in advance of significant meteorological disturbances, the BPU typically queries electric utilities to gauge their readiness. Lastly, based on other states' experiences, the BPU estimated that it would take between two weeks and a month for the utilities to fully restore electric power were a category 3 or stronger hurricane to hit New Jersey.

- **Questions:** Please share the BPU's preliminary assessment of the preparedness and restoration performance of each of New Jersey's electric distribution companies with regard to Hurricane Sandy. To what extent did the utilities improve their restoration performance following Hurricane Sandy relative to Hurricane Irene and the October 29, 2011 snowstorm? Did the BPU notice that the utilities have successfully implemented lessons learned from the 2011 storms? In the BPU's opinion, was the

Discussion Points (Cont'd)

electric companies' Sandy performance acceptable? Could the BPU have used the regulatory process to prod the electric companies into being better prepared for the hurricane? By what date does the Board anticipate receiving the Center for Energy, Economic and Environmental Policy's review of options to shore up the reliability of the electric distribution system in extensive, violent storms?

- Please indicate the total costs the electric distribution companies incurred in restoring electricity to all New Jersey ratepayers after Hurricane Sandy. Which percentage of the expenditures will the Federal Emergency Management Agency reimburse? To what extent will electric utilities be authorized to charge ratepayers for the cost of service restoration? Does the BPU anticipate that the utilities will want to invest heavily in their electric transmission infrastructure so as to strengthen its resilience in extreme weather episodes? Could the BPU use the regulatory process to compel the utilities to make specific investments in their electric transmission infrastructure? If so, does the BPU intend to use the regulatory process to improve the resilience of New Jersey's electric transmission infrastructure? Please detail any funding requests through the rate-setting process that the BPU has already received from electric companies for major infrastructure upgrades. Since the related costs would presumably be passed through to consumers, what tests will the BPU use in balancing the costs of improved preparedness with the objective of ensuring competitively priced electric service?

For ease of response and clarity, each question and the associated response is set forth below separately.

Please share the BPU's preliminary assessment of the preparedness and restoration performance of each of New Jersey's electric distribution companies with regard to Hurricane Sandy

Of all the states impacted by Superstorm Sandy, New Jersey experienced the largest number of electric outages during Sandy. In total, New Jersey's four Electric Distribution Companies (EDCs) reported 2,900,000 peak customer outages representing approximately 73% of all electric customers. The damage from this event was devastating: 49 major substations flooded; over 3,000 distribution circuits damaged; an excess of 100,000 trees; and over 9,000 poles fell down.

The effective use and marshaling of mutual aid resources is the most important element of a large utility recovery effort. The EDCs were more aggressive here than previously observed during Hurricane Irene. Specifically, the EDC's took proactive measures to muster a sizeable number of out-of-state workers. Approximately 4 to 5 thousand contractors, linemen and tree crews were in state and ready to respond to the outages prior to the storm's impact. The numbers of crews grew throughout the restoration process as the EDCs continued to request and receive mutual assistance from other states. Eventually, this became the largest utility workforce ever mobilized in New Jersey. At the height of the restoration work, the total number of restoration workers grew to between 15 and 17 thousand. This included the following Federal assets: lineman and equipment from Bonneville Power, Western Area Power

Discussion Points (Cont'd)

Administration, Southwestern Power Administration, the U.S. Army Corps of Engineers, and firefighting crews from the U.S. Forest Service.

The response and restoration efforts made by the EDCs resulted in a 60% outage recovery within six days of the storm, and a 90% outage recovery within 9 days of the storm. As the EDCs approached the 90% recovery rate, New Jersey subsequently experienced a Nor'easter that added to the complexity and size of the recovery effort. The EDCs still continued to address, make progress, and achieve full recovery in 14 days for those customers that could safely accept commercial power. The EDCs worked closely with officials to restore individual services in flooded and damaged homes.

Recovery command was established at the Regional Operations and Intelligence Center (ROIC), and fluid communications was established with the leadership of the EDC from the onset of the storm.

While some improvement in communications was observed in that restoration timelines were established and provided to the public, the accuracy and content of that information was lacking. This is an area where the Electric Sector must improve, and the BPU established a Communications Task Force with the express mission of improving how utilities communicate with the public and local officials during outages. The Board ordered the EDCs, through the January 2013 Order, to establish websites for each municipality it serves, and use these websites, social media, and other communication methods, to provide more information about preparedness and more accurate projections of service restoration. In addition, the Board is working to facilitate improved communications and information sharing between the EDC's and cable providers to help facilitate faster restoration.

To what extent did the utilities improve their restoration performance following Hurricane Sandy relative to Hurricane Irene and the October 29, 2011 snowstorm? Did the BPU notice that the utilities have successfully implemented lessons learned from the 2011 storms?

As a result of lessons learned from Hurricane Irene and the October 29, 2011 snow storm, some improvements were evident. As referenced above, the restoration effort was more focused, and there was an unprecedented human resource response of mutual aid assets. Moreover, the lessons learned in the wake of Irene about the need to plan for larger scale events resulted in an overall higher level of preparedness and response by the utilities. The incident command between the utility sectors and the state was extremely fluid and functioned at both an operational and leadership level.

The utilities also integrated well with the state's efforts in securing federal assistance and repair assets including specialized equipment, crews and forest service workers.

While lessons learned from past weather events improved the response and recovery from Superstorm Sandy, the EDCs' lessons learned process will continue, especially in the area of communications.

Discussion Points (Cont'd)

The BPU is also working with the utilities to facilitate closer coordination between the utility and local public works and safety officials to establish priorities regarding roadway access.

In the BPU's opinion, was the electric companies' Sandy performance acceptable?

We cannot use the term "acceptable" to characterize the EDCs performance at this point. While we did see some improvements since Hurricane Irene, we continue to be dissatisfied with the performance of the hardest-hit utilities (PSE&G, JCP&L and Rockland) regarding communication

These catastrophic weather events and huge recovery efforts always create opportunities to improve, and Superstorm Sandy presented some unique challenges and lessons which are being examined. Our mission is to ensure that the electric sector is fully prepared for weather events, can execute an effective recovery effort and can communicate meaningful information to the public. These efforts will continue as we implement the 100 plus items related to storm preparedness, communications, planning and response. listed in the Board's January 2013 Order.

Could the BPU have used the regulatory process to prod the electric companies into being better prepared for the hurricane?

As a result of Hurricane Irene, the Board conducted an investigation into the overall performance by the EDCs. The Board conducted public hearings throughout the state, hired a consultant to closely examine the efforts made by the EDCs, and a Board Order was issued summarizing customer concerns, Board recommendations, and future benchmarks to be achieved. Considering the enormity of Superstorm Sandy, the EDCs showed promise in mitigating the effects of the storm, but failed to thoroughly communicate with customers and town officials. In response, the Board's President formed a communications task force charged with having the EDCs create a more fluid and technical method in supplying reliable and accurate estimates on restoration to local government officials. The Board has, and will continue to employ the regulatory process to ensure out utilities are prepared.

By what date does the Board anticipate receiving the Center for Energy, Economic and Environmental Policy's review of options to shore up the reliability of the electric distribution system in extensive, violent storms?

At the Board's request, the Center for Energy, Economic and Environmental Policy (CEEPP) at Rutgers University will be conducting a study of the relative costs and benefits of various types of expenditures which have been proposed. Dr. Frank A. Felder, Director of CEEPP and an acknowledged expert in this type of analysis, will oversee the project. Funding for this project is expected to become available in June 2013 which would enable the start of the analysis. BPU Staff currently is refining the scope of work for the contract with CEEPP. It is anticipated that CEEPP will conduct a cost-benefit analysis of each EDC's proposals to harden their systems to withstand better future severe weather events like Hurricane Irene and Superstorm Sandy.

Discussion Points (Cont'd)

Please indicate the total costs the electric distribution companies incurred in restoring electricity to all New Jersey ratepayers after Hurricane Sandy. Which percentage of the expenditures will the Federal Emergency Management Agency reimburse?

Individual utility specific estimates are:

- Atlantic City Electric Company spent \$85 million
- Elizabethtown Gas Company spent \$1.5 million
- Jersey Central Power and Light Company spent \$630 million
- New Jersey Natural Gas Company spent \$50.9 – \$76.3 million
- Public Service Electric & Gas Company spent \$250 - \$300 million
- Rockland Electric Company spent \$25 - \$30 million
- South Jersey Gas Company spent \$.5 million

We do not expect FEMA or any other federal assistance to be directed to the investor-owned owned utilities. The municipally owned utilities are eligible for federal assistance.

Should the investor owned utilities receive federal funding, the Board would view any such funds as an offset to the amount cited in any petition filed to reimburse a utility for specific storm costs which costs will be reviewed for prudence.

To what extent will electric utilities be authorized to charge ratepayers for the cost of service restoration?

On March 20, 2013, the Board issued an Order in Docket No. AZ13030196 directing the utilities that experienced major storm restoration costs and seek recovery of said costs in current or future rate cases to file a detailed cost report by July 1, 2013 or sooner. In the Order, the Board stated that it “continues to recognize that rate impacts to the State’s utility ratepayers associated with its decisions must be viewed in concert with the associated benefit of expenditures incurred when preparing for, responding to and restoring the damage caused by any Major Storm Event.”(Board Order, page 4)

Does the BPU anticipate that the utilities will want to invest heavily in their electric transmission infrastructure so as to strengthen its resilience in extreme weather episodes?

Yes, therefore, on March 20, 2013, the Board issued an Order in Docket No. AZ13030197 directing Staff to open up a proceeding to examine all utility storm mitigation plans while inviting utilities not subject to a separate January 23, 2013 Order to file “detailed proposals for infrastructure upgrades designed to protect the State’s utility infrastructure from future Major Storm Events...”(Board Order, page 3). The Order also allows Staff to retain independent experts to aid the Board in reviewing the efficacy of the proposed measures, costs and expected benefits.

Discussion Points (Cont'd)

Could the BPU use the regulatory process to compel the utilities to make specific investments in their electric transmission infrastructure? If so, does the BPU intend to use the regulatory process to improve the resilience of New Jersey's electric transmission infrastructure?

Utilities earn a return on infrastructure investments and their revenue stream relies on their ability to successfully deliver energy over their networks. It is the Board's responsibility to consider which investments or what level of investment strike the correct balance to ensure the safe, adequate and proper provision of service to customers at a reasonable rate, once improvement costs are folded into rates.

The January 23, 2013 and March 20, 2013 Orders cited above reflect the Board's intention to use the regulatory process to improve the resilience of New Jersey's electric transmission structure in a way that balances the costs with the benefits to ensure safety and affordability.

The Board already has metrics and reporting in place to review system performance and has taken steps to improve the reporting of, and response to, system outages. The current, and recently approved, regulations allow the Board to analyze the systems, identify problem areas, and then direct the EDC's to take action.

Please detail any funding requests through the rate-setting process that the BPU has already received from electric companies for major infrastructure upgrades.

PSE&G filed a submission referred to as "Energy Strong" which proposed \$3.9 Billion dollars in storm mitigation measures, including substation upgrades and protection, circuit reconfiguration, storm hardening, system resiliency improvements, technology upgrades, communication upgrades, and system automation measures. The Board's April 1, 2013 order invited the other Utilities to submit infrastructure upgrade filings.

To assess the prudence, costs, benefits, and rate impacts of each mitigation measure proposed in the Energy Strong filing, Board staff asked PSE&G for additional information, including how each measure will minimize damage to infrastructure during storms or other emergency situations; minimize outage times and/or expedite restoration time; will provide redundancy in the event of a limited/localized disruption of power; create jobs; improve communications with local officials, customers, and mutual aid crews; reduce impact on grid congestion; and Improve overall system reliability. Board staff will also consider the rate impacts of these proposed measures on residential, commercial/industrial, and large industrial rate payers.

Since the related costs would presumably be passed through to consumers, what tests will the BPU use in balancing the costs of improved preparedness with the objective of ensuring competitively priced electric service?

As the March 20, 2013 Order in Docket No. AX13030197 provides, "The Board recognizes that maintaining safe, reliable and affordable utility infrastructure is the mandate of all New Jersey utilities, as is the requirement that rates be just and reasonable. Therefore, the potential rate impacts associated with decisions made regarding these Major Storm Event related actions must include an evaluation of the associated benefits of the proposed measures for protecting

Discussion Points (Cont'd)

the State's utility infrastructure...The Board HEREBY ORDERS Staff to require that any entity retained the by Board to assist in the evaluation of proposed mitigation efforts associated with Major Storm Events prioritize those proposed mitigation efforts that fall outside of the capital expenditures normally incurred in the ordinary course of a utility's business of maintaining its infrastructure in such a state so as to enable it to provide safe, adequate and reliable service in accordance with accepted industry norms." (March 20, 2013 Order, page 4) The Board must balance utility and ratepayer interests with the additional concern of maintaining electricity rates that can support an expanding economy and job growth in the state.

2. The 2011 Energy Master Plan reaffirmed the State's commitment to sourcing 22.5 percent of the electricity used in New Jersey from renewable energy sources by 2021. That percentage reflects the pre-existing objective under the State's **Renewable Portfolio Standards (RPS)**. P.L.1999, c.23 (N.J.S.A.48:3-49 et seq.) established the RPS, which prescribe a minimum percentage of total kilowatt hours sold in New Jersey by each electric power supplier and basic generation service provider that must be generated from renewable energy sources. While the law prescribes specific minimum RPS targets for some years and forms of alternative energy, it leaves the formulation of the overall RPS schedule to the BPU's discretion (subsection d. of N.J.S.A.48:3-87). Current RPS targets are outlined in N.J.A.C.14:8-2.3. The regulatory RPS schedule excludes solar energy targets, as they are set forth in permanent statutes in accordance with P.L.2012, c.24.

For energy years 2010 through 2021, the table below lists the percentages of energy supplied in New Jersey that must be either from Class I, Class II or solar renewable energy. The Class I and Class II targets reflect the RPS as delineated in N.J.A.C.14:8-2.3. The solar energy figures represent the RPS for energy year 2010; the gigawatthours-based (Gwhrs) targets for energy years 2011, 2012, and 2013 in accordance with P.L.2009, c.289; and starting in energy 2014 the percentage targets set forth in the superseding P.L.2012, c.24.

Class I energy sources are solar technologies, wind energy, photovoltaic technologies, geothermal technologies, fuel cells, wave or tidal action, the combustion of methane gas captured from landfills or biomass facilities, and hydropower facilities with a capacity not exceeding three megawatts. Electricity from hydroelectric facilities with a capacity exceeding three megawatts constitutes a Class II energy source. As to the nomenclature for an energy year, energy year 2010, for example, started on June 1, 2009 and ended on May 31, 2010.

Renewable Portfolio Standards: Percentage of Energy Sold in New Jersey that Must Be from Renewable Energy Sources				
Energy Year	Class I Energy	Class II Energy	Solar Energy	Total Renewable Energy
2010	4.685%	2.50%	0.221%	7.41%
2011	5.492%	2.50%	306 Gwhrs	8.30% est.
2012	6.320%	2.50%	442 Gwhrs	9.21% est.
2013	7.143%	2.50%	596 Gwhrs	10.14% est.
2014	7.977%	2.50%	2.050%	12.53%
2015	8.807%	2.50%	2.450%	13.76%

Discussion Points (Cont'd)

2016	9.649%	2.50%	2.750%	14.90%
2017	10.485%	2.50%	3.000%	15.99%
2018	12.325%	2.50%	3.200%	18.03%
2019	14.175%	2.50%	3.290%	19.97%
2020	16.029%	2.50%	3.380%	21.91%
2021	17.880%	2.50%	3.470%	23.85%

- Questions:** Please indicate the actual percentage of electricity sold in New Jersey in each of energy years 2010, 2011, and 2012 that was generated from renewable energy sources. Did the electric power suppliers and basic generation service providers comply with the Class I, Class II, and solar energy targets of the Renewable Portfolio Standards (RPS) in each of those years? Please break out the creditable components that electric power suppliers and basic generation service providers used to meet the Class I, Class II, and solar energy RPS requirements in energy years 2010, 2011, and 2012. What was the total cost to ratepayers, and average cost per ratepayer, of the RPS in energy years 2010, 2011, and 2012? What consequences do electric power suppliers and basic generation service providers face upon failing to meet an RPS mandate?

NOTE: The RPS Table, above, provided by OLS incorrectly adds the percentage of solar energy to the percentage of Class I Energy when the amount of solar is not in addition, but is a portion of the Class I Energy requirement. Accordingly, the total numbers in each Energy Year (the fourth column) should be reduced by the amount of Solar Energy (the third column).

For ease of response and clarity, each question and the associated response is set forth below separately.

Please indicate the actual percentage of electricity sold in New Jersey in each of energy years 2010, 2011, and 2012 that was generated from renewable energy sources.

The actual percentage of electricity for Energy Year 2010, 2011 and 2012 that was generated from renewable energy was 7.345%, 8.347% and 9.39% respectively. During these years New Jersey customers purchased additional renewable energy through the Clean Power Choice program. This Program allows residential electric customers to purchase additional renewable energy through renewable energy certificates on their electric bill. The Clean Power Choice program could add up to 0.15% of additional renewable energy used in New Jersey.

