In the Matter of the Renewable Portfolio Standard	**)**	**Recommendations for Alternative Compliance Payments and Solar Alternative Compliance Payments for Energy Year 2008, A Stakeholder Process Regarding Alternative Compliance Payment and Solar Alternative Compliance Payment Levels for Energy Year 2009 and 2010 or Longer, and a Solar REC-Only Pilot**

Docket Number EO06100744

SUPPLEMENTAL REPLY COMMENTS OF THE DEPARTMENT OF THE PUBLIC ADVOCATE DIVISION OF RATE COUNSEL

1. INTRODUCTION

The Department of the Public Advocate, Division of Rate Counsel ("Rate Counsel") would like to thank the Board of Public Utilities ("Board" or "BPU") for the opportunity to present our supplemental reply comments on the updated and final Strawman proposal provided by the Office of Clean Energy ("OCE") on August 13, 2007 (hereafter "final recommendation"). Rate Counsel is disappointed that the only option that has been left open for consideration and further discussion is a proposal which is only marginally improved from the earlier version submitted by OCE on May 25, 2007 ("original straw").

In our direct comments regarding the OCE's original straw, Rate Counsel noted the following deficiencies that would adversely impact ratepayers including:

- The OCE final recommendation creates regulatory risk that will increase costs to ratepayers for the delivery of solar energy required under the RPS. This risk will be reflected in premiums through higher SREC prices.
- The OCE final recommendation creates regulatory risk that will jeopardize the potential amount of solar energy capacity that needs to be developed to meet the RPS requirements. This places an increased regulatory liability on ratepayers that could result in significant rate shock and loss of rate continuity.
- The OCE final recommendation will result in increased costs to ratepayers due to an inefficient program design that rests too heavily on

administratively-determined prices and micro-regulation of solar installations and not market forces.

Rate Counsel believes that the OCE final recommendation, while reflecting some improvements, suffers from the same deficiencies we noted in our direct and supplemental comments. Rate Counsel continues to recommend that the Board adopt an auction-oriented approach for the future solar market structure for New Jersey.

As we noted in our direct comments, Rate Counsel believes that over the long run, a mechanism like an Auction Model will be the best approach at (a) addressing the securitization issue important to the solar industry and (b) securing least cost resources which are equally important to ratepayers. Rate Counsel also believes that, over the long run, the Auction Model is more likely to generate the most effectively competitive and efficient model under examination.

Rate Counsel's position is not only supported conceptually, but quantitatively. Summit Blue, in its various rate impact analyses, shows that the Auction Model (in addition to the 15-Year Full Tariff) has the least ratepayer impact option of all the models under consideration. Rate Counsel's own quantitative analyses support this conclusion. As we will discuss in detail later, the rate impact analyses supporting the OCE straw are inaccurate and considerably flawed. If the Board chooses the OCE proposal, it should clearly recognize that the basis for making such a choice can only rest on factors other than least ratepayer impact.

Rate Counsel's position on the recent OCE final recommendation is summarized as follows:

- The final recommendation will not result in the least cost ratepayer impacts.
- The final recommendation fails to satisfactorily address the issue of longer term regulatory certainty that all parties acknowledge is important in maintaining the long-run sustainability of this market.
- The use of qualification lives is fraught with a variety of economic and regulatory problems that we believe will prove to create a regulatory nightmare for the Board within the next several years.
- While we agree with the OCE that several additional proceedings need to be conducted over the next year to address many issues left out of the final recommendation, we are frustrated by the degree of equivocating included in these recommendations.

The remainder of our comments will address the concerns we have with the OCE final recommendation.

2. The OCE Final Recommendation Fails to Address Regulatory Certainty

Rate Counsel continues to believe that the OCE final recommendation (like the original and revised versions of their various straw proposals) fails to meaningfully address longer term regulatory certainty. While the OCE's recommendation to have a Phase 2 investigation on securitization is a good suggestion, we would note that it is offered on highly conditioned terms, and raises significant questions about OCE's real commitment to this issue. For instance, the recommendation suggests a proceeding to explore whether longer term market security should be adopted, not one that takes this issue as a given, and explores specific structures to accommodate this apparent regulatory need. Rate Counsel, as well as most all the other parties to this proceeding, have already provided ample evidence supporting securitization. There is little need to "explore" the issue further, and any future investigations should dedicate valuable time and resources to potential implementation.

Rate Counsel believes that OCE's current proposal to use a fixed eight-year SACP schedule is wholly inadequate in providing the certainty the market will need over the longer run for the development of the solar energy goals envisioned by the Board. As we noted in both our direct and reply comments, Rate Counsel believes that an eight-year SACP schedule, like the Board's overall solar energy set-aside, is based upon a regulatory construct: easy to create and equally easy to remove. This longer-run SACP schedule provides no contractual certainty for developers, and as a result, will cause significant discounts on any future SREC revenue streams, like those used in evaluating project economics and financing.

Rate Counsel also noted in our direct comments that setting a multi-year SACP can be an inefficient means of setting both overall rate caps, as well as some schedule intended to influence the direction and movement of overall SREC prices. While OCE has recognized the shortcomings of regulatory determined prices in its critique of the tariff model, it appears to disregard this position when it comes to attempting to set SACP prices, qualification lives, and SREC prices which are based upon the implied IRRs derived from their proposed method.

A good example of the arbitrary nature and shortcomings of using the proposed eight-year SACP schedule to calibrate SREC prices comes from the annual percent changes in the installed costs of solar projects. These annual decreases in SACP prices are based upon a 3.0 percent solar energy installed cost decrease that is not supported by any information in any of the rate impact models provided to date. If this assumed decrease is in error, it will have important implications for solar energy prices, market development, and ratepayer impacts given the OCE proposed model framework.

Summit Blue, for instance, uses the 2.2 percent annual decrease in PV system costs as a conservative measure in estimating the rate impacts from various

different proposed market structures. Yet it is Rate Counsel's interpretation that the purpose of using this cost decrease factor/assumption was not for use as a basis for cost decreases in an actual solar pricing framework. Further, the assumed installation cost decrease factor used by Summit Blue was taken from the Energy Information Administration ("EIA") based upon national survey information, and not on New Jersey specific experiences. Installed costs in New Jersey have decreased at a considerably faster rate that is closer to 4.0 percent.[1]

Rate Counsel would disagree with any rebuttal which would suggest that there is no relationship between SACP and SREC levels. First, SACPs are set as a fixed mark-up of SRECs so the trend and direction established in SACP markets should be reflected in SREC markets. Second, and from a practical perspective, it is likely that if the OCE recommendation is accepted, an increasing share of the market will digress to SACPs. This is likely to occur since SREC prices are already showing an increasing trend towards the SACP amount and the use of qualification lives to constrain SREC revenue streams will likely make this headroom even tighter. This makes OCE's assumptions regarding the appropriate hurdle rates needed to keep market participants in the SREC, as opposed to the SACP, market very important. If they are wrong, then the market will begin to digress to the higher cost SACPs, resulting in higher than necessary costs to ratepayers.