Did the electric power suppliers and basic generation service providers comply with the Class I, Class II, and solar energy targets of the Renewable Portfolio Standards (RPS) in each of those years?

In Energy Years 2010, 2011, and 2012 there was 100% compliance by the electric suppliers and basic generation service providers with the New Jersey renewable energy portfolio standard (RPS) requirements.

Discussion Points (Cont'd)

Please break out the creditable components that electric power suppliers and basic generation service providers used to meet the Class I, Class II, and solar energy RPS requirements in energy years 2010, 2011, and 2012.

Over the 3 Energy Years of 2010, 2011 and 2012 the creditable component of the RPS was 99.68%. The remainder of the RPS compliance was met through Alternative Compliance Payments (ACP) or Solar Alternative Compliance Payments (SACP). The provisions of N.J.A.C 14:8-2.8 requires compliance with the RPS or solar RPS with RECs or SREC; or ACP or SACP.

What was the total cost to ratepayers, and average cost per ratepayer, of the RPS in energy years 2010, 2011, and 2012?

The annual total cost for each Energy Year for Class I, Class II and solar, as well as the total costs for the RPS including solar are listed in the table below. The table below calculates the annual average compliance cost per MWh for Class I, Class II and solar as well as the total average RPS compliance cost per MWh. Assuming an annual electric usage for the average residential, commercial and industrial customers of 10,000 kWh per year, 100,000 kWh per year and 1,000,000 kWh per year, respectively, the annual cost to the average residential, commercial and industrial customer averaged over the three years are \$19.63 per year, \$196.27 per year and \$1,967.73 per year respectively.

In addition to the RPS certificate costs in the table below, there are other costs associated with the renewable energy program including RE rebates, administrative costs including contractor costs, Board staff and the utilities, net metering costs and utility distribution costs.

Total RPS Cost and Average cost to the Ratepayers																	
Energy Year	Retail Sales of Electricity	Class II Requirement				Class I Requirements				Solar Requirement				Total RPS Requirement			
		MWh	%	MWh	\$/MWh	total cost	%	MWh	\$/MWh	total cost	%	MWh	\$/MWh	total cost	%	MWh	total cost
2010	77,418,756	2.50%	1,935,469	\$1.11	\$2,148,370	4.685%	3,627,069	\$2.00	\$7,254,148	0.221%	171,095	\$615.50	\$108,975,974	7.406%	5,733,633	\$118,378,492	\$1.53
2011	81,349,339	2.50%	2,033,733	\$1.11	\$2,257,444	5.492%	4,467,706	\$2.38	\$10,634,790	0.376%	306,000	\$602.99	\$184,634,073	8.368%	6,807,439	\$197,526,307	\$2.43
2012	76,935,091	2.50%	1,923,377	\$1.11	\$2,134,949	6.320%	4,862,298	\$4.14	\$20,147,401	0.575%	442,000	\$287.71	\$126,278,551	9.395%	7,227,675	\$148,560,901	\$1.93
Total	235,703,186		5,892,580		\$6,540,763		12,957,072		\$38,036,339		919,095		\$419,888,598		19,768,747	\$464,465,700	\$1.97

The Solar RPS requirements in EY 2011 and 2012 were Gigawatt-hour requirements not a percentage of electric retail sales. The solar percentages are calculated from reported certificate and electric retail sales. The total cost includes both average certificate costs and alternate compliance payments.

What consequences do electric power suppliers and basic generation service providers face upon failing to meet an RPS mandate?

Discussion Points (Cont'd)

To date no providers have failed to meet the RPS. As set forth at N.J.A.C 14:8-1.3: Enforcement of the RPS, failure to comply with the RPS provisions shall subject the violator to the following:

- i* Suspension or revocation of their license or any other Board issued approval;
- ii* Financial penalties;
- iii* Disallowance of recovery of costs; and
- iv* Prohibition on acceptance of new customers.

- **Please comment on the impact of P.L.2012, c.24 on the RPS. Did the law's enactment increase to 23.85 percent the RPS' goal of sourcing 22.5 percent of the electricity used in New Jersey from renewable energy sources by 2021? Does the BPU intend to revise the RPS in reply to the law's enactment? Please set forth the updated RPS targets from energy year 2014 through energy year 2021 by Class I, Class II and solar energy. In the BPU's estimation, what is the likelihood that the energy year 2021 target will be attained? Is the BPU concerned that implementing the energy year 2021 target might erode the competitive position of New Jersey-based energy-intensive businesses? What will be the financial impact on ratepayers of meeting the RPS' energy year 2021 target?**

For ease of response and clarity, each question and the associated response is set forth below separately.

Please comment on the impact of P.L.2012, c.24 on the RPS.

P.L.2012, c.24, did not change the RPS but changed the manner in which the RPS for solar is calculated, from a fixed Gigawatt number to a percentage of annual electric retail sales.

Did the law's enactment increase to 23.85 percent the RPS' goal of sourcing 22.5 percent of the electricity used in New Jersey from renewable energy sources by 2021?

No. N.J.S.A. 48:3-51(3) provides that "'Class I renewable energy' means electric energy produced from solar technologies, photovoltaic technologies, wind energy, fuel cells, geothermal technologies, wave or tidal action, small scale hydropower....and methane gas from landfills [.]" P.L.2012, c.24 did not increase the total for Class I renewable energy required in any Energy Year, but did accelerate the amount of solar energy required as of EY 2014 and following.

Does the BPU intend to revise the RPS in reply to the law's enactment?

The BPU issued amendments to the regulations to reflect that the solar energy obligation was changed from a fixed number to a percentage.

Discussion Points (Cont'd)

Please set forth the updated RPS targets from energy year 2014 through energy year 2021 by Class I, Class II and solar energy.

Energy Year	Class II	Class I	Solar
	%	%	%
2014	2.50%	7.977%	2.050%
2015	2.50%	8.807%	2.450%
2016	2.50%	9.649%	2.750%
2017	2.50%	10.485%	3.000%
2018	2.50%	12.325%	3.200%
2019	2.50%	14.175%	3.290%
2020	2.50%	16.029%	3.380%
2021	2.50%	17.880%	3.470%

In the BPU's estimation, what is the likelihood that the energy year 2021 target will be attained?

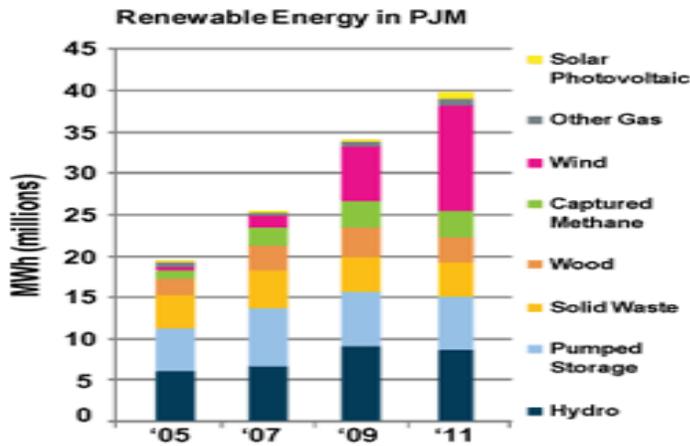
Board staff estimates it is likely that the Class I and Class II requirements as set forth in N.J.A.C. 14:8-2 will be attained.

Please see the chart below on the current RE resources available in PJM. In 2011 there was just under 40,000,000 MWh of RE generation electricity produced in PJM. The total New Jersey RPS requirement in Energy Year 2011 was 6,807,440 MWh. The data for the current RE resources is available at <http://www.pjm.com/about-pjm/renewable-dashboard/renewables-today.aspx>. PJM also tracking RE resources in its planning queue. The chart below is an interactive map available on PJM's website of RE resources in PJM that are in the planning and installation pipeline. The data on each of these projects is available at: <http://www.pjm.com/planning/generation-interconnection/generation-queue-active.aspx>.

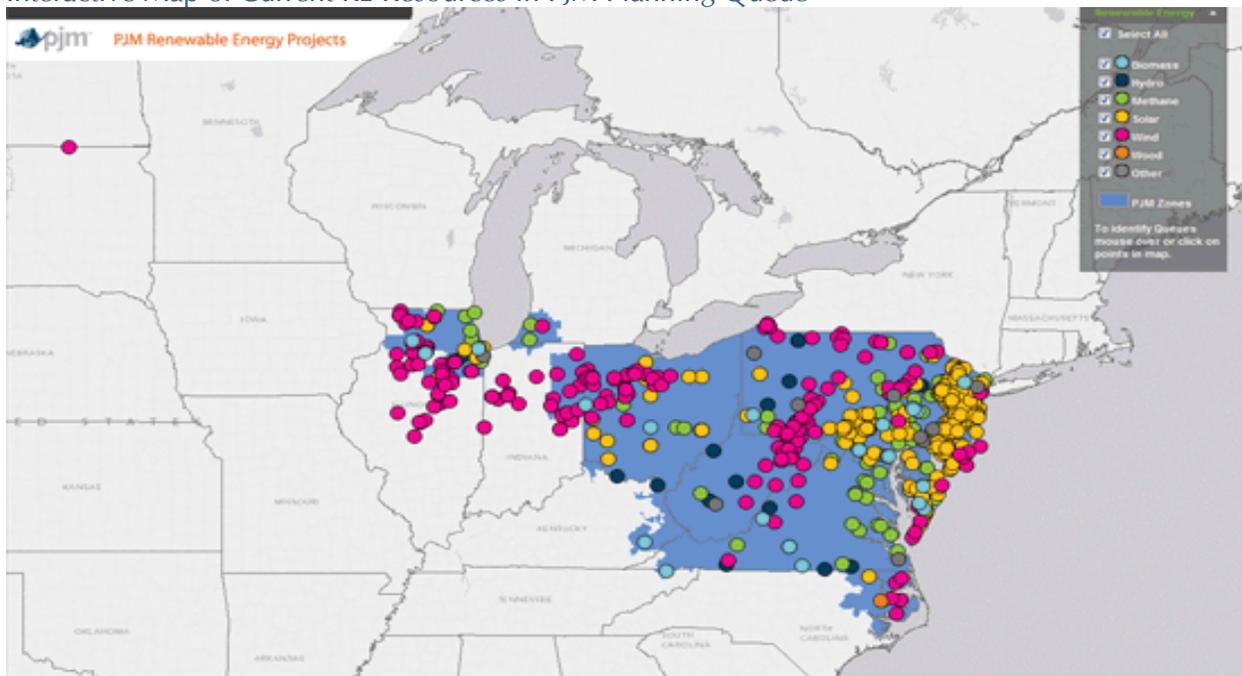
While the full operational development of RE resources in the PJM queue depends on various market conditions at that time, given the availability of Class I and Class II resources in PJM and in areas adjacent to PJM that can transfer both the electricity and the renewable certificates into PJM, New Jersey is likely to reach the EY 2021 RPS.

RE Resources currently operating in PJM

Discussion Points (Cont'd)



Interactive Map of Current RE Resources in PJM Planning Queue



Is the BPU concerned that implementing the energy year 2021 target might erode the competitive position of New Jersey-based energy-intensive businesses?

The State has made a commitment to support and promote renewable energy. The Board’s role is to help in develop cost competitive renewable energy markets that install renewables at the least cost to the ratepayers. To this end, for example, the substantial decrease in the SACP, as provided for in P.L. 2012,c.24, will serve to protect ratepayers from future RPS compliance costs.

Discussion Points (Cont'd)

What will be the financial impact on ratepayers of meeting the RPS' energy year 2021 target?

It is difficult to project the financial impact on ratepayers at a date so far in the future given the uncertainties surrounding the development of alternative technologies, the falling prices of certain renewable technologies, improvements to existing technologies, the potential for development of energy storage, and federal energy policies.

3. New Jersey must expand its solar energy generation capacity substantially to meet its long-term solar targets under the statutory Renewable Portfolio Standards (subsection d. of N.J.S.A.48:3-87). P.L.2012, c.24 revised the solar targets starting in energy year 2014 (June 2013 through May 2014). Solar energy must now comprise 2.05 percent of total electricity sold in New Jersey in energy year 2014 with the percentage gradually rising to 4.1 percent by energy year 2028. The previous solar targets, set by P.L.2009, c.289, required electric utilities to generate or purchase at least 306 gigawatt-hours of solar energy in energy year 2011 and at least 5,316 gigawatt-hours by energy year 2026.

The State has set up a price support system that is intended to impel the solar capacity investments needed to meet RPS solar targets. The system has three basic elements: a) RPS solar targets, which create a demand for solar energy by obligating electric power suppliers and providers to meet specific solar quotas; b) **Solar Renewable Energy Certificates (SRECs)**, which are issued for every megawatt-hour (MWh) of electricity generated by solar power installations and are sold separately from the generated electricity; and c) a trading platform on which electric power suppliers and providers can acquire from solar energy generators the SRECs they need to meet their annual solar targets. To limit the cost to ratepayers of the price support system, a gradually declining price ceiling applies to SRECs in the form of Solar Alternative Compliance Payments (SACP). Electric power suppliers and providers may make such alternative payments to the BPU in lieu of purchasing SRECs to meet their solar quotas. In reply to BPU Discussion Point #10 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis, the Board estimated that the pre-P.L.2012, c.24 solar targets would cost ratepayers \$90 million in energy year 2012, \$120 million in energy year 2013, \$150 million in energy year 2014, and \$190 million in energy year 2015. The amount would have steadily increased to \$2.0 billion by energy year 2026.

The authors of the 2011 Energy Master Plan expressed concern that tumbling SREC prices might deter the creation of additional solar capacity and thereby jeopardize compliance with the long-run solar targets. Prices were collapsing because New Jersey experienced a surge in solar energy supply during 2010 and the first half of 2011 on the heels of previously high SREC prices, the federal Business Energy Investment Tax Credit of 30 percent of a business' investment in solar facilities, and declining prices for photovoltaic panels. Weighted average monthly prices plummeted from \$600 to \$617 MWh per month in energy year 2011 to a range of between \$215 and \$312 per MWh in energy year 2013 through December 2012. The upper price limit was \$675 per MWh in energy year 2011 and is \$641 per MWh in energy year 2013.

With an eye toward lifting SREC prices, P.L.2012, c.24 then strove to increase the demand for SRECs by establishing more aggressive solar targets. But the law also sought to control the solar

Discussion Points (Cont'd)

targets' cost effect on ratepayers by replacing the previous regulatory ceilings on SREC prices with significantly lower statutory caps. The prior limit per MWh fell gradually from \$625 in energy year 2014 to \$594 in energy year 2016. Under P.L.2012, c.24, the new ceiling declines from \$339 in energy year 2014 to \$323 in energy year 2016. Responding to BPU Discussion Point #10 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis, the BPU conveyed that electric power suppliers and providers met 95 percent of the solar target of 306 gigawatt-hours in energy year 2011 through SRECs and five percent through alternative SACP payments to the BPU, which serves as the *de facto* cap on SREC prices.

- **Questions: Please comment on the state of the Solar Renewable Energy Certificates (SRECs) market in energy year 2013 prior to P.L.2012, c.24's higher solar energy generation capacity targets and reduced SREC price ceilings. How many SRECs did and did not sell in energy year 2013? By what month were all the SRECs sold that are required to meet the energy year 2013 solar quota of 596 gigawatt-hours? At current SREC prices, what is the internal rate of return of the typical solar installation and how long must investors wait to break even? If applicable, please share any available metrics demonstrating that plummeting SREC prices in recent years have hampered the creation of new solar capacity. What percentage of the energy year 2012 solar target of 442 gigawatt-hours did electric power suppliers and providers meet through SRECs and through the alternative SACP payments to the BPU?**

For ease of response and clarity, each question and the associated response is set forth below separately.

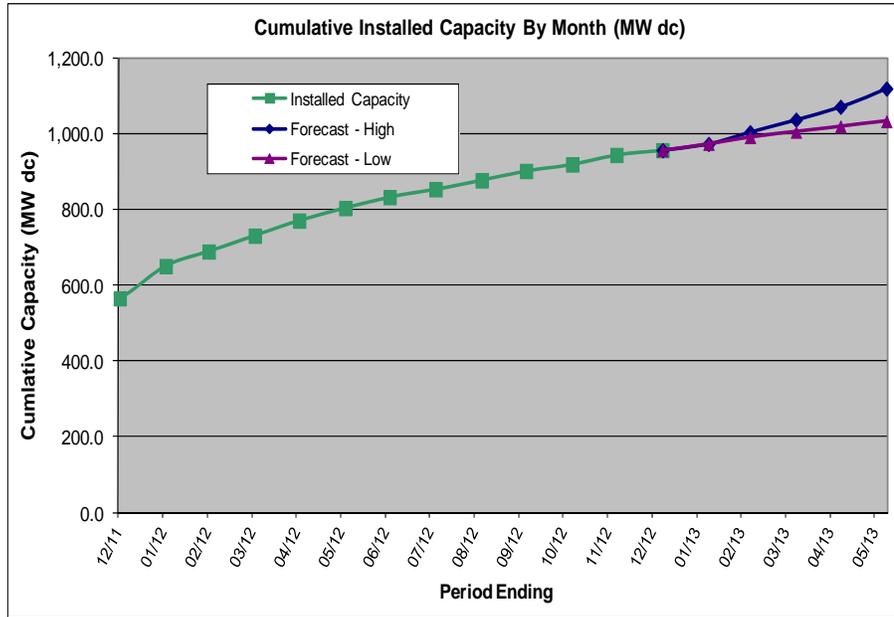
Please comment on the state of the Solar Renewable Energy Certificates (SRECs) market in energy year 2013 prior to P.L.2012, c.24's higher solar energy generation capacity targets and reduced SREC price ceilings.