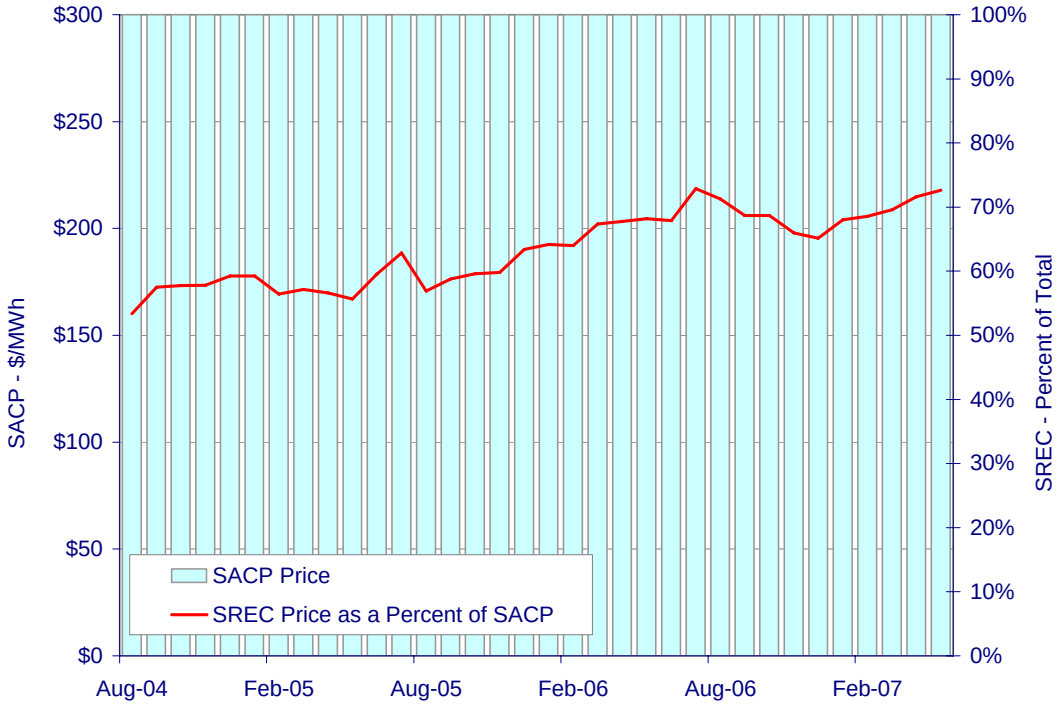

Figure 1: New Jersey SREC Prices as a Percent of SACP Prices

[1] Summit Blue Report, Revised Draft, July 31, 2007, page 24.

3. OCE's Rate Impact Comparisons Are Faulty and Inappropriate

The OCE final recommendation does not result in the least-cost ratepayer impact once all models are put on comparable "apples to apples" terms. It seems that virtually every version of the rate impacts provided by the OCE contains certain omissions that have important implications regarding the rate impacts of their recommendations. As will be seen in the tables below, that correct for some of these omissions, the OCE final recommendation is not the least cost rate impact option that has been examined, even when a generous risk premium discount factor is applied to the implied SREC revenues streams resulting from their proposal.

One of the first inconsistencies between a comparison of OCE's final recommendation to other models is that the rate impacts need to be examined on comparable cost decrease assumptions which OCE has arbitrarily changed to 3 percent. Table 1 provides that analysis.

Table 1: Rate Impact Estimates Using Comparable Cost Decrease Assumptions (All Models Using 3 Percent SREC Discount)

Annual SREC Cost of Straw (million $)						
	2009	**2013**	**2017**	**2021**	**2023**	**Total Cost (NPV)**
OCE Final Straw Proposal (August 13, 2007)	$ 42.24	$ 210.24	$ 490.87	$ 904.65	$ 864.37	$ 3,489.70
OCE First Straw Proposal (May 25, 2007)	$ 36.28	$ 180.59	$ 421.65	$ 777.08	$ 742.48	$ 2,997.05
15-Year Auction Model	$ 33.48	$ 166.66	$ 389.12	$ 717.13	$ 685.20	$ 2,765.83
15-Year Tariff Model	$ 33.48	$ 166.66	$ 389.12	$ 717.13	$ 685.20	$ 2,765.83

As shown in Table 1, OCE's final recommendation has the largest overall rate impacts by $700 million on a net present value ("NPV") basis. As we will note later, even this estimate is understated since the final recommendation fails to include the overall costs of program administration and the complete cost of the ongoing rebate program it has also proposed.

For instance, in the public meeting held on August 9, 2007, OCE's consultants acknowledged that administrative costs had been excluded, but noted that since the current OCE proposal was generally consistent with their current processes, that new administrative costs were highly unlikely. This raises two issues. First, in examining the proposed models, there were two that were comparable to the "status quo:" the SREC Only Model and the SREC-Rebate Model. Both of these

models included between $55 million to $60 million (NPV) in administrative costs. In order to be comparable, even if the OCE final recommendation is similar to the status quo, some degree of administrative costs needs to be included.[2] Further, if the OCE final recommendation is so similar to the status quo, and there are questions about the status quo's ability to promote solar energy on a forward going basis, then one is certainly left to wonder how the final recommendation is going to result in any improvement.

In addition, a more important omission in the recent OCE Rate Impact analysis are the costs associated with the rebate program. According to the August 9, 2007 public meeting, Summit Blue indicated that their estimates of the OCE proposal rate impacts only include four years of rebate costs. According to OCE, these costs were not included in the rate impact model, but rather somehow added after the fact in order to derive a total rate impact from the revised straw proposal. In reviewing the revised Summit Blue workpapers, we find no evidence that this has in fact occurred since the total rate impacts included in the model (that exclude rebate costs) exactly match the reported total rate impact implied in the various discussion papers provided by OCE on August 2, 2007 and August 13, 2007.[3] In other words, there is no external calculation.