Prior to the enactment of P.L.2012, c.24, New Jersey saw a surge of solar energy facilities due to the high prices of SRECs, the 30% federal investment tax credit and the dramatic decline in prices of photovoltaic panels. The SREC market for EY 2012 was fully supplied within the first two months and, as a result, SREC prices dropped from a spot market high of close to \$600 to a low of \$160. Despite the slowdown in solar installations that naturally followed the oversupply of SRECs, Board Staff expects the number of SRECs available in EY 2013 to well exceed demand (the solar RPS for Energy Year 2013).

The RPS was designed to create market demand, and channel development, to allow renewable technologies to achieve economies of scale in manufacturing and installation so that these technologies can compete better with conventional generation sources. The subsidies for solar were intended to naturally decline as the amount of solar installed increased. P.L. 2012, c.24 was intended to provide some interim relief for the SREC market and an opportunity for the industry to adjust to the dramatic SREC oversupply. Developers are not precluded from installing solar, but in the absence of guaranteed subsidies, have shown less willingness to do so.

Discussion Points (Cont'd)

Below is the most recent monthly chart issued by BPU to report on solar system SREC performances. The graph charts cumulative installed capacity to date and projected to the end of the Energy Year. Based on this report and market projections, Board staff anticipates that over 1,100,000 SRECs will be generated in EY 2013; the RPS requires 596,000 SRECs.



Cumulative Installed Capacity (MW dc)													
End Date	05/31/12	06/30/12	07/31/12	08/31/12	09/30/12	10/31/12	11/30/12	12/31/12	01/31/13	02/28/13	03/31/13	04/30/13	05/31/13
Forecast - Low	802.8	831.8	852.7	876.1	900.9	918.1	943.2	955.6	973.4	991.4	1,007.4	1,021.4	1,035.4
Forecast - High	802.8	831.8	852.7	876.1	900.9	918.1	943.2	955.6	973.4	1,011.4	1,045.4	1,079.4	1,127.5

The 973.4 MW of solar capacity installed as of 01/31/13 and the additionally forecast installed solar capacity for the remainder of Energy Year 2013 is estimated to be capable of producing approximately 1,105,700 to 1,118,800 SRECs during Energy Year 2013.

This data is provided for informational purposes only. Past levels of installed capacity rates are not predictive of future values, and any persons considering investment in the solar market should perform their independent due diligence.

How many SRECs did and did not sell in energy year 2013?

There were 271,879 SRECs that were not traded in EY 2012. EY 2013 does not end until May 31, 2013 and the report period in which the suppliers and providers must demonstrate compliance as recently established in the new Solar Act (P.L. 2012, c.24) shall be no less than 120 days from the end of the Energy Year. The suppliers and providers will not report on their compliance with the solar RPS until October 1st for EY 2013 compliance.

Below is the most recent table NJBPU issues monthly to report on solar system SREC performance forecasted for the next 3 Energy Years. The table presents the cumulative SREC generated to date, the annual solar RPS requirement, the capacity added, excess SREC available from the previous Energy Year and SREC projected to the end of the next 3 Energy

Discussion Points (Cont'd)

Years. Based on this data and analysis, Board Staff expects the number of SREC available in Energy Year 2013 to exceed the solar RPS for Energy Year 2013 by 230%. Based upon current solar market condition, as noted in the above chart and the table below we anticipate 596,000 solar renewable energy certificates (SREC) being sold in Energy Year 2013 or essentially 100% SREC retired for solar RPS compliance. Board staff expects that approximately 790,000 SREC generated in Energy Year 2013 or previous Energy Years to be available in Energy Year 2014.

Discussion Points (Cont'd)

NJCEP Solar Generation Forecast				
Summary By Energy Year - As of 02/28/13				
Energy Yr	Item	Low	Med	High
EY2012	Est Generation (MWh)	713,879	713,879	713,879
	RPS Req (MWh)	442,000	442,000	442,000
	% of RPS Requirement	161.5%	161.5%	161.5%
	MWh Difference	271,879	271,879	271,879
	MW Difference	226.6	226.6	226.6
EY2013	Est Capacity Added (MW)	272.5	282.5	306.5
	Est Generation (MWh)	1,111,900	1,113,600	1,117,800
	Excess From Prior Yr	271,879	271,879	271,879
	Est Avail (MWh)	1,383,779	1,385,479	1,389,679
	RPS Req (MWh)	596,000	596,000	596,000
	% of RPS Requirement	232.2%	232.5%	233.2%
	MWh Difference	787,779	789,479	793,679
	MW Difference	656.5	657.9	661.4
EY2014	Est Capacity Added (MW)	220.1	358.3	380.0
	Est Generation (MWh)	1,393,000	1,494,400	1,537,200
	Excess From Prior Yr	787,779	789,479	793,679
	Est Avail (MWh)	2,180,779	2,283,879	2,330,879
	RPS Req (MWh)	1,660,500	1,660,500	1,660,500
	% of RPS Requirement	131.3%	137.5%	140.4%
	MWh Difference	520,279	623,379	670,379
	MW Difference	433.6	519.5	558.6
EY2015	Est Capacity Added (MW)	256.1	368.3	396.8
	Est Generation (MWh)	1,680,400	1,930,800	2,004,000
	Excess From Prior Yr	520,279	623,379	670,379
	Est Avail (MWh)	2,200,679	2,554,179	2,674,379
	RPS Req (MWh)	1,984,500	1,984,500	1,984,500
	% of RPS Requirement	110.9%	128.7%	134.8%
	MWh Difference	216,179	569,679	689,879
	MW Difference	180.1	474.7	574.9
EY2016	Est Capacity Added (MW)	264.1	373.3	408.6
	Est Generation (MWh)	1,992,800	2,376,100	2,487,800
	Excess From Prior Yr	216,179	569,679	689,879
	Est Avail (MWh)	2,208,979	2,945,779	3,177,679
	RPS Req (MWh)	2,227,500	2,227,500	2,227,500
	% of RPS Requirement	99.2%	132.2%	142.7%
	MWh Difference	(18,521)	718,279	950,179
	MW Difference	(15.4)	598.6	791.8

This data is provided for informational purposes only. Past levels of installed capacity rates are not predictive of future values, and any persons considering investment in the solar market should perform their independent due diligence.

Discussion Points (Cont'd)

By what month were all the SRECs sold that are required to meet the energy year 2013 solar quota of 596 gigawatt-hours?

Energy Year 2013 does not end until May 31, 2013 and the report period in which the suppliers and providers must demonstrate compliance as recently established in the new solar act (P.L. 2012, c.24) shall be no less than 120 days from the end of the Energy Year. However, based on the chart and table above, Board staff estimates, based on the SREC that were available and not traded in previous Energy Years and those generated by solar systems in Energy Years 2013, that by September of 2012 enough SREC were available to meet compliance with Energy Year 2013 solar RPS of 596,000 SREC.

At current SREC prices, what is the internal rate of return of the typical solar installation and how long must investors wait to break even?

Calculating the internal rate of return requires making assumptions with respect to various factors including the discount rate and weighed average cost of capital. Such analysis is best left to companies analyzing or comparing the value of individual projects to make investment decisions. To answer this question, Board staff presents a simpler analysis using the simple payback period which addresses the same question.

At the current SREC value of \$100 per MWh, and using the retail and wholesale cost for electricity, Board staff calculated the simple payback period for four general scenarios: (1) a net metered residential customer with a 10 kW system; (2) a net metered commercial customer with a 100 kW system; (3) a net metered industrial customer with a 1 MW system; and (4) a wholesale energy non-residential customer with a 2 MW system. Board staff used the following values for the avoided cost of electricity:

<i>Residential</i>	<i>\$0.153/kWh</i>
<i>Commercial</i>	<i>\$0.12/kWh</i>
<i>Industrial</i>	<i>\$0.10/kWh</i>
<i>Wholesale</i>	<i>\$0.70/kWh</i>

In addition, based on the recent solar system installed cost posted on the NJCEP website and updated monthly, as reported in the Solar Energy Industries Association (SEIA) 2013 Annual report and the Lawrence Berkeley Livermore (LBL) annual report Tracking the Sun, Board Staff used the following installed costs:

<i>Residential 10 kW system</i>	<i>\$4.24 per watt installed</i>
<i>Commercial 100 kW system</i>	<i>\$3.07 per watt installed</i>
<i>Industrial 1 MW system</i>	<i>\$2.67 per watt installed</i>
<i>Non-residential 2 MW system</i>	<i>\$2.27 per watt installed</i>

A 30% investment tax credit was applied to all non-residential systems and 1,200 kWh per kW installed as determined in verified installed New Jersey solar systems was used as the capacity factor for all installed systems.

Discussion Points (Cont'd)

Based on the above, the following is the simple payback period is noted in the table below

- Nonresidential 2 MW wholesale energy system 7.6 years
- Industrial 1 MW net metered system. 7.8 years
- Commercial 100 kW net metered system 8.1 years
- Residential 10 kW net metered system 14 years

Simple Payback Period for various Installed Solar Systems												
Type of system	System Size	Investment Tax Credit	Cost per watt Installed	SREC value	Cost of electricity	Energy generated	Installed cost	Installed cost after ITC	Annual value of avoided energy costs	Annual value of SREC	Total annual avoided costs	Simple Payback Period years
	kW	%	\$/kW	\$/MWh	\$/kWh	kWh/year	\$	\$	\$	\$	\$	years
Residential - NM	10	NA	\$4.24	\$100	\$0.153	12,000	\$42,400	\$42,400	\$1,836	\$1,200	\$3,036	13.97
Commercial - NM	100	30%	\$3.07	\$100	\$0.120	120,000	\$307,000	\$214,900	\$14,400	\$12,000	\$26,400	8.14
Industrial - NM	1000	30%	\$2.67	\$100	\$0.100	1,200,000	\$2,670,000	\$1,869,000	\$120,000	\$120,000	\$240,000	7.79
Industrial - WS	2000	30%	2.27	\$100	\$0.075	2,400,000	\$4,540,000	\$3,178,000	\$180,000	\$240,000	\$420,000	7.57

If the SREC values increase above \$100/MWh the payback years will be less and if the SREC values decrease below \$100/MWh the payback years will increase
 If the cost for electricity increase above the current cost the payback period will decrease and if the cost for electricity decreases below the current cost the payback period will increase
 If the installed cost is less than the above installed cost the payback period will decrease and if the installed cost is more than the above installed cost the payback period will increase.

If the federal investment tax credit were equally applied to the residential solar system or if the SRECs were sold at an average price of \$200, the simple payback for a residential system would be less than 10 Years. Likewise, if the cost to install a residential system decreased by \$1.20 per watt, the simple payback period for a residential system would be less than 10 years. In establishing the SREC program the Board set a target for a simple payback period of 7 to 10 years. In order to address this issue in the residential and small business solar markets the Board has directed the four EDCs to submit extension filings to their EDC SREC Financing programs. These filings are currently under review and appropriately address the issues in the residential, small business and landfill/brownfield solar markets.

If applicable, please share any available metrics demonstrating that plummeting SREC prices in recent years have hampered the creation of new solar capacity. What percentage of the energy year 2012 solar target of 442 gigawatt-hours did electric power suppliers and providers meet through SRECs and through the alternative SACP payments to the BPU?

In addition to the chart and table above, below are several metrics Board staff, with the Renewable Energy Market Manager, evaluated to determine trends in the solar market. These include:

- i the monthly installed solar capacity in MW that is reported from 2007 to present,
- ii the number of monthly registrations and the monthly completed projects as reported over the last three (3) Energy Years
- ii the monthly project registration acceptance rate over the last two (2) years
- iv the month scrub rate of solar projects

Discussion Points (Cont'd)

- v *The installed capacity and the pipeline capacity of projects under construction or development*

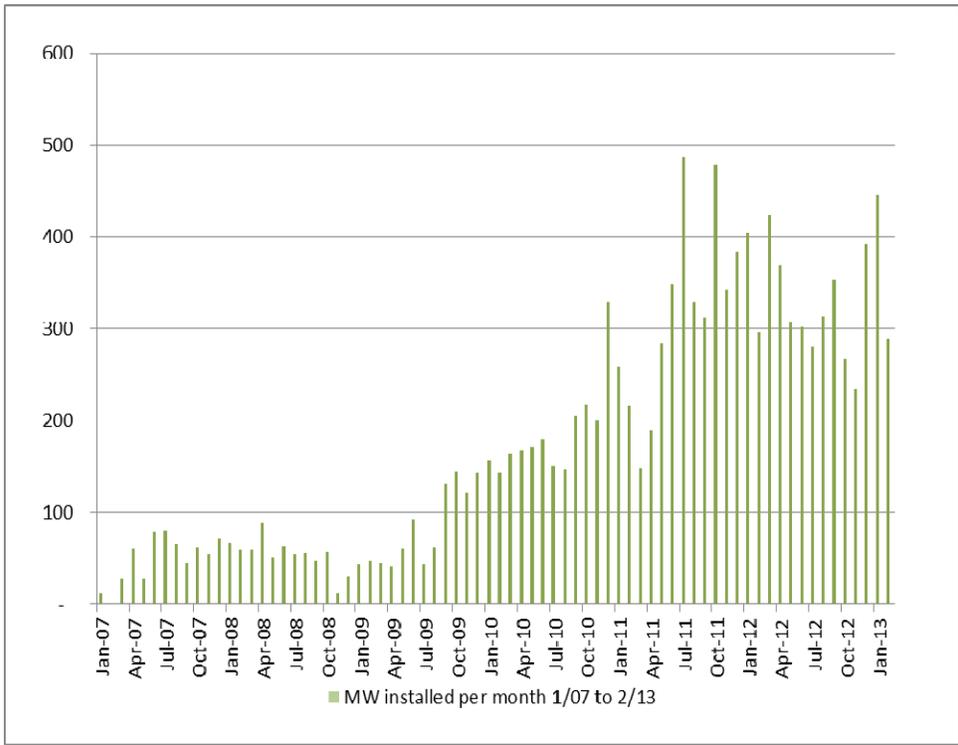
As noted in the charts and table presented, the NJBPU is not seeing any appreciable slowdown in the solar market that could hamper the creation of new solar capacity.

Board staff views the current solar market as moderating from an over-heated solar market. This over-heated market occurred 2012 when additional solar RPS requirements were mandated on top of an already short market, and when the 30% federal investment tax credits were available as an upfront grant instead of the current tax credit.

The NJBPU posts both the near term and long term SREC projections through the current and following three Energy Years. These projections are based on the past solar installation and application rates. Board staff and the RE Market Manager reviews this data monthly with interested parties at the monthly RE Committee meeting. The data, including the meeting notes of the discussion, are available online at <http://www.njcleanenergy.com/main/clean-energy-council-committees/renewable-energy>. Please note that the information contained online is Board Staff's market analysis, used internally to make recommendations to the Board related to the solar market. Although this information is shared with the public, Board staff appropriately cautions solar developers to develop their own analyses and evaluations of the solar market data.