In its original analysis, Summit Blue estimated that there would be some $2.76 billion (NPV) in rebate costs for small systems under the SREC-Rebate Model. The current OCE estimate is some $50 to $100 million. Based upon Rate Counsel's estimate of the rate impacts for OCE's current proposal, there should be close to $1.1 billion in rebate costs for the duration of the RPS period. These rebates will be needed to provide the support to smaller systems given the assumed SREC prices, qualification lives, and IRRs included in the OCE final recommendation. Given this estimated level of support, there is roughly some $1 billion (NPV) in missing rate impacts that have not been included in the OCE final recommendation. This, compounded with the current $3.4 billion estimated impact on the SREC portion of the model only, results in a total rate impact of some $4.4 billion overall – far higher than either the Auction or Tariff model.

Lastly, Rate Counsel would like to highlight its concerns about the "bouncing ball" of rate impact estimates that have been provided to the stakeholders during the course of this investigation. This is not an insignificant matter since the rate impacts from the various versions released to the stakeholders have been

[2] In our reply comments, Rate Counsel attempted to estimate the rate impacts from the original OCE straw and used the administrative costs found in the SREC-Rebate model as the basis for its estimates.

[3] We note that these rate impacts are implied since OCE rarely presented consistent and clearly understandable rate impact support for any of their proposals in the various discussion papers. In many instances, the numbers provided were incomplete and/or failed to total (or sum), on NPV terms, to the amounts listed in both the discussion paper and the workpaper provided on the renewable energy list server. Further, Rate Counsel did not receive its first workpaper from OCE, that included its detailed rate impact calculations, until August 9, 2007. Prior versions of these workpapers had all the formulas used to make the calculations intentionally removed.

changing by billions per estimate. It is also frustrating to all stakeholders since the workpapers containing the detailed calculations for any of the rate impacts included in this proceeding were not provided, to at least Rate Counsel, until August 9, 2007. Table 2 provides a comparison of the various rate impact estimate changes that have been provided in the reports and discussion papers presented by OCE.

	Results Provided as Total Ratepayer Impacts				
	April 25 Summit Blue Report	July 26 Briefing Paper	Revised April 25 Results	Revised July 31 Draft	August 13 Final Straw*
15-Year Tariff	$ 3,602	$ 3,600	$ 4,220	$ 3,738	
Auction	$ 4,301		$ 4,714	$ 4,001	
OCE Straw		$ 2,400		$ 2,421	$ 3,148

* Note: these results are provided as total SREC costs only. They do not include rebate or administrative costs.

4. Qualification Lives

The OCE final recommendation continues to fundamentally rest upon the use of qualification lives to "fix" the overall financial support that accrues to New Jersey solar projects. It would appear that the intent of creating these qualification lives is to limit overall financial support and minimize potential "windfalls." This is certainly meritorious in principle, however, it suffers from some serious shortcomings that Rate Counsel believes will make the longer run solar market structure unsustainable.

First, the creation of qualification lives is simply a regulatory artifact developed to "regulate" the internal rate of return and payback period of various different types of solar applications. This process is fundamentally no different than attempting to regulate, or administratively determine, prices for solar energy. This is not entirely different in concept than some of the principles of traditional utility regulation.[4] Rate Counsel noted in its direct and reply comments that over the long run, administratively-determined prices are likely to be unsuccessful in developing solar energy markets and will cost ratepayers considerably.

OCE's own comments correctly recognize this same fundamental problem in their August 2, 2007 Discussion Paper (and again in their August 2, 2007 Updated Discussion Paper) when they note that administratively determined prices "…relies on a high degree of confidence in the regulatory fore-sight,

[4] In traditional regulation, prices are fixed with the intent of regulating the allowed rate of return. The OCE proposal operates a little differently by fixing rates of return with the intent of regulating prices (SRECs).

primarily the ability to accurately set future [price] levels at the right level... [This can result in] … a relatively high probability of either over, or under, subsidizing the projects." (page 5)

Defining qualification lives is no different than setting administratively determined prices. If the qualification lives are not adequate, there will be an under-development of solar energy. Further, it is highly likely, as we noted in our earlier comments, that the internal rates of return needed to bring new adopters in the market will increase over time rather than remain constant. The only way to move the market under the OCE framework will be to increase qualification lives thereby creating an administrative nightmare, confusion, and an incredible hassle.