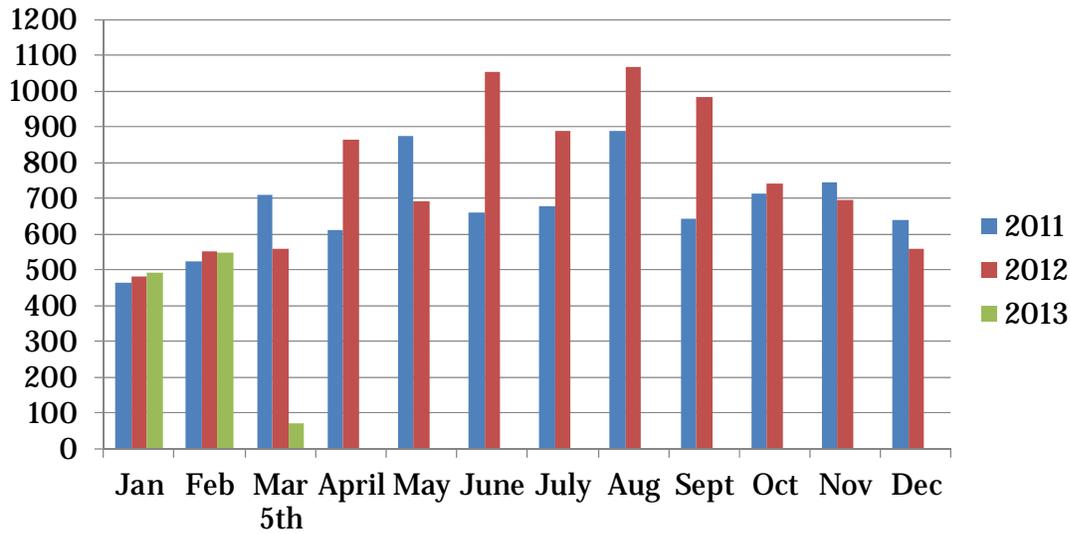
Monthly Solar Installed Capacity in MW from 2007 to present

Discussion Points (Cont'd)

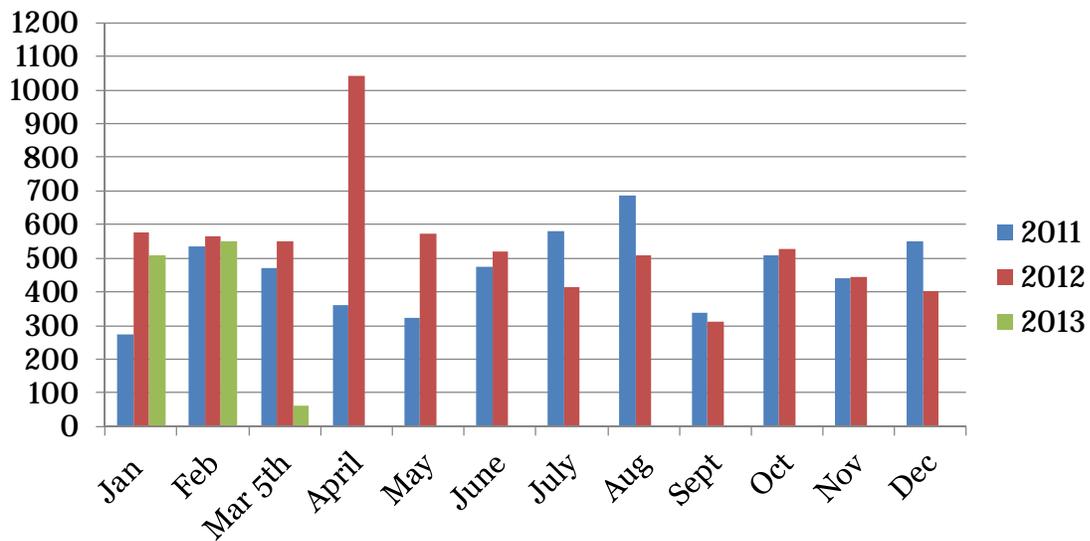


Discussion Points (Cont'd)

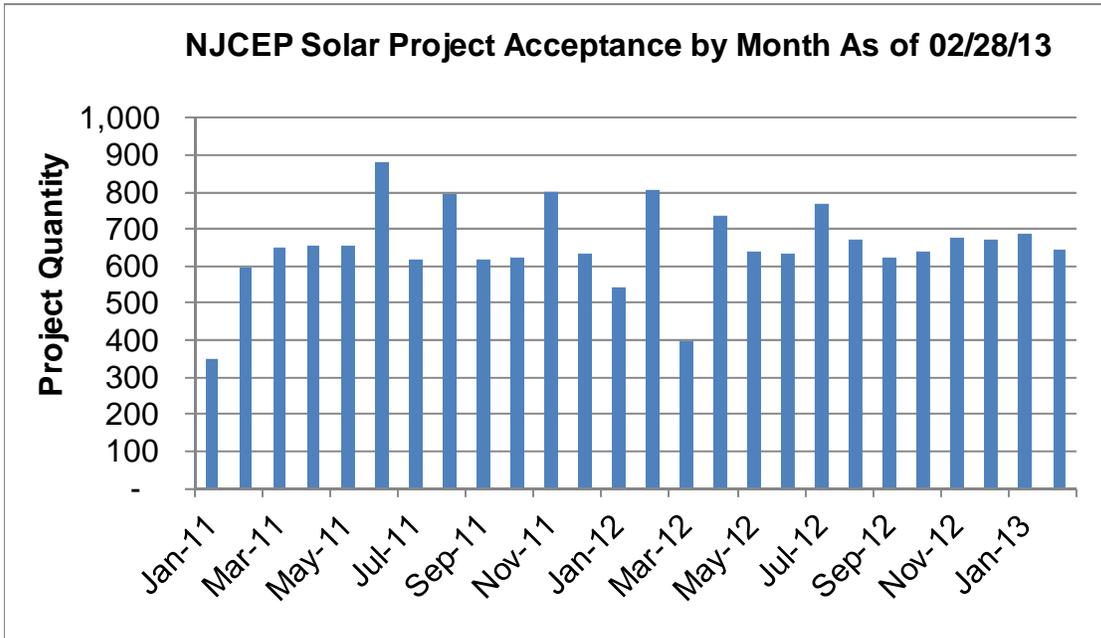
Monthly Solar Project Registration in number of projects



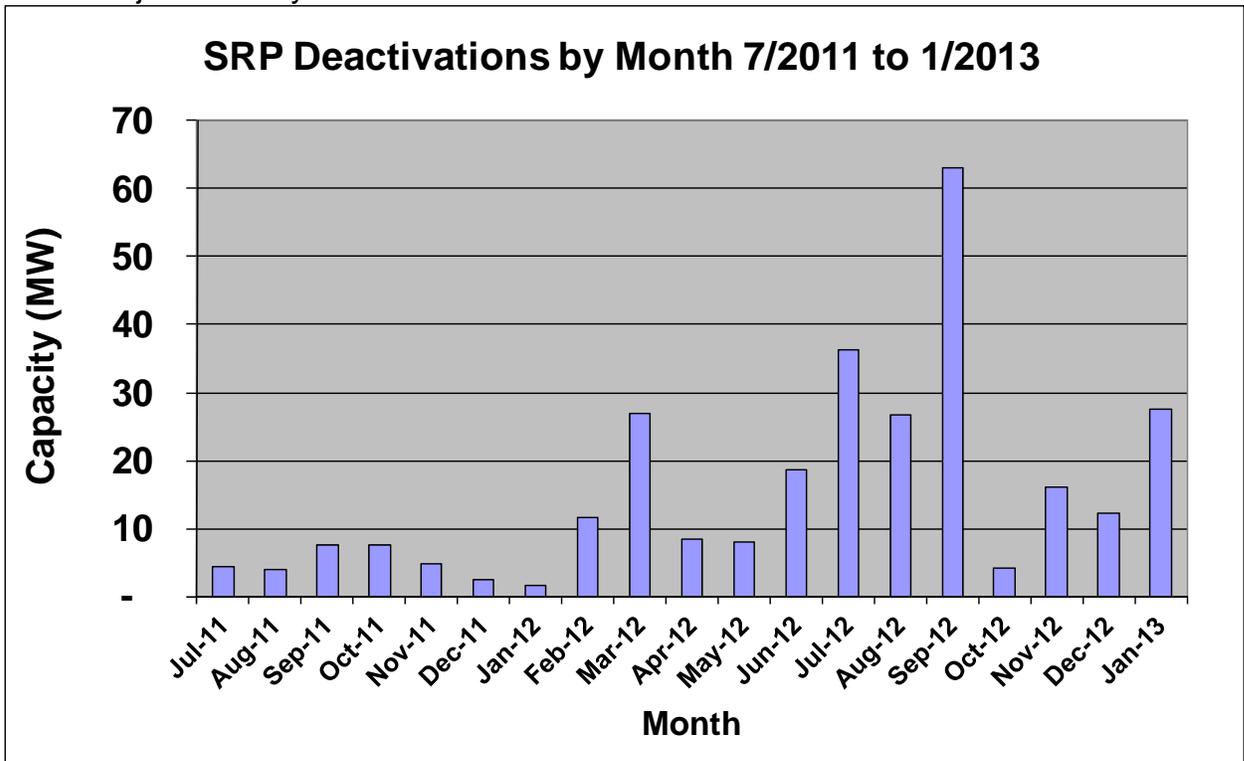
Monthly Solar Projects Completed in number of projects



Discussion Points (Cont'd)



Solar Project Monthly Scrub Rate



Discussion Points (Cont'd)

NJCEP Solar Pipeline Plus Installed Projects History as of 1/31/13			
As Of	MW Installed	MW Pipeline	Combined MW
9/30/2011	447.7	569.3	1,017.0
10/31/2011	490.5	571.7	1,062.2
11/30/2011	531.7	599.4	1,131.1
12/31/2011	565.9	618.7	1,184.6
1/31/2012	649.9	548.0	1,197.1
2/29/2012	688.3	542.3	1,231.4
3/31/2012	730.0	526.1	1,256.5
4/30/2012	770.0	510.0	1,280.0
5/31/2012	802.8	560.7	1,363.5
6/30/2012	831.9	590.3	1,422.2
7/31/2012	852.6	756.2	1,608.8
8/31/2012	876.1	806.9	1,683.0
9/30/2012	900.9	740.0	1,640.9
10/31/2012	918.1	738.9	1,657.0
11/30/2012	943.2	750.3	1,693.5
12/31/2012	955.6	744.4	1,700.0
1/31/2013	973.4	731.6	1,705.0

Preliminary values for 1/31/13

What percentage of the energy year 2012 solar target of 442 gigawatt-hours did electric power suppliers and providers meet through SRECs and through the alternative SACP payments to the BPU?

The Energy Year 2012 solar RPS of 442,000 MWh was met through the retirement of 438,000 SRECs and only 4 SACP payments. Based on current information, 99.3% of Energy Year 2012 solar RPS was met via retiring SREC. This number is preliminary, is being verified and, as such, may change.

- **Please report on the projected impacts of P.L.2012, c.24's accelerated solar energy generation capacity targets and reduced SREC price caps. What is the anticipated average SREC price in energy years 2014, 2015, and 2016? At the anticipated SREC prices and SACP rates, what is the estimated internal rate of return of a typical solar**

Discussion Points (Cont'd)

installation and how long will investors have to wait to break even? Does the BPU expect that all available SRECs will be sold in those years? Conversely, how significant is the risk that the SREC supply will be insufficient to meet the rising solar targets in energy years 2014, 2015, and 2016 and that electric power suppliers and providers will have to make alternative SACP payments to the BPU? What will be the estimated annual cost to the average residential ratepayer of meeting the new solar quotas in energy years 2014, 2015 and 2016?

For ease of response and clarity, each question and the associated response is set forth below separately.

Please report on the projected impacts of P.L.2012, c.24's accelerated solar energy generation capacity targets and reduced SREC price caps. What is the anticipated average SREC price in energy years 2014, 2015, and 2016?

It is the policy of the Board not to project SREC prices. However, as noted above, Board Staff provides sufficient information for solar developers and other market participants to make their own informed decisions on the future solar and SREC market. As is illustrated in the charts above, the SREC market will be potentially over supplied for Energy Years 2014, 2015 and 2016 and, as such, SREC prices, to the benefit of the ratepayers, should remain in the same range.

At the anticipated SREC prices and SACP rates, what is the estimated internal rate of return of a typical solar installation and how long will investors have to wait to break even?

Please see discussion of estimated internal rate of return, above. Given the current trend of decreasing solar installation costs, Board Staff expects the solar market to have similar results through Energy Years 2014, 2015 and 2016.

Does the BPU expect that all available SRECs will be sold in those years? Conversely, how significant is the risk that the SREC supply will be insufficient to meet the rising solar targets in energy years 2014, 2015, and 2016 and that electric power suppliers and providers will have to make alternative SACP payments to the BPU?

Board staff expects the solar market to be over supplied through Energy Years 2014, 2015 and 2016 and that all available SRECs will be sold in those years.

What will be the estimated annual cost to the average residential ratepayer of meeting the new solar quotas in energy years 2014, 2015 and 2016?

See the table below. Board staff estimated the annual solar RPS cost as set forth in the recent solar act at P.L. 2012, c.24 with annual electric retail sales at 80,000,000 MWh per year and a total retail sales at \$11 billion in 2014 and increase 3% annually. The annual cost set forth by the new solar act at P.L. 2012, c.23 was calculated at an SREC value of \$100 per MWh and at the SACP as set forth in the recent Solar Act.

Discussion Points (Cont'd)

Estimated Annual Costs to Ratepayers to meet the Solar RPS									
Energy Year	Electric Retail	Total Electric		Cost \$100 per		Rate at \$100		Rate at the	
	sales	Retails sales	Solar RPS	Solar RPS	SREC	per SREC	SACP	Cost at the SACP	SACP
	MWh	\$	%	MWH	\$	%	\$	\$	%
2014	80,000,000	\$11,000,000,000	2.050%	1,640,000	\$164,000,000	1.49%	\$339	\$555,960,000	5.054%
2015	80,000,000	\$11,330,000,000	2.450%	1,960,000	\$196,000,000	1.73%	\$331	\$648,760,000	5.726%
2016	80,000,000	\$11,667,000,000	2.750%	2,200,000	\$220,000,000	1.89%	\$323	\$710,600,000	6.091%
Total	240,000,000	\$33,997,000,000		5,800,000	\$580,000,000	1.71%		\$1,915,320,000	5.634%

4. The "Offshore Wind Economic Development Act," P.L.2010, c.57, directs the BPU to establish an **Offshore Renewable Energy Certificate (OREC)** program. A price support system modeled after the Solar Renewable Energy Certificate (SREC) program addressed in Discussion Point #3, the OREC program is intended to ensure that New Jersey generates at least 1,100 megawatts of electricity from qualified offshore wind projects by an unspecified date. Under the OREC financing mechanism, the BPU would first determine an annual percentage of New Jersey electricity sales that must be from offshore wind installations. Electric power suppliers and providers would then have to source that percentage of their New Jersey electricity sales from offshore wind farms. They would do so through the purchase of ORECs, which represent power generated by owners of offshore wind electric generation systems at prices that reflect the higher cost of renewable energy. ORECs would be sold separately from the electricity actually generated by the wind farms. To limit the price support system's cost to ratepayers, the BPU would set a *de facto* price ceiling for the certificates in the form of Offshore Wind Alternative Compliance Payments. Electric power suppliers and providers could make such alternative payments to the BPU in lieu of purchasing ORECs to meet their offshore wind requirements.

The creation of the OREC program has stalled as P.L.2010, c.57 makes the establishment of offshore wind generation targets contingent on the prior BPU approval of offshore wind installations for program participation. But the BPU has yet to approve the first program participant. Two impediments commonly stand between prospective applicants and program approval. First, projects to be sited in federal waters, which begin three miles off the State's coast, must receive federal permits. The United States government, however, has been slow to issue rules and permits for offshore wind energy activity. Second, the "Offshore Wind Economic Development Act" requires that OREC-eligible projects yield positive economic net benefits to the State. But complying with the net benefit requirement poses a challenge, according to unidentified developers cited in the NJSpotlight January 22, 2013 article "New Funding Mechanism Could Stop State from Raiding Offshore Wind Revenue." In fact, the only developer that has submitted an application to the BPU, Fishermen Energy for its planned Atlantic City Wind Farm, failed the net benefit analysis in December 2012, thereby jeopardizing its ability to participate in the OREC program and delaying the program's

Discussion Points (Cont'd)

establishment further. The BPU will pronounce a final verdict on the project at the end of June 2013. Notwithstanding this setback, the BPU retained Boston Pacific to set up the infrastructure for an OREC market. Moreover, in a public notice dated January 18, 2013, the Board announced a February 2013 stakeholder meeting to discuss the adoption of OREC regulations. But, as the BPU noted in reply to BPU Discussion Point #11 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis, in light of the above complications, achieving 1,100 megawatts of energy generation capacity from qualified offshore wind installations was still an unspecified number of years away.

- **Questions:** Please report on the BPU's progress in establishing an Offshore Renewable Energy Certificate (OREC) program. By which date does the BPU expect to have OREC rules promulgated, the market infrastructure set up, and the first certificates ready to trade? Based on its conversations with offshore wind developers and its evaluation of Fishermen Energy's application for the Atlantic City Wind Farm, does the BPU anticipate that proposed offshore wind energy installations have a reasonable chance of passing the economic net benefit test? What aspects of the current test impede program qualification? If the BPU is considering altering the economic net benefit test, please describe the contemplated changes. If the BPU supports amendments to the "Offshore Wind Economic Development Act" to facilitate entry into the OREC program, please set forth the recommended revisions. Has the BPU received any applications for OREC participation other than the one for Fishermen Energy's Atlantic City Wind Farm?

For ease of response and clarity, each question and the associated response is set forth below separately.

NOTE: As a matter of clarification, the OREC program is not modeled after the SREC program. The OREC program will not ensure that New Jersey generates 1,100 MW of offshore wind energy, but will ensure offshore wind developers receive ratepayer support once their facilities are operational. The OREC program has not stalled; BPU continues to work with Boston Pacific Company, the BPU's independent consultant, and stakeholders to establish this program.

Please report on BPU's progress in establishing an Offshore Renewable Energy Certificate (OREC) program.

On February 10, 2011, the Board adopted N.J.A.C. 14:8-6.1 et seq. providing for an application process for proposed projects and a framework under which the Board will review any application. On February 20, 2013, the Board readopted these rules with amendments to clarify the requirements and improve the application process. The offshore wind stakeholders were given the opportunity, through multiple stakeholder meetings prior to publication of the proposed re-adoption and through the public comment period, to provide input and recommendations regarding the rules.

Discussion Points (Cont'd)

BPU staff continues to work with Boston Pacific and stakeholders to develop the funding mechanism – the means by which payment for the OREC revenue will move from suppliers to the developers of operating facilities. On February 21, 2013, Board Staff and Boston Pacific met with stakeholders to present an OREC proposal that provides for regulatory certainty and funding security. Board Staff will be accepting comments on this proposal until May 3, 2013.

By which date does the BPU expect to have OREC rules promulgated, the market infrastructure set up, and the first certificates ready to trade?

Board Staff anticipates that a rulemaking proposal will be ready for Board action in the near term. The market infrastructure cannot be established until offshore wind projects are approved by the Board. ORECs will not be generated until the offshore wind projects are operational and are only available for sale between approved developers and suppliers.

Based on its conversations with offshore wind developers and its evaluation of Fishermen Energy's application for the Atlantic City Wind Farm, does the BPU anticipate that proposed offshore wind energy installations have a reasonable chance of passing the economic net benefit test? What aspects of the current test impede program qualification?

The Board strongly believes that the net benefit requirements in the Offshore Wind Economic Development Act ("OWEDA") and the rules at N.J.A.C. 14:8-6 provide essential protections for New Jersey ratepayers. All proposed projects will be evaluated using those standards. The Board cannot comment on whether a project currently before the Board is capable of passing these tests, or if a particular aspect of the statutory and/or regulatory requirements prevents this project from qualifying for ratepayers subsidies.

If the BPU is considering altering the economic net benefit test, please describe the contemplated changes.

The BPU adopted regulations detailing the economic net benefit test which are consistent with the standards set forth in OWEDA.

If the BPU supports amendments to the "Offshore Wind Economic Development Act" to facilitate entry into the OREC program, please set forth the recommended revisions.

The BPU does not recommend revisions to OWEDA.

Has the BPU received any applications for OREC participation other than the one for Fishermen Energy's Atlantic City Wind Farm?

The Board has not received any other applications under OWEDA. The Board has not opened an application window for federal waters projects pursuant to N.J.A.C. 14:8-6.3; acquisition of a federal lease is a prerequisite for Board approval of a project in federal waters and the federal government has yet to conduct an auction for leases on the Outer Continental Shelf offshore New Jersey.

Discussion Points (Cont'd)

5. The Governor's FY 2014 Budget includes a **proposal to lapse \$196.2 million from the dedicated, off-budget Clean Energy Fund into the State General Fund in FY 2014**. The diversion has three components. Some \$152.2 million would be redirected without an assigned spending purpose. In addition, \$42.5 million would be used to defray the cost of utilities in State facilities and \$1.5 million to pay the administrative expenses related to State-funded positions of the BPU's Office of Clean Energy. The recommended FY 2014 diversion would come on the heels of similar \$133.0 million FY 2013 and \$255.1 million FY 2012 redirections. In all, the Governor's FY 2014 Budget anticipates \$471.1 million in available Clean Energy Fund resources in FY 2014, which is composed of \$333.0 million in new revenues and an opening balance of \$138.1 million. On the other side of the ledger, the Governor's FY 2014 Budget anticipates \$411.2 million in expenditures, which is comprised of \$215.0 million in direct expenditures and \$196.2 million in transfers to the State General Fund. A \$59.9 million projected fund balance would remain at the end of FY 2014 (page 24 of the "Supplementary Information" section in the Governor's FY 2014 Budget, available in the online version only).

New Jersey ratepayers finance the Clean Energy Program via the societal benefits charge included in their electric and natural gas bills. Operative since April 2001, the program was authorized as part of the "Electric Discount and Energy Competition Act," P.L.1999, c.23 (N.J.S.A.48:3-49 et seq.). Through the program the BPU seeks to promote increased energy efficiency and the use of renewable energy sources, including wind, geothermal, and sustainable biomass. The program no longer supports the installation of solar energy generation systems, as the State has adopted Solar Renewable Energy Certificates (SRECs) as the subsidy mechanism for solar power (see Discussion Point #3). The nascent Offshore Renewable Energy Certificate (OREC) program attempts to do the same for offshore wind energy installations (see Discussion Point #4). The aforementioned \$388.1 million FY 2012 and FY 2013 reallocations of Clean Energy Fund balances into the State General Fund prompted the BPU to reduce the original program budget for the 18-month period from January 2012 through June 2013 by \$188.8 million. The revised program has a total 18-month funding level of \$511.4 million: a) \$387.7 million, or 75.8 percent, to support energy efficiency programs; b) \$49.0 million, or 9.6 percent, for clean energy-related economic development programs that the BPU co-administers with the Economic Development Authority; c) \$38.6 million, or 7.6 percent, for renewable energy programs; d) \$21.8 million, or 4.3 percent, for the Temporary Relief for Utility Expenses (TRUE) program (see Discussion Point #15); and e) \$14.2 million, or 2.8 percent, for the administrative expenses of the BPU's Office of Clean Energy. (Board Order dated November 20, 2012 Docket numbers EO07030203 and EO11100631V)

- **Questions:** Please comment on the likely impact on the Clean Energy Program of the Governor's proposed lapse of \$196.2 million in fund balances into the State General Fund. Has the BPU raised or will it raise the Clean Energy Fund component of the societal benefits charge for FY 2014 to cover this additional expense? Absent the proposed FY 2014 diversion, how would the BPU expend the \$196.2 million? Will alternative resources be allocated for these purposes? To what extent will any shift in moneys among BPU programs, prompted by the proposed lapse, reprioritize energy efficiency and renewable energy programs? If the BPU did not anticipate

Discussion Points (Cont'd)

expending the \$196.2 million on specific spending purposes, was it contemplating drawing the sum down to temporarily lower the Clean Energy Fund component of the societal benefits charge?

For ease of response and clarity, each question and the associated response is set forth below separately.

Please comment on the likely impact on the Clean Energy Program of the Governor's proposed lapse of \$196.2 million in fund balances into the State General Fund. Has the BPU raised or will it raise the Clean Energy Fund component of the societal benefits charge for FY 2014 to cover this additional expense?

The NJCEP is currently proceeding with its fourth Comprehensive Resource Analysis (CRA) for 2014-17. This process, as required by EDECA (N.J.S.A. 48:3-49 et seq.) sets the four-year funding levels for NJCEP, and determines the amount of SBC funds that will be collected from ratepayers to promote energy efficiency and renewable programs. The CRA process requires Board approval and is scheduled to be completed on or about May of 2013.

Absent the proposed FY 2014 diversion, how would the BPU expend the \$196.2 million? Will alternative resources be allocated for these purposes?

Specifically, absent the proposed general appropriation, staff would have recommended a significant reduction in the funding level that would have resulted in lower SBC charges to ratepayers. Approximately \$33 M of the general appropriation will be directed from the ACP/SACP account, which results in the need for \$161 M to come out of the NJCEP.

When approved by the Board, the funding level is then allocated to Energy Efficiency (EE) and Renewable Energy (RE) programs within the NJCEP, through the Office of Clean Energy's (OCE) annual budgeting process, to establish individual program budgets and to pay for administration and marketing associated with the NJCEP. Program budgets include new funding plus any carryover from the previous program year. Carryover funds include uncommitted and unexpended funds, as well as funds committed to approved applications. This budget process requires Board approval, and for FY14 is scheduled for completion in June of 2013.

The existing programs offered are expected to continue. As exhibited through recent data, the spend-rate has increased as staff focuses on storm recovery enhancements to existing programs, as well as more analysis of program performance.

To what extent will any shift in moneys among BPU programs, prompted by the proposed lapse, reprioritize energy efficiency and renewable energy programs? If the BPU did not anticipate expending the \$196.2 million on specific spending purposes, was it contemplating drawing the sum down to temporarily lower the Clean Energy Fund component of the societal benefits charge?

Discussion Points (Cont'd)

In November 2012, the Board chose to align the NJCEP calendar year budget with the State's fiscal year. As a result, on or about December, 2012, the Board approved a six-month extension of the existing program funding level, resulting in continuation of CEP programs through June 30, 2013. This resulted in an 18-month NJCEP budget of \$511,366,306.

Based on current expenditures of \$207,798,363 and existing commitments of \$137,017,991 through February 2013, Staff is estimating that \$91,265,250 in unexpended and uncommitted funds will be added to the proposed FY14 funding level of \$379,250,000, resulting in an estimated \$470,515,250 for new FY14 expenses and commitments (does not include the carryover of existing commitments to approved applications).

Staff estimates \$308,930,250 will be available for new program expenditures and commitments, which is in keeping with NJCEP 2012 program year expenditures and commitments of \$323,458,536. Assuming that the current spending/commitment pace continues, Staff does not anticipate that the general appropriation will require current programs to be eliminated or rebate levels to be reduced.

However, as per the objective of the EMP to redesign the delivery and financing of State EE programs, in FY2014, Staff will start the process of transitioning EE programs to alternate means of financing. The process will involve rigorous evaluation of existing programs, to determine what combination of programs most cost-effectively delivers the most energy savings. Staff will also evaluate which programs lend themselves to alternate means of financing, in order to reduce the NJCEP's reliance on the collection of SBC funds over the remaining years of the CRA 2014-17. This objective is consistent with the Governor's 2011 EMP.

6. The authors of the 2011 Energy Master Plan reported that the BPU was looking to **restructure the Clean Energy Program**, which is the umbrella for the State's sundry energy efficiency and renewable energy programs. The authors emphasized two areas for reform. First, they supported funding the program through a revolving loan fund in lieu of the societal benefits charge. Second, they recommended that the State only operate energy efficiency programs that do not just benefit program participants but all ratepayers, for example through a lowering of peak energy demand that would drive down energy rates for everyone.

The BPU has since set the contemplated reforms in motion. It stated in reply to BPU Discussion Point #8 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis that a top priority was to replace the existing three program administrators (Applied Energy Group Inc, Honeywell International Inc, and TRC Environmental Corporation) with a single manager. To effectuate the consolidation, on June 11, 2012, the Division of Purchase and Property in the Department of the Treasury issued Request for Proposal (RFP) 13-X-22546 for "Management Consulting – Program Administrator New Jersey Clean Energy Program (NJCEP)." The BPU explained further that once chosen, the new program administrator would submit a plan for the consolidation and elimination of existing programs as well as the development of alternative financing options. The BPU's long-term goal was to reduce the reliance of the Clean Energy Program on the societal benefits charge as the program's funding mechanism and to inaugurate

Discussion Points (Cont'd)

revolving loan funds as alternative funding vehicles. Societal benefits charge collections would initially fund the revolving loan funds, however. Moreover, the BPU envisages operating Clean Energy Fund incentives more on a performance basis so as to reduce costs and improve the delivery of energy efficiency programs.

- **Questions:** Please provide a status report on the Request for Proposal 13-X-22546 for "Management Consulting – Program Administrator New Jersey Clean Energy Program (NJCEP)." Has the State awarded a contract? If so, what business entity is the contractor? If not, by what date does the State expect a contract award? How many bidders answered the Request for Proposal? Given that the BPU must adopt a new Clean Energy Program budget for the four years starting on July 1, 2013, will the new program administrator have a sufficient amount of time to influence the formulation of the new program budget?

On February 22, 2013, Treasury issued Letters of Intent to Award the Management Consulting – Program Administrator New Jersey Clean Energy Program (NJCEP) to Applied Energy Group. The six bidders who responded to the RFP (issued June 11, 2012) received Letters of Intent to Award to AEG and two protests were submitted to Treasury. The new Program Administrator (PA) will not commence with a new contract until the disputes are resolved, and as this is a Treasury process, Staff cannot predict the schedule for resolution. The transition to a single PA is expected to save the CEP program approximately \$8.5 million annually in administrative fees.

When the PA contract is awarded, OCE Staff will work closely with the new PA to develop a Strategic Plan, which will guide the NJCEP through its transition to financing and will inform the funding levels for NJCEP FY 2015 – 2017. In the meantime, through the CRA process, Staff is recommending that current funding level of \$379,250,000 be extended through FY14 (see Q#5). Staff will use FY14 to perform program evaluations, to identify which programs lend themselves to alternate means of financing, and to explore the role of utility EE programs in contributing to the State's EE goals.

- **If available, please submit the four-year Clean Energy Program budget from July 1, 2013 through June 30, 2017. If unavailable, please indicate the date by which the BPU intends to adopt a new program budget. Is the BPU using the new program budget as the vehicle through which to implement the envisioned restructuring of the Clean Energy Program? Please describe the anticipated timetable for phasing in any new financing mechanism, such as revolving loan funds, and transitioning out of the societal benefits charge as a funding source. Please list all energy efficiency programs the BPU intends to end and provide a brief justification for the cull. Will the BPU retain the administrative responsibility for the Clean Energy Program or will the Board transfer control of any renewable energy or energy efficiency program to another State agency? If so, please detail the programs to be shifted and the State agencies assuming responsibility therefor. Does the BPU plan to revise the comprehensive strategic plan and performance metrics and targets for the Clean Energy Program?**

Discussion Points (Cont'd)

As per the CRA 2014-17 process, the BPU will approve the FY 2014 funding level at its May 29, 2013 Board Agenda Meeting. After the Board approves the recommended funding levels, Staff will recommend how to allocate the funds to individual NJCEP programs through its annual budgeting process. The recommended FY14 program budgets will be presented to the Board for approval at its June 19 agenda meeting.

OCE Staff is awaiting the PA award and associated Strategic Plan to identify an appropriate timetable for the transition to financing, to determine which programs are the most cost effective, and which programs, if any, should be eliminated or redesigned for improved effectiveness.

The Board plans to retain the administration oversight of the Clean Energy Program and to assume the QA/QC responsibilities now performed by the Program Coordinator. In FY14, Staff will also be performing a global review of all EE and RE programs – utility programs, ESIPs, and those implemented through Board's State Energy Office and the NJ Economic Development Authority– to eliminate redundant programs, to improve customer and contractor participation, to reduce the administrative costs associated with delivering clean energy programs and to gain a comprehensive understanding of the universe of EE and RE programs contributing to the EMP goals.

Following the transition of the OCE program to a single PA, the Strategic Plan will identify opportunities for alternative means of financing that may involve other state agencies. In FY14, it is also Staff's goal to review existing metrics that are captured by the NJCEP. Currently, the program tracks energy and energy cost savings, greenhouse gases avoided, and the administrative costs associated with the delivery of each of the NJCEP program. Additional metrics to be captured include the amount of private or other funds leveraged by NJCEP dollars and the number of jobs the NJCEP creates/maintains and attracts to the State.

7. The BPU Board Order dated November 20, 2012 Docket numbers EO07030203 and EO11100631V, shows that the Clean Energy Program's total revised funding level for the 18-month period from January 2012 through June 2013 is \$511.4 million. The oversight expenses of the BPU's Office of Clean Energy account for \$14.2 million, or 2.8 percent, of the total. But it appears that the amount only includes the administrative costs incurred by the Office of Clean Energy (\$12.0 million) and its contracted program coordinator, Applied Energy Group Inc (\$2.2 million). **Total management costs of the Clean Energy Program**, however, are substantially higher once the administrative expenses of the two contracted program administrators are included: Honeywell International Inc and TRC Environmental Corporation. The contractors' calendar year 2010 administrative expenses, including those of Applied Energy Group Inc, approached \$53.2 million out of a total program budget of \$413.5 million, according to a table provided by the BPU in its response to BPU Discussion Point #2 in the OLS FY 2010-2011 Department of the Treasury Budget Analysis. The administrative costs of the three contractors,

Discussion Points (Cont'd)

exclusive of the oversight expenditures of the Office of Clean Energy, therefore consumed 12.86 percent of the total program budget.

New Jersey Clean Energy Program 2010 Revised Budget				
Program	Contractor	Total Budget	Direct Rebates	Administrative Cost
Residential Energy Efficiency Programs	Honeywell	\$129,047,469	\$103,672,290	\$25,375,179
Commercial and Industrial Energy Efficiency Programs	TRC	\$154,730,992	\$135,480,046	\$19,250,946
Renewable Energy Programs	Honeywell	\$127,454,799	\$122,781,294	\$6,754,607
Program Coordinator	AEG	\$2,289,480	\$0	\$2,289,480
Total		\$413,522,740	\$361,933,630	\$53,170,212

- Questions:** For calendar year 2011, please update the above table showing for each program class under the Clean Energy Program the total budget, the amount of benefits paid out, and the contracted program administrator's administrative cost. For the revised 18-month Clean Energy Program budget running from January 2012 through June 2013, please update the above table showing for each program class the estimated total budget, the estimated amount of benefits paid out, and the contracted program administrator's estimated administrative cost. Please relate to what extent the new contract with a single program administrator as of July 1, 2013 (Discussion Point #6) will reduce the administrative cost of the Clean Energy Program.