Second, Rate Counsel believes that setting these qualification lives has the possibility of creating a number of unintended consequences that will be deleterious to solar energy development in New Jersey. Qualification lives provide no incentives to maintain the long-run viability of New Jersey's solar energy markets. If a project is only given a fixed 10 or 12 year life, the incentives to maintain the project are reduced and the resource could easily be abandoned or moved to another state where the income earning opportunity is preserved. As we noted before, typical energy projects, like a traditional power plant, do not have qualification lives, and neither do other renewable energy projects like biomass or wind energy. Thus, establishing qualification lives for solar energy projects would represent a considerable inconsistency relative to other types of generation projects in traditional or alternative energy markets. Setting a precedent of this nature is likely to have very important unforeseen consequences in the future if the goals of making renewable energy markets more broad and seamless are realized.

Third, and perhaps most importantly, the use of qualification lives fundamentally changes the nature of solar energy development in New Jersey and would make it explicitly different than anywhere else in the U.S. If regional consistency is an important justification[5] for offering the OCE straw, then the proposal to create qualification lives clearly undermines that rationale. No other state in the U.S. imposes qualification lives on their renewable resources, solar included. Further, proposed federal legislation considering a nation-wide RPS requirement does not include any form of qualification life. Thus, adopting the OCE recommendation could run at odds with regional, as well as possible federal initiatives.

[5]It has been our impression from discussions at the most recent public meeting that one of the motivating factors for OCE's promotion of the straw proposal was that it was an approach that could facilitate the existing policy infrastructure and one that would be generally consistent with neighboring regions. This is simply not the case when it comes to the issue of qualification lives.

The use of qualification lives also raises some fundamental questions about the purpose and definition of SRECs on a forward going basis. Currently, SRECs serve two fundamental purposes, one practical, the other more conceptual.

From a practical perspective, SRECs serve as a mechanism to provide additional market-based financial support for solar development. The SREC, in theory, reflects market expectations about the costs and required returns needed to bring additional solar energy to the market. Those required to fulfill a solar generation requirement must decide, at the margin, whether to develop their own solar energy resource, or purchase a credit from the market where the purchased credit reflects the going trends and market conditions of developing solar energy.

From a conceptual perspective, SRECs reflect the unique attribute of this specific type of energy resource. The value of a SREC, in addition to reflecting overall costs, reflects the premium society is willing to pay (or required to pay) for the development of solar energy. This premium can reflect a number of different benefits and attributes ranging from environmental, to technological, to other factors considered important in public policy like energy independence and security.

Using qualification lives to restrict the ability of SRECs to continue to be earned as long as the resource is in place and generating electricity is tantamount to restricting not only the financial support for solar projects, but also the recognition of all the other benefits for which solar has been promoted. SRECs now just become a regulatory accounting mechanism to ensure projects get their allowed rates of return and nothing more. While Rate Counsel is as sensitive as any party, including OCE, to not wanting to over-subsidize any energy project, we are also reluctant to start restricting the definition of the benefits of a resource which public policy has determined as being important.

5. Conclusions

Rate Counsel thanks the Board for the opportunity to provide its written supplemental reply comments in this important matter. Rate Counsel reiterates its support for a 15-Year Auction Model but recognizes there are other means by which longer term certainty can be brought to the market: the OCE proposal, however, is not one of them. Rate Counsel believes that the OCE proposal, even with its most recent modifications, will not result in longer term benefits for ratepayers. The proposal is nothing more than a slight, and even negative change from the status quo that will result in increased costs over the long run for ratepayers.

The fundamental problem with the OCE proposal is that it does nothing to create market certainty. A fixed schedule of capped solar energy prices (SACP) is not a contract: developers can not take this to any source of capital as proof of a

guaranteed source of revenue that will back a project over its expected life. The problems with the OCE proposal are compounded even further by the creation of a new regulatory concept (i.e., qualification lives) that will place restrictions on the sale of solar energy attributes (SRECs). It is Rate Counsel's belief that this new and untested concept will ultimately prove to be incompatible with other regional and ultimately national renewable energy markets.

Mostly importantly, the OCE proposal will not result in the least cost ratepayer impact relative to the other options available to the Board. The Board should reject this proposal, and direct the OCE and other parties to this proceeding to develop a plan that includes some significant and meaningful commitment to longer term market certainty and sustainability.