Below are the updated tables to reflect the 2011 and 2012-13 budget information:

New Jersey Clean Energy Program <u>2011 Revised Budget</u>				
Program	Contractor	Total Budget	Direct Rebates	Administrative Cost
Residential Energy Efficiency Programs	Honeywell	\$91,932,075	\$76,234,278	\$15,697,797
Commercial and Industrial Energy Efficiency Programs	TRC	\$171,365,216	\$160,592,554	\$10,772,662
Renewable Energy Programs	Honeywell	\$64,681,129	\$60,979,256	\$3,701,873
Program Coordinator	AEG	\$2,067,983	\$0	\$2,067,983
Total		\$330,046,403	\$297,806,088	\$32,240,315

Discussion Points (Cont'd)

New Jersey Clean Energy Program <u>2012-13 Revised Budget</u>				
Program	Contractor	Total Budget	Direct Rebates	Administrative Cost
Residential Energy Efficiency Programs	Honeywell	\$125,996,892	\$108,081,752	\$17,915,140
Commercial and Industrial Energy Efficiency Programs	TRC	\$217,490,135	\$201,937,093	\$15,553,042
Renewable Energy Programs	Honeywell	\$23,224,184	\$18,506,384	\$4,717,800
Program Coordinator	AEG	\$2,985,499	\$0	\$2,985,499
Total		\$369,696,710	\$328,525,229	\$41,171,481

*Transitioning of the CEP program will streamline program management, increase program flexibility and save approximately \$8.5 million in administration fees **annually**.*

8. a. The State enacted P.L.2011, c.9 to foster the construction of new electric generation facilities through the inception of the **Long-Term Capacity Agreement Pilot Program**. The BPU later selected three gas-fired combined cycle projects for program participation: NRG Energy Inc.'s Old Bridge Clean Energy Center (proposed to be operational by June 1, 2015), Competitive Power Ventures LLC's Woodbridge Energy Center (proposed to be operational by June 1, 2015), and Hess Corp.'s Newark Energy Center (proposed to be operational by June 1, 2016). In general, combined cycle power facilities produce electric power via the combustion of fuel and use the resulting waste heat by-product to generate additional electric power. The three selected projects are supposed to add 1,950 megawatt to New Jersey's generation capacity and provide an estimated \$1.8 billion in net economic benefits on a present value basis over 15 years.

To subsidize the projects, P.L.2011, c.9 provides for "Standard Offer Capacity Agreements" (SOCAs). A SOCA is a contract in which the three selected power generators would receive BPU-approved payments from electric public utilities for a defined amount of electric capacity at a fixed price for a term not to exceed 15 years. But in order to secure SOCA payments, the BPU-selected generation companies must succeed in selling their capacity in interstate electricity auctions conducted by PJM Interconnection LLC, the regional transmission organization operating the wholesale competitive electricity market and power grid across thirteen Mid-Atlantic and Midwestern states and the District of Columbia. Once a project clears the auction, it receives SOCA payments and ratepayers in effect subsidize the project in an

Discussion Points (Cont'd)

amount equal to the difference between the SOCA rate and the capacity price set at auction. Conversely, if it fails to clear the auction, the SOCA will be void and the new generation capacity will not be available. PJM's annual capacity auction takes place in every May and two of the three gas-fired combined cycle projects cleared the May 2012 three-year forward looking auction to receive payments in 2015. In contrast, NRG Energy's Old Bridge Clean Energy Center did not. It is unclear whether the project will participate in and clear the May 2013 auction for entrance in the capacity market in 2016.

- **Questions:** Please provide a status update on the Long-Term Capacity Agreement Pilot Program. Given that the Woodbridge Energy Center and Newark Energy Center cleared the May 2012 PJM capacity auction, has construction on the respective sites commenced and are the projects on schedule to be operational in 2015? Will NRG Energy Inc.'s Old Bridge Clean Energy Center attempt to clear the May 2013 capacity auction or has NRG Energy abandoned the project? If NRG Energy fails to clear the May 2013 auction or has abandoned the project, does the BPU intend to replace it with another project in the pilot program? Is the BPU considering or favoring the expansion of the program to spark the construction of additional electric generation facilities?

It appears the Newark Energy Center is progressing as scheduled and will be in operation by the 2015 Delivery Year. CPV announced that the Woodbridge Energy Center will not be in operation by the 2015 Delivery Year. The company repeatedly represented to the Board and the City of Woodbridge that the plant will be in operation by 2017. The Company continues to work with the Department of Environmental Protection to obtain needed permits.

NRG Energy stated that it intends to enter the May 2013 capacity auction. The Board has no intention of replacing this project and supports the efforts of NRG to meet its obligations under the SOCA.

The Board has no plans at this time to expand the LCAPP program to spark the construction of additional generation facilities.

8. b. In addressing BPU Discussion Point #4 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis, the Board reported that three legal challenges could affect the viability of the Long-Term Capacity Agreement Pilot Program. First, on November 25, 2011, the BPU and Rate Counsel filed with the United States Court of Appeals for the Third Circuit a lawsuit against the Federal Energy Regulatory Commission (FERC). Specifically, the BPU challenged the legality of new rules FERC promulgated in 2011 that required the three combined cycle projects to offer their capacity at an administratively set minimum offer price at PJM capacity auctions until they clear their first auction. In setting the minimum price, FERC acted as the regulator of PJM Interconnection LLC, which had objected that New Jersey's SOCA price support system could distort the regional wholesale electric market by enabling subsidized generators to submit capacity price bids below actual cost at PJM's capacity auctions.

Discussion Points (Cont'd)

Second, in two separate cases before the Superior Court of New Jersey – Appellate Division that were initiated on May 13, 2011 and June 24, 2011, two power generation companies that are not participating in the pilot program and New Jersey's incumbent electric distribution companies that have to pay SOCA rates challenged the BPU's implementation of P.L.2011, c.9. The plaintiffs allege that the BPU failed to follow due process in implementing the pilot program, arrived at an arbitrary and capricious decision, adopted SOCA's in violation of the law's requirements, and acted contrary to the public interest.

Third, a myriad of utility and electric generation companies filed a complaint against P.L.2011, c.9 in the United States District Court for the District of New Jersey on February 9, 2011. The plaintiffs allege that the law violates the Supremacy Clause of the United States Constitution, as the Federal Power Act vests FERC with the exclusive jurisdiction to regulate wholesale electricity prices. Moreover, the plaintiffs contend that the law breached the Commerce Clause of the United States Constitution, as its subsidies allegedly favor in-state companies over out-of-state competitors. The court denied the plaintiffs' and defendants' motions for summary judgment on September 28, 2012 and scheduled a trial for March 26, 2013.

- **Questions:** Please comment on the status of the three legal challenges involving the Long-Term Capacity Agreement Pilot Program: a) the two cases brought by two power generation companies and New Jersey's electric distribution companies before the Superior Court of New Jersey – Appellate Division that challenge the implementation of P.L.2011, c.9; b) the lawsuit brought by a myriad of utility and electric generation companies in the United States District Court for the District of New Jersey contending that P.L.2011, c.9 violates the United States Constitution; and c) the lawsuit the BPU filed with the United States Court of Appeals for the Third Circuit challenging the legality of new 2011 rules by the Federal Energy Regulatory Commission (FERC) that require new electric generation facilities benefitting from SOCA's to offer their capacity at an administratively set minimum offer price at the PJM capacity auction until they clear their first auction. Does the uncertainty created by the lawsuits function as a deterrent to the construction of the Woodbridge Energy Center and Newark Energy Center? Who bears the financial risk of the courts invalidating the Long-Term Capacity Agreement Pilot Program? Does the BPU stand ready to provide financial support of a different nature to the projects in case of adverse court rulings? Given that the two projects cleared the May 2012 capacity auction, is the BPU still concerned about FERC requiring that new electric generation projects benefitting from SOCA's offer their capacity at an administratively set minimum offer price at capacity auctions until they clear their first auction? What has been the State's cost to date of engaging in the three court proceedings?

a) *"The two cases brought by two power generation companies and New Jersey's electric distribution companies before the Superior Court of New Jersey – Appellate Division that challenge the implementation of P.L.2011, c.9" are pending. Judge Carchman recommended*

Discussion Points (Cont'd)

consolidation of the appeals; the Appellate Division has also considered closing the generators' appeal. The court has made no decision with respect to either action.

b) The trial in *PPL Energy Plus L.L.C. v. Solomon et al.*, "the lawsuit brought by a myriad of utility and electric generation companies in the United States District Court for the District of New Jersey contending that P.L.2011, c.9 violates the United States Constitution," is currently underway before Judge Sheridan. The Attorney General's Office anticipates that trial will conclude in April or early May, with post-trial briefs to follow.

c) *The New Jersey Board of Public Utilities v. FERC* is "the lawsuit the BPU filed with the United States Court of Appeals for the Third Circuit challenging the legality of new 2011 rules by the Federal Energy Regulatory Commission (FERC), that require new electric generation facilities benefitting from SOCAs to offer their capacity at an administratively set minimum offer price at the PJM capacity auction until they clear their first auction."

In this case, the Board, the New Jersey Division of Rate Counsel and Hess Corporation (collectively, the "Parties") allege that certain provisions of FERC's Orders regarding the Minimum Offer Price Rule ("MOPR") were unjust and unreasonable. The Parties filed their initial Brief on September 6, 2012. Reply briefs were filed in accordance with the agreed upon briefing schedule and a decision is pending.

A new generator is not automatically subject to the MOPR threshold until it clears one Base Residual Auction (BRA), as stated in the question, above. The current MOPR allows a generator to bid into the BRA at its actual net cost of entry, subject to an extensive review by PJM. This "unit specific review process" was used by both the Newark and Woodbridge Energy Centers in the last BRA. The Board believes this is a reasonable approach and should be retained if the "state self-supply exception" is not reinstated by the Third Circuit.

The above question appears to confuse the Third Circuit case with different (and ongoing) litigation at FERC regarding additional changes to the MOPR requested by PJM in early December 2012. For a period of four months following the May 2012 BRA, PJM regularly met with a large cross-section of its membership to craft changes to MOPR that are expressly designed to exclude states from incentivizing new generation development. The Board has taken a strong position before PJM and FERC alleging that PJM's actions violated the states' right to due process and that the substantive changes to MOPR would violate the states' Constitutionally-protected police power, as defined by the Federal Power Act. This matter is currently pending before FERC, with a decision expected in early May.

Even if the changes to the MOPR proposed by PJM were adopted, both the Newark and Woodbridge Energy Centers are "grandfathered" in and would not need to re-clear the BRA. It appears the Newark Energy Center is progressing as scheduled and will be in operation by the 2015 Delivery Year. CPV will not be in operation by the 2015 Delivery Year. The company repeatedly represented to the Board and the City of Woodbridge that the plant will be in operation by 2017, however, if CPV cannot provide firm delivery by energy year 2016, the company will need to bid into the BRA again. If the PJM-proposed MOPR is adopted, BPU staff predicts that it is unlikely that the facility would clear the BRA.

Discussion Points (Cont'd)

The financial risk of the courts invalidating the LCAPP lies with Hess and CPV. Both the Newark and Woodbridge Energy Centers are presumed by PJM to be economic or "necessary resources" despite the SOCA and, therefore, are required to provide their capacity obligation to PJM or pay the associated penalty for non-delivery.

In the case of adverse rulings, the Board, as a State government entity, would have difficulty offering financial incentives to develop new generation within the RPM construct. The proposed (and currently challenged) MOPR revisions essentially guarantee that any entity holding a multi-year contract with a government entity would be excluded from the PJM capacity market.

The State's cost to date for the three proceedings is approximately \$360,000.00, not including time charged by the attorneys in the Division of Law.

9. The Oyster Creek nuclear power plant in Lacey Township, Ocean County, is expected to be decommissioned at the end of 2019. Because nuclear power is a carbon-free electricity generation resource the authors of the 2011 Energy Master Plan contend that the closure of Oyster Creek jeopardizes meeting the greenhouse gas reduction targets of the Global Warming Response Act, P.L.2007, c.112: 2020 New Jersey greenhouse gas emissions are not to exceed their 1990 level and 2050 emissions 20 percent of their 2006 level. The plan's authors state that, consequently, "the Christie Administration supports the consideration of new nuclear generation as a potential baseload resource." They relate further that a planning process has begun to explore substitution options for Oyster Creek's generation capacity and that a State agency panel will be established to assess the **role of nuclear power in New Jersey's future in-state electricity generation**. Replying to BPU Discussion Point #13 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis, the Board noted that relevant State and local agencies and officials had already convened to begin discussions regarding the redevelopment of the region around the Oyster Creek nuclear power plant. Following the identification of a lead State agency, the BPU expected that the committee would reconvene to craft a plan, which may involve the establishment of an energy enterprise zone. The redevelopment may also include the construction of a new nuclear power plant on the Lacey Township property, according to a footnote on page 84 of the 2011 Energy Master Plan, as the location benefits from the presence of a highly-skilled workforce, community support for such an initiative, and the existing electrical transmission infrastructure.

Oyster Creek is one of four licensed nuclear power plants in New Jersey. Its 615 Megawatt (MW) of capacity represents 15 percent of 4,108 MW in total statewide nuclear power generation capacity. In 2011, nuclear power plants accounted for 51.9 percent, or 39 million Megawatt Hours (MWh) of the 75 million MWh of electricity generated in New Jersey.

- **Questions: Please provide a status update on the work of the committee that is to develop a redevelopment plan for the region around the Oyster Creek nuclear power plant. Which agencies, entities, and stakeholders are represented thereon? What State agency leads the committee? By which date is the planning process supposed to yield a redevelopment strategy? If already available, please explain the strategy that**

Discussion Points (Cont'd)

will be used and the reason(s) for selecting that strategy. Is the committee considering erecting a new nuclear power plant on the site of the current power plant?

- **Has the State agency panel been established that is supposed to assess the role of nuclear power in New Jersey's future electricity generation pursuant to the 2011 Energy Master Plan? If so, please outline the composition of its membership and set forth by which date the panel is supposed to submit a report or make recommendations. Is the panel the same body as the committee charged with the redevelopment of the region around the Oyster Creek nuclear power plant?**

A workshop is being planned for May, 2013 to solicit public input on the redevelopment plan for that area. The event will take place in Lacey Township, one of the three communities that hosts part of the Oyster creek facility. This workshop will include representation from the Office of Planning Advocacy, BPU, DEP, Labor and Workforce Development, DCA, the Pinelands Commission as well as local officials from Lacey. Residents and local officials from Barnegat Township and Ocean will also be invited.

Development of an action plan for the redevelopment of this site will be the next step. This plan will address a broad range of issues including jobs creation, economic redevelopment, and potential for developing new energy options.

The Christie Administration supports the consideration of new nuclear generation as a potential base load resource. However, the plan to develop new nuclear or any other form of energy generation will have to be initiated by the private sector in response to the redevelopment plan.

10. In June 2011, the Administration established the **State Energy Office** in the BPU's Division of Economic Development and Energy Policy. The office is to identify opportunities for reducing the energy consumption in State facilities. As part of that mission, the office implements and manages the **energy savings improvement program for State-owned and -operated buildings** in accordance with P.L.2009, c.4. Such programs represent a financing mechanism for projects that are intended to lower buildings' energy needs. Under the initiative, the State contracts with energy service companies that assume the up-front cost of infrastructure improvements that are designed to reduce the energy consumption of State buildings. The State then repays its debt to the companies out of the energy cost savings it realizes from the investments over a period not exceeding 15 years (or 20 years in certain cases). The ability to defray the up-front cost of energy conservation projects over several years ought to enable the State to increase the number of projects it undertakes. No energy savings improvement contracts had been signed yet, although several projects were in the planning stages, as of the BPU's response to BPU Discussion Point #15 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis. The BPU related further that since inception the State Energy Office also implemented energy audits, negotiated lower prices on the State's electrical supply contract that are projected to generate \$6.2 million in savings over 36 months, negotiated price reductions on the State's natural gas contract that are projected to yield \$3.7 million in savings over 20 months, assisted State agencies with the determination of their FY

Discussion Points (Cont'd)

2013 energy-related needs and capital budget requests, and reviewed energy funding requests with the Office of Management and Budget in the Department of the Treasury. The office performed these tasks with three full-time employees who avail themselves of other Division of Economic Development and Energy Policy staff, as needed.

The State Energy Office is the successor to the Office of Energy Savings. Executive Order #11 of 2006 established the Director of Energy Savings in the Department of the Treasury to study and implement energy efficiency measures for State government. Subsequently, Executive Order #54 of 2007 instructed the director to develop specific targets and implementation strategies for reducing energy usage at State facilities and the State motor vehicle fleet's fuel consumption.

- **Questions:** Please describe the State Energy Office's activities since its response to BPU Discussion Point #15 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis. As the successor to the Office of Energy Savings, has the State Energy Office also assumed responsibility for developing specific targets and implementation strategies for reducing the State motor vehicle fleet's fuel consumption, as the Office of Energy Savings was instructed to do in Executive Order #54 of 2007? If so, please comment on the activities the office has undertaken in this regard. If not, please indicate what State agency has taken control of that function.

The SEO has continued to assist other state agencies with capital budget requests related to energy issues. In early March 2013, SEO Staff again negotiated changes to the State's natural gas contract, which will result in an annual savings of \$1.08 million.

When created within the Board, the State Energy Office was charged with "identifying opportunities for reducing the energy consumption in State Facilities". Treasury's Division of Administration manages the State's vehicle fleet.

- **Please provide a progress report on the State's energy savings improvement program for State-owned and -operated buildings. How many energy savings improvement contracts have been signed? For each contract please detail the State building benefitting from energy-savings infrastructure improvements, the improvements being undertaken, their capital cost, the amortization period, the projected amount of energy cost savings over the amortization period, and the debt service payments the State is anticipated to make out of the projects' energy savings.**

To date, no contracts have been signed. In 2012, Treasury determined that financing through an ESCO was not as cost-effective as implementing State ESIP projects through a \$100 million line-of-credit (to be used for energy projects only). The RFP for the line-of-credit is awaiting review and approval from the Comptroller's Office.

To date, however the SEO has several initiatives that have resulted in significant energy and cost savings for the State. Examples include:

Discussion Points (Cont'd)

- *Electricity Supply Contract in 2010* New contracts were awarded through a bid process to supply 1.7 billion kilowatt-hours of electricity to a consortium of 17 state agencies, authorities, and colleges. These contracts are currently supplying electricity to State facilities at a price that is below the wholesale electricity market. This contract contained a provision which permitted the State to “blend and extend” the rates thru June of 2015. In March of 2013, Board SEO executed another option to add certain accounts and extend the contract thru December of 2015. These changes will result in another \$188 K in annual savings thru December 2015.
- *Natural Gas Supply Contract in 2011* The State’s existing natural gas supply contracts were renegotiated for 16 State agencies, authorities, and colleges; taking advantage of lower pricing in the futures market to provide an immediate price reduction. The original contracts were estimated to reduce the State’s natural gas supply cost by \$4.1 million, compared to the prior contracts. In April 2012, the BPU, SEO and Treasury exercised an option, further reducing the natural costs by \$2.25 million annually. This benefit will be realized through December of 2013. In March of 2013, the SEO executed a “blend and extend” agreement which will result in additional annual savings of \$1.08 million and the contract has been extended thru December 2015.
- *Audits – Energy audits* have been completed at the New Jersey State Police Headquarters in West Trenton and the Katzenbach School in Ewing. These two facilities will be among the ESIP projects once the line of credit is approved by the Comptroller’s Office
- *Projects – Projects* have been initiated to replace chiller equipment at the Hunterdon Developmental Center in Clinton (\$2.8 million) and the Woodbine Developmental Center in Woodbine (\$3.1 million). The Hunterdon project is in bid phase for construction and the Woodbine project is currently still in design.

11. P.L.2009, c.239 created the eleven-member **Solar and Wind Energy Commission** to study the feasibility of solar and wind energy installations on State owned property. The commission’s final report is to be published on the websites of the BPU and the Department of Environmental Protection. The BPU President serves as an *ex officio* member of the commission.

- **Questions:** Please provide an update on the Solar and Wind Energy Commission. How many of its eleven members have been appointed? Has the commission held its organizational meeting? If so, when did the organizational meeting take place and how often has it met since? What is the commission’s work plan? If there are still vacancies on the commission, by which date does the Administration anticipate the commission to hold its organizational meeting? Please set forth the reasons for any delay in organizing the commission.

Discussion Points (Cont'd)

P.L.2009, c.239 was signed by Governor Jon Corzine, but he did not nominate members to the Commission created by the Act. From the beginning of the Christie Administration, significant efforts have been directed to reducing red tape and bureaucracy. The State Energy Office has, and will continue to, evaluate the opportunities for energy efficiency and renewable energy at State-owned and operated buildings. However, the first priority regarding state owned property is to make the facilities as energy efficient as possible, before expending funds on more expensive renewable energy options.

12. According to evaluation data in the Governor's FY 2014 Budget, the number of **registered energy agents** increased from 16 in FY 2012 to 45 in FY 2013 and is projected to soar to 138 in FY 2014. An energy agent is a person who is registered with the BPU pursuant to the "Electric Discount and Energy Competition Act," P.L.1999, c.23, and who acts as a broker for the sale of retail electricity or electric related services or retail gas supply or gas related services between electric power or gas suppliers and government or private sector clients.

- **Questions:** Please explain the dynamics behind the projected spike in the number of registered energy agents from 16 in FY 2012 to 138 in FY 2014. Has the increase occurred across all customer classes or is it ascribable to the residential, commercial or industrial customer class in particular? Have any changes in the energy market provided an impetus for business entities to newly register as energy agents? Please describe the extent to which the BPU regulates energy agents and their marketing and business practices.

In FY 2013 the number of energy agent applications tripled from 16 to 43 and we expect this number to triple again in FY2014 based upon filings being made over the past several months. As energy prices decrease and competition increases, we are seeing a marked increase in customer switching in every class of customers. In 2011, just 5% of residential customers were switching. By 2012 that switching number rose to 10% and in 2013, over 15% of residential customers are shopping for energy. Similar increases in the commercial and industrial classes have occurred from 15% of commercial & industrial users switching in 2011 to 28% switching in 2013. In general, energy agents focus more on the small and medium commercial customers. The desire by customers to switch is being driven by the decrease in wholesale electric and natural gas prices over the past three years. In 2011 energy prices decreased to a point where a Third Party Supplier could secure a lower rate for their customers than the Basic Generation Service rate which offered default customers an average price that included 2009 and 2010 higher prices. Licensed Third Party Suppliers are offering incentives from cash bonuses to locked rates and referral credits. These incentives have provided energy agents with terrific opportunities in today's market. Many companies, which may not need to file for energy agent status under the Board's regulations, continue to apply to the Board for this status in order to provide an extra level of comfort to Third Party Suppliers with whom they are negotiating for business clients in the energy market.

Per N.J.A.C. 14:4 ENERGY COMPETITION, SUBCHAPTER 5. ENERGY LICENSING AND REGISTRATION, the Board is responsible for the licensing and registration of Energy Agents, Energy Consultants, Private Aggregators and Third Party Suppliers. The registration process for

Discussion Points (Cont'd)

an energy agent includes completion of a number of forms which are reviewed by Staff prior to seeking Board approval of registered Energy Agent Status. The registration must be renewed annually.

The registration form requires the following types of information:

- *Identifying and contact information for the registrant and the registrant's business;*
- *Background information on the registrant's business, including any business affiliations;*
- *Evidence of financial integrity, including relevant financial records and references;*
- *Information regarding the registrant's knowledge of and experience in the energy industry;*
- *Information regarding any existing, pending or past adverse rulings, litigation, liabilities, investigations or other matters relating to financial or operational status, including criminal charges against the registrant, its employees, or any affiliated entities; and*
- *Information on all persons with ownership interests in the registrant's business and the form of ownership.*
- *A signed certification providing that a Third Party Supplier, an any telemarketer and/or agent acting on behalf of the Third Party Supplier, is in compliance with all F.T.C. do-not-call lists.*

Additionally, the registrant is required to notify the Board within 30 days after any material change in the organizational structure or operation of the registrant's business.

If, after approval of a registration, it is discovered that any part of the registration was inaccurate or noncompliant with the Board's regulations, the Board is not foreclosed from bringing enforcement action against the registrant for the inaccuracy or noncompliance, including suspension or revocation of the registration, as well as monetary fines.

13. Imposed pursuant to N.J.S.A. 48:3-60 as a component of the "Electric Discount and Energy Competition Act" (P.L.1999, c.23), the **societal benefits charge** is embedded in, but separately delineated on, electric and natural gas ratepayers' monthly utility bills. Proceeds finance nuclear plant decommissioning, manufactured gas plant remediation, utilities' uncollectible debts, energy consumer education, energy assistance programs to low-income utility customers via the Universal Services Fund (page 38 of the "Supplementary Information" section in the Governor's FY 2014 Budget, available in the online version only), and energy demand management programs including BPU's Clean Energy Program (page 24 of the "Supplementary Information" section in the Governor's FY 2014 Budget, available in the online version only). In calendar year 2010, the charge yielded \$792.3 million in revenues after generating \$783.1 million in calendar year 2009, and \$643.0 million in calendar year 2008. The Universal Service Fund (a \$61.4 million increase from \$256.6 million to \$318.0 million) and the Clean Energy Program (a \$49.6 million increase from \$279.8 million to \$329.4 million) accounted for most of the growth from calendar year 2008 to calendar year 2009. Depending on the utility, the societal benefits charge represented between 2.71 percent (\$35.75) and 4.55 percent (\$60.47) of the annual bill of the average electric ratepayer as of March 2011 and between 2.63 percent (\$33.27) and 4.94 percent (\$72.17) of the annual bill of the average natural gas ratepayer.

Discussion Points (Cont'd)

- Questions:** Please indicate the amount the societal benefits charge raised in calendar years 2011 and 2012, as well as the amount of societal benefits charge collections that financed each program supported by the charge. Please list, by utility and by societal benefits charge component, the 2012 and 2013 rates of the charge and present the reasons for any increase. The charge represented what percentage of an average ratepayer's annual energy utility bill in calendar year 2012 and represents what estimated percentage in calendar year 2013?

For ease of response and clarity, each question and the associated response is set forth below separately.

- Questions:** Please indicate the amount the societal benefits charge raised in calendar years 2011 and 2012, as well as the amount of societal benefits charge collections that financed each program supported by the charge.

**CY2012 SBC Revenues,
including Sales and Use
Tax (\$M)
CY2011 SBC Revenues,
including Sales and Use
Tax (\$M)
(\$million)**

	ACE	JCP&L	PSE&G (Electric)	RECO	SJG	PSE&G (Gas)	NJNG	ETG	Total
Consumer Education	\$0.00	\$0.00	\$0.00			\$0.00			\$0.00
Consumer Education DSM/Clean Energy		\$3.42							\$3.42
DSM/Clean Energy USF	\$20.496	\$58.85	\$130.00	\$5.69	\$9.47	\$56.00	\$11.36	\$17.15	\$309.01
USF Lifeline	\$9.01	\$54.14	\$133.00	\$6.23	\$7.55	\$68.00	\$13.31	\$9.53	\$300.77
Lifeline Uncollectible Nuclear	\$24.13	\$49.44	\$99.00	\$4.16	\$5.51	\$31.00	\$7.53	\$5.04	\$226.43
USF Lifeline Uncollectible Nuclear	\$20.61	\$45.26	\$84.00	\$3.54	\$7.58	\$38.00	\$9.21	\$6.44	\$214.64
Decommissioning Nuclear RAC	\$6.50	\$14.34	\$26.00	\$1.12	\$2.78	\$14.00	\$3.52	\$2.38	\$70.64
Decommissioning Nuclear RAC Social Programs	\$16.08	\$11.33	\$0.00			\$0.00			\$27.41
Decommissioning Nuclear RAC Social Programs Temporary Rate Adjustment	\$15.55	\$9.31							\$24.86
Decommissioning Nuclear RAC Social Programs Reconciliation	\$0.00	\$0.00	\$0.00			\$0.00			\$0.00
Decommissioning Nuclear RAC Social Programs Reconciliation		\$12.41	\$22.00		\$17.48	\$24.00	\$13.12	-\$0.79	\$12.41
Decommissioning Nuclear RAC Social Programs Reconciliation	\$0.00	\$0.856	\$23.00	\$78.00	\$7.83	\$28.00	\$21.27	-\$1.11	\$79.85
Decommissioning Nuclear RAC Social Programs Reconciliation	\$0.00	\$0.00	\$70.00						\$70.00
Decommissioning Nuclear RAC Social Programs Reconciliation	\$0.00	\$0.00	\$0.00			\$0.00			\$0.00
Decommissioning Nuclear RAC Social Programs Reconciliation	\$0.00	\$0.00	\$0.00			\$0.00			\$0.00
Decommissioning Nuclear RAC Social Programs Reconciliation	\$67.10	\$135.04	\$355.00	\$10.95	\$34.89	\$123.00	\$39.81	\$24.11	\$789.90
Total Revenues	\$51.67	\$139.74	\$336.00	\$10.89	\$25.74	\$148.00	\$47.31	\$17.24	\$776.59

Discussion Points (Cont'd)

Please list, by utility and by societal benefits charge component, the 2012 and 2013 rates of the charge and present the reasons for any increase

Discussion Points (Cont'd)

Societal Benefits Charge (SBC) Rates - April 2012

SBC Components	Electric (\$/kWh)				Gas (\$/Therm)			
	PSE&G	JCP&L	ACE	RECO	PSE&G	NJN	SJG	ETG
Clean Energy Program/ Demand Side Management	0.002900	0.002831	0.000707	0.003255	0.022843	0.018972	0.016200	0.028411
Manufactured Gas Plant Remediation	0.000532	0.000130	--	--	0.010497	0.030280	0.032600	(0.003738)
Universal Service Fund w/ Lifeline	0.003032	0.003032	0.003032	0.003032	0.017300	0.017289	0.017300	0.017300
Nuclear Plant Decommissioning	--	0.000000	--	--	--	--	--	--
Uncollectibles/Social Programs	0.001755	0.000545	0.001525	--	--	--	--	--
Consumer Education Program	--	0.000000	--	--	--	--	--	--
TOTAL (without Sales and Use Tax)	0.008642	0.006538	0.005264	0.006287	0.050640	0.066541	0.066100	0.041973
TOTAL (w Sales and Use Tax)	\$0.009247	\$0.006996	\$0.005633	\$0.006727	\$0.054185	\$0.071199	\$0.070727	\$0.044911

Societal Benefits Charge (SBC) Rates - April 2013

SBC Components	Electric (\$/kWh)				Gas (\$/Therm)			
	PSE&G	JCP&L	ACE	RECO	PSE&G	NJN	SJG	ETG
Clean Energy Program/ Demand Side Management	0.004090	0.002831	0.003293	0.003255	0.033286	0.018972	0.022710	0.059907
Manufactured Gas Plant Remediation	0.000349	0.000130	--	--	0.008673	0.030280	0.035327	0.001121
Universal Service Fund w/ Lifeline	0.002865	0.002865	0.002865	0.002865	0.017200	0.017196	0.017200	0.017196
Nuclear Plant Decommissioning	--	0.000000	--	--	--	--	--	--
Uncollectibles/Social Programs	0.001325	0.000545	0.001636	--	--	--	--	--
Consumer Education Program	--	0.000000	--	--	--	--	--	--
TOTAL (without Sales and Use Tax)	0.009099	0.006371	0.007793	0.006120	0.059159	0.066448	0.075237	0.078224
TOTAL (w Sales and Use Tax)	\$0.009736	\$0.006817	\$0.008339	\$0.006548	\$0.063300	\$0.071100	\$0.080504	\$0.083700

Discussion Points (Cont'd)

Definitions:

Clean Energy Program/Demand Side Management: includes costs for the Clean Energy Program, as approved by the BPU in the Comprehensive Resources Analysis, as well as other Board-approved demand side management programs.

Manufactured Gas Plant Remediation: Includes the costs for investigations, testing, land acquisition, remediation and/or litigation expenses. Also includes third party claims.

Universal Service Fund w/Lifeline: Low income energy assistance

Nuclear Plan Decommissioning: Includes the costs of safely removing nuclear plants from service.

Uncollectibles: Includes costs associated with uncollectible accounts

Consumer Education Program: Includes costs associated with the state-mandated Consumer Education Program

Reconciliation and Temporary Rate Adjustment for RECO: Include costs associated with over/under recoveries from prior SBC periods

Note: Some utilities may not have a rate for a certain component because that component is not applicable to them. For example, JCP&L and PSE&G are the only electric companies that have Manufactured Gas Plant Remediation costs. This is because they held interests in this type of plan at some point, whereas ACE and RECO did not. For other components (Consumer Education) those without rates have recovered their costs and no longer need that specific rate component.

Changes in the SBC component charges reflect annual adjustments that “true-up” for prior over or under-recoveries and/or reflect changes to funding level requirements for the year going forward.

The charge represented what percentage of an average ratepayer’s annual energy utility bill in calendar year 2012 and represents what estimated percentage in calendar year 2013?

Annual Impact of SBC Rates

Electric {1}	<u>Apr-12</u>	<u>Apr-13</u>	Gas{2}	<u>Apr-12</u>	<u>Apr-13</u>
--------------	---------------	---------------	--------	---------------	---------------

Discussion Points (Cont'd)

ACE			ETG		
SBC Portion of Annual Bill	\$ 39.43	\$ 58.37	SBC Portion of Annual Bill	\$ 44.90	\$ 83.70
Average Annual Bill	\$1,276.61	\$ 1,286.07	Average Annual Bill	\$ 1,155.35	\$ 1,184.02
SBC% of Annual Bill	3.09%	4.54%	SBC% of Annual Bill	3.89%	7.07%
JCP&L			NJNG		
SBC Portion of Annual Bill	\$48.97	\$ 47.72	SBC Portion of Annual Bill	\$ 71.21	\$ 71.10
Average Annual Bill	\$1,084.69	\$ 994.17	Average Annual Bill	\$ 1,068.72	\$ 1,222.30
SBC% of Annual Bill	4.51%	4.80%	SBC% of Annual Bill	6.66%	5.82%
PSE&G- Electric			PSE&G- Gas		
SBC Portion of Annual Bill	\$ 64.73	\$ 68.15	SBC Portion of Annual Bill	\$ 54.18	\$ 63.30
Average Annual Bill	\$1,273.56	\$ 1,225.07	Average Annual Bill	\$ 1,069.81	\$ 1,077.22
SBC% of Annual Bill	5.08%	5.56%	SBC% of Annual Bill	5.06%	5.88%
RECO			SJG		
SBC Portion of Annual Bill	\$ 47.09	\$ 45.84	SBC Portion of Annual Bill	\$ 70.70	\$ 80.50
Average Annual Bill	\$1,198.21	\$ 1,277.55	Average Annual Bill	\$ 1,342.09	\$ 1,329.79
SBC% of Annual Bill	3.93%	3.59%	SBC% of Annual Bill	5.27%	6.05%

*NOTE: The rates and bill impacts include Sales and Use Tax of 7%

{1}- The following usage was used: Residential- 7000 kWh per year

{2}- The following usage was used: Residential- 1000 therms per year

14. New Jersey ratepayers fund the **Universal Service Fund (USF)** via the societal benefits charge included in their electric and natural gas bills. The USF finances several State energy assistance programs: the USF, the "Fresh Start", and Lifeline credit programs, the Tenants' Assistance Rebate Program, as well as energy assistance payments under the Temporary Assistance for Needy Family (TANF) program. The Governor's FY 2014 Budget anticipates \$325.9 million in USF expenditures for FY 2014 (page 38, available in the online version of the Governor's FY 2014 Budget only). Of this amount, the Governor proposes \$244.7 million in direct fund expenditures as well as a transfer of \$81.2 million to other funds, of which \$63.8 million would finance the "Lifeline Credit Program" (N.J.S.A.48:2-29.15 et seq.) and the "Tenants' Lifeline Assistance Program" (N.J.S.A.48:2-29.31 et seq.), under which 304,576 low-income households would receive up to \$225 in electric and gas utility credits in FY 2014. An additional \$6.9 million would finance energy assistance payments for Work First New Jersey recipients (Work First New Jersey is the State's TANF program) and the Department of Community Affairs would receive another \$8.6 million to administer the USF and "Fresh Start" credit programs.

Discussion Points (Cont'd)

The USF credit program is an energy assistance program seeking to ensure that eligible utility customers pay no more than six percent of their annual income for their natural gas and electric service. The "Fresh Start" credit program, on the other hand, allows first-time USF credit recipients with at least \$60 in arrears on their energy bills to retire their outstanding balances by paying their USF-adjusted affordable energy bill in full for 12 consecutive months following program admittance. The BPU carries the financial responsibility for the programs, the Department of Community Affairs administers them, and the electric and natural gas utilities credit the benefits to customer accounts. In program year 2011, the operation of the two programs cost \$216.3 million, as related by the BPU in its response to BPU Discussion Point #17 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis. For program years 2010 and 2011, the tables below display for each of the two credit programs the number of beneficiary households, total credit expenditures, and the average benefit per household. A program year starts on November 1. Program year 2010, for example, began on November 1, 2009 and ended on October 31, 2010.

Universal Service Fund Credit Program Metrics for 2010 and 2011 Program Years

Program Year	Households Enrolled	Total Credit Cost	Average Benefit per Household
2009 - 2010	194,660	\$193,477,000	\$993.92
2010 - 2011	223,088	\$200,956,254	\$900.79

"Fresh Start" Credit Program Metrics for 2010 and 2011 Program Years

Program Year	Households Enrolled	Total Credit Cost	Average Benefit per Household
2009 - 2010	23,359	\$13,447,945	\$575.71
2010 - 2011	26,770	\$15,299,127	\$571.50

Questions: For each of the USF credit and "Fresh Start" programs, please provide actual expenditures for the 2011-2012 program year and estimated expenditures for the 2012-2013 program year. What is the number of USF credit and "Fresh Start" beneficiaries in program years 2011-2012 and 2012-2013?

Note: Department of Community Affairs changed the Home Energy Assistance and therefore also the USF Program Year from November – October to October – September, starting in the fall of 2012.

USF:

Discussion Points (Cont'd)

Program Year	USF Enrollment by Household	USF Enrollment by Utility Account	\$ USF Credits Provided to Clients
2011-2012	221,451	271,844	\$ 196,935,385
2012-2013*	170,712	258,792	\$ 74,589,993

* October 2012 – February 2013 data from USFHEA database system and utility companies

Fresh Start:

Program Year	Fresh Start Enrollment by Household (estimated)	Fresh Start Enrollment by Utility Account	\$ Fresh Start (Debt Forgiveness) Amount
2011-2012	24,360	30,509	\$ 12,411,258
2012-2013*	15,634	22,953	\$ 3,859,706

* Based on October 2012 – February 2013 data from USFHEA system and utility companies

USF Administrative Budget approved by Board for Department of Community Affairs:

FY 2011-2012: \$6.7M

FY 2012-2013: \$7.9M¹

For what reason(s) did USF credit program participation increase by 28,400, or 14.6 percent, from program year 2009-2010 to program year 2010-2011?

The USF program receives applications in three ways: 1) a physical application is mailed in to a county agency/ sub-grantee which processes the application for the Department of Community Affairs; 2) the household is electronically screened for USF eligibility in the USF/HEA database system through information extracted from the Food Stamp/SNAP program; and 3) the household is electronically screened for USF eligibility in the USF/HEA database system through information provided by the Lifeline Utility Assistance program (a program for seniors and the disabled). Increased participation is likely due to the economic conditions in NJ and the US during those years

What factor(s) account for the \$93, or 9.4 percent, drop in the average USF credit over the same period?

¹ This increase is due to several factors. The USF and the federal LIHEAP program share an application, database, Hotline and sub-grantee network that processes applications and the total USF and LIHEAP budget is split according to the enrollment numbers of each program. There has been an increase in USF grantees compared to LIHEAP grantees, increasing specifically from 36 percent USF grantees in FY 2012 to 40 percent USF grantees in FY 2013. In addition, there were increased sub-grantee staff, required computer and telephone upgrades; and new CBO offices. At the DCA there were salary and fringe increases; increased postage costs; consultant fees to fund DCA's call center vendor for administering the USF/LIHEAP hotline as well as increases to the New Jersey Office of Information Technology costs which stem from significant improvements to the USF/LIHEAP database system.

Discussion Points (Cont'd)

The USF benefit is calculated based on the amount of money a household spends on electric and natural gas in relation to household income. Therefore the reason for the reduction in the average USF benefits would be due to income, the price of energy and/or household consumption of energy.

What are the USF rates built into the societal benefits charge for those years and what does the program cost the average residential and non-residential energy utility customer?

2010-2011: Residential Rates and Bill Impact

Average Residential Customers	Gas	Electric	Total
Rates After Tax	\$ 0.0142	\$ 0.002052	
Monthly Bill Impact	\$ 1.42	\$ 1.33	\$ 2.75
Annual Bill Impact	\$17.04	\$16.01	\$33.05

2011-2012: Residential Rates and Bill Impact

Average Residential Customers	Gas	Electric	Total
Rates After Tax	\$0.0134	\$0.002567	
Monthly Bill Impact	\$1.34	\$ 1.67	\$ 3.01
Annual Bill Impact	\$16.08	\$20.02	\$36.10

2012-2013: Residential Rates and Bill Impact

Average Residential Customers	Gas	Electric	Total
Rates After Tax	\$0.0136	\$0.002428	
Monthly Bill Impact	\$1.36	\$1.58	\$2.94
Annual Bill Impact	\$16.32	\$18.94	\$35.26

Commercial & Industrial Customers (C&I) Gas

Program	Total Gas	GAS	Bill Impact of
----------------	------------------	------------	-----------------------

Discussion Points (Cont'd)

Year	<u>USF/Lifeline</u> Revenues from all gas customers	Revenues from C&I:	USF and Lifeline
2010- 2011	\$95,178,074	\$60,342,898	Not available*
2011- 2012	\$79,389,855	\$38,597,409	Not available*
2012- 2013	\$75,859,022	\$37,053,541	Not available*

Commercial & Industrial Customers (C&I) Electric

Program Year	<u>Total Electric</u> <u>USF/Lifeline</u> Revenues from all electric customers	ELECTRIC Revenues from C&I:	Bill Impact of USF and Lifeline
2010- 2011	\$186,480,151	\$97,529,119	Not available*
2011- 2012	\$234,186,745	\$142,860,432	Not available*
2012- 2013	\$208,169,209	\$131,382,175	Not available*

* Bill Impact on C&I customers is not available because jurisdictional volumes available are not broken down by residential and non-residential sales. Also the revenues listed above from C&I customers are for the USF and Lifeline utility assistance programs combined, not USF alone.

15. P.L.2009, c.207 directs the BPU to make a one-time \$25 million allocation out of unexpended and uncommitted societal benefits charge balances to an electric and gas utility assistance grant program for households experiencing a temporary financial crisis. The program has to be operated by a non-profit organization, which must submit a report to the Board detailing program statistics and other administrative information within one year of receiving the final tranche of the \$25 million program budget. In application of the law, the BPU established the **Temporary Relief for Utility Expenses (TRUE) program** and, in March 2011, selected the non-profit Affordable Housing Alliance (AHA) as the program administrator. For State budgeting purposes, the TRUE program has been placed under the banner of the Clean Energy Program.

According to the AHA website, the TRUE program is an annual assistance program designed to help low- and moderate-income households who newly face financial hardship. In order to qualify, applicants must meet income guidelines. For example, a three-person household must have an annual income ranging from \$38,196 to \$85,391. In addition, applicants must not have received energy assistance under the Universal Service Fund credit program and the Low Income Home Energy Assistance Program in the past 12 months. They must also demonstrate that balances in their electric and gas accounts are at least 45 days overdue or that they have received a disconnection notice for their electric or gas service. Lastly, they must demonstrate

Discussion Points (Cont'd)

that they have made four electric or gas bill payments of at least \$25 each within the past six months.

- **Questions: For the Temporary Relief for Utility Expenses (TRUE) program, please indicate, by program year, the number of beneficiary households, the average benefit amount, and the total budgetary outlay.**

Drawdown Schedule	# Grants Distributed*	Avg combined g/e benefit	Disbursement Amount
March 2011 <i>Initial payment</i>	--	--	\$4.6M
October 2011	3,003	\$894	\$3M
April 2012	7,085	\$898	\$3M
October 2012	10,307	\$886	\$3M
April 2013**	Not available	Not available	\$3M
Total	10,307***		\$16.6M

* Reported cumulatively

** Next disbursement estimated for April 2013

*** As of 3/28/13 - 10,319 households have received one or more TRUE grants

Has the BPU transferred the full \$25 million to the Affordable Housing Alliance (AHA)? If so, by what date must the alliance submit the program report required by P.L.2009, c.207? If not, what amount has the BPU already transferred to the program administrator and by what date does the BPU expect to transfer the final tranche?

As of October 2012 \$13.6M was disbursed to the AHA by the Board. The next \$3M drawdown is currently pending after all financial reporting for the last \$3M spent by the AHA is reviewed and approved by Board Staff. On December 19, 2012 the Board extended the TRUE contract with AHA through March 2015. The program report is due within one year of the last payment to the AHA. Reporting has been ongoing since the inception of the program as the AHA provides regular detailed financial and performance reports to Board Staff prior to receiving each \$3M drawdown from Treasury.

In what year does the BPU project the AHA to exhaust the \$25 million?

Discussion Points (Cont'd)

The program has been extended to March, 2015 or when the money is fully expended, whichever is sooner.

Has the program acquired a permanent funding source, given that the AHA states on its TRUE website that the program is annual?

No, by "annual" AHA is indicating that a household can reapply for a grant on an annual basis as long as funding remains available.

16. In conjunction with the Office of Information Technology, the BPU has undertaken the "**BPU Database Re-engineering Project**" to develop a new comprehensive database system that would support all of the BPU's existing programs and data. The BPU's previous database hardware did not allow for E-government functionality, such as electronic filing, secure file transfer protocols or remote access to the databases. The database software, in turn, was last upgraded in 1996 and still used technology in a character-based environment. In its August 2007 audit report on the BPU, the State Auditor specifically criticized the state of the computer applications the BPU used in the management of underground utility safety programs. The State Auditor deemed inadequate the application tracking data on the location of interstate gas pipelines and their inspection status under the Pipeline Safety Program. The State Auditor also stated that meaningful analysis of incidents with underground facilities under the "Underground Facility Protection Act" pursuant to P.L.1994, c.118 (N.J.S.A.48:2-73 et seq.), was impossible because the computer application could not provide adequate data. The law requires excavators to call a toll-free number three days prior to excavation and companies to mark their underground facilities near the excavation to prevent damage.

Answering BPU Discussion Point #2 in the OLS FY 2012-2013 Department of the Treasury Budget Analysis, the Board conveyed that the State awarded the "BPU Database Re-engineering Project" contract to CSI Technologies in October 2011. At the time of crafting its reply, the BPU was in the first phase of the project, which entailed data gathering, gap analysis, data flow evaluation, and the draft design of screens and reports. Phase II, which was to begin in May 2012, would include the excavation one-call database and the creation of the pipeline safety system. The BPU expected the completion of the entire project by December of 2012. The Board also noted that the project would produce a comprehensive database system that would newly enable electronic filing; ad-hoc reporting; data analysis; and the electronic storage of case files, inspections, site pictures, and notes.

- **Questions:** Please provide an update on the status of the "BPU Database Re-engineering Project." Has the project been completed? If not, at which development stage is the project currently and by which date does the BPU expect its completion? If the project has been completed, please comment on the BPU's experiences with the new technology. Has staff productivity improved? What problems has the BPU encountered with the new technology, if any, and what amount would have to be expended to correct the problems? What was the vendor's cost estimate for the project when it was awarded the contract? What is the vendor's current cost estimate

Discussion Points (Cont'd)

or, if the project is already completed, the projects' actual cost? If applicable, what factors account for the cost overrun?

Upon completion of the procurement processes, the project began in 1Q'2012 and is nearing completion. The new computer software by CSI Technology is installed on the Board servers in the State's datacenter in West Trenton. Board staff is performing final testing and providing minor recommendations which the vendor is making presently. The project will provide new database and case management software for 6 divisions of the BPU: Customer Assistance/Complaints, Case Management, One-Call Violations, Pipeline Safety, Slamming, and Cable-TV. At present Board has the software installed and configured for several divisions which the Board considers a priority (Customer Assistance, Pipeline Safety, and Case Management). A demonstration of this new system was provided to the NJUA (New Jersey Utility Association) whose members include PSE&G, Verizon, JCP&L, etc.) in late March.

The new system will be deployed and brought on-line in several phases, to allow Staff training and workflow changes to occur at a controlled rate. The first two parts of the new system will be the Pipeline Safety and Customer Assistance. Board expects this live implementation to begin in late April.

The project is not completed, but Board staff have had extensive interaction with both the new technology and the vendor. These experiences were both positive. In addition to the new software itself, there will be significant operational changes (the term "re-engineered processes") within the Board to improve efficiency, and provide Board management with substantial improvements for increased "dashboard views" or metrics.

Because the system is not fully implemented, the impact on Staff productivity cannot yet be determined. Early testing and refinements between the BPU and the Vendor indicates two examples which will likely show productivity improvement: 1) Because of the elimination of the 30+ year old technology of transmitting Customer Complaints and Utility remediation between BPU and the State's utilities, the Board will now have a portal which will allow utilities to see real-time any verbal or written complaints which each utility is required to address. The Board management will have a current picture of this complaint volume at any moment of the day. 2) The present Pipeline Safety system has been completely paper-based and manual. The new system provides on-line data entry and electronic saving, searching, printing, and e-mailing of these safety inspection forms. There are over 50 different paper forms, and the BPU has directed the vendor to create electronic versions of these forms as well as Mapping software and the ability to upload photos and images directly to the database.

Post-implementation, the Board will have empirical data to identify any problems with this new system. At present, the Board does not foresee problems with the technology. Of course, with any new introduction of workflow changes or new technology there are startup adjustments both internal and external (growing pains) and we expect these to be minimal. Thus far, the Board staff has been pleased and excited with the operation of the new system during the testing phase.

Discussion Points (Cont'd)

The cost of the new database and case management system software was \$1.2M. This was awarded on 2012 contract A80130 / T-2722.

Thus far the BPU paid the following:

Milestone invoices against the total amount:

*Computer Square Inc. FY2012 Database Reengineering Project
Milestone 1 \$135,000.00 134-12
7574971 Payment 3/6/12.*

*Computer Square Inc. FY2012 Database Reengineering Project
Milestone 2 \$195,000.00 151-12
7632798 Payment 7/3/12*

*Computer Square Inc. FY2013 Database Re-Engineering Project
Milestone 3 \$320,000.00 33-13
7688920 Payment 10/12/12*

*Computer Square Inc. FY2013 Database Re-Engineering Project
Milestone 4 \$240,000.00 33-13
7688920 Payment 10/16/12*

*Computer Square Inc. FY2013 Database Re-Engineering Project
Milestone 5 \$210,000.00 33-13
7688920 Payment 12/18/12*

There have been no cost over-runs or changes. This will be the actual cost of the software, testing, installation, and training.