



State of New Jersey

DIVISION OF RATE COUNSEL

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STEFANIE A. BRAND
Director

July 8, 2011

Via Hand Delivery and Electronic Mail

Honorable Kristi Izzo, Secretary
New Jersey Board of Public Utilities
Two Gateway Center, Suite 801
Newark, NJ 07102

**Re: Office of Clean Energy ("OCE") Straw Proposal, Solar Alternative
Compliance Payment Rate Schedule ("SACP") (2017-2025)**

Dear Secretary Izzo:

Enclosed please find an original and ten copies of comments submitted on behalf of the New Jersey Division of Rate Counsel in connection with the above-captioned matters. Copies of the comments are being provided to all parties by electronic mail and hard copies will be provided upon request to our office.

We are enclosing one additional copy of the comments. Please stamp and date the extra copy as "filed" and return it to our courier.


Honorable Kristi Izzo, Secretary
July 8, 2011
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Thank you for your consideration and assistance.

Respectfully submitted,

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Comments of the New Jersey Division of Rate Counsel

Office of Clean Energy Straw Proposal, Solar Alternative Compliance Payment Rate Schedule (2017-2025)

Comments Dated:
July 8, 2011

1. Introduction

Rate Counsel appreciates the opportunity to provide the Office of Clean Energy (“OCE”) with comments regarding its straw proposal to extend the current eight-year Solar Alternative Compliance (“SACP”) schedule to a 15-year schedule, consistent with the recently-passed Solar Advancement Act of 2010 (AB 3520). The prior eight-year SACP schedule was adopted by the Board in 2007, started at a level of \$711, and decreased by roughly 2.5 percent each year to 2016. This prior-approved eight year schedule is set forth in Table 1.

Table 1. Original Board-Approved Eight-Year SACP Schedule

	2009	2010	2011	2012	2013	2014	2015	2016
SACP	\$ 711	\$ 693	\$ 675	\$ 658	\$ 641	\$ 625	\$ 609	\$ 594
% change		-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%

OCE is specifically proposing a series of SACP prices for the period 2017 through 2025, consistent with AB 3520. OCE’s straw proposal would reduce SACP prices by 20 percent between 2016 to 2017, where 2016 is the last year of SACP prices under the Board’s prior-approved eight year schedule. OCE’s proposed 20 percent discount is based upon its position that solar module prices have fallen by over 18 percent and these decreases should be reflected in the SACP. The OCE-proposed SACP for the remaining years, however, reverts to the same annual percent decline (2.5 percent) used in the original eight-year SACP schedule.¹

2. Rate Counsel Recommendations – Overview

Rate Counsel sets forth four different SACP proposals to the Board in Table 2, below. Our primary recommendation is that the Board select, the “Forced Average Parity (Equal Percent Reduction)” proposal.

¹OCE Memorandum, November 20, 2010, updated December 15, 2010, pg 1; pg.11.

Each of the four options have been developed to force solar markets to move in a direction consistent with the recently-released Energy Master Plan.² Each proposal recognizes two fundamentally important aspects of solar energy policy as it relates to future SACP schedules. First, and most importantly, SACP can be increased in any future year but they can never be decreased. This creates an asymmetrical risk for ratepayers since they must maintain a price support for solar over a 15-year period with no opportunity for reducing this price support mechanism over the longer term should market conditions change.

Second, Rate Counsel's recommendations make a firm and concerted effort at "taking the training wheels off" of the solar market by setting a future date at which solar financial support will substantially decrease, if not be completely eliminated.³ Rate Counsel's four SACP proposals are based upon the philosophical goal of either (a) moving the New Jersey solar market into parity with other regional solar markets or (b) moving the New Jersey solar market to "grid parity" within a fixed time period.

The first two options propose SACP prices that force New Jersey's SACPs to a level consistent with other Atlantic states. The first "forced average parity (constant dollar)" scenario averages the anticipated difference, on an absolute dollar basis, between the current OCE straw proposal and the average SACP posted by other Atlantic states.⁴

The second "forced average parity (constant percent)" scenario simply smoothes the average SACP difference, on a uniform percent basis, across the 2017-2025 time period. Rate Counsel recommends that this approach be adopted by the Board. The approach provides a known, uniform percentage reduction in prices that is a slight improvement on the constant dollar reduction approach provided in the first option and is less aggressive in its overall SACP price reductions than either of the "grid parity" options discussed below.

The last two SACP options are based upon a goal of forcing the New Jersey solar market to "grid parity" (i.e., costs comparable to existing market resources) by a date certain. As shown in Table 2 below, "grid parity" occurs when the SACP level reaches \$100, under the assumption that SREC prices are \$100 below SACP levels.

²New Jersey 2011 Draft Energy Master Plan, June 7, 2011.

³ An SACP value of \$100 assumes an SREC price of \$0 given past OCE modeling assumptions.

⁴SACP prices for the District of Columbia and Pennsylvania have not been used in formulating the average since each jurisdictions' schedule is limited to a finite period much shorter than New Jersey or other eastern states. SACP prices for Massachusetts are also not included in the average, as they are set annually by the Massachusetts Department of Energy Resources.

Table 2. Rate Counsel SACP Proposal and Alternatives

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
8-year SACP (Approved 2007)																	
	\$ 711	\$ 693	\$ 675	\$ 658	\$ 641	\$ 625	\$ 609	\$ 594									
	-2.5%	-2.6%	-2.6%	-2.5%	-2.6%	-2.5%	-2.6%	-2.5%									
Staff Straw Proposal (Sept-2010)																	
									\$ 475	\$ 463	\$ 451	\$ 440	\$ 429	\$ 418	\$ 407	\$ 397	\$ 387
									-20.0%	-2.5%	-2.6%	-2.4%	-2.5%	-2.6%	-2.6%	-2.5%	-2.5%
Other States																	
Maryland	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 350	\$ 350	\$ 200	\$ 200	\$ 150	\$ 150	\$ 100	\$ 100	\$ 50		
Massachusetts	\$ 450	\$ 400	\$ 400	\$ 350	\$ 350	\$ 300	\$ 300	\$ 250	\$ 250	\$ 200	\$ 150	\$ 150	\$ 100	\$ 100	\$ 50		
Ohio																	
Pennsylvania	\$ 654	TBD	TBD	TBD	TBD	TBD	TBD	TBD	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
Delaware	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 500	\$ 500							
DC	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500									
Average of Other States									\$ 283	\$ 267	\$ 250	\$ 233	\$ 217	\$ 200	\$ 183	\$ 168	\$ 154
									-5.9%	-6.3%	-6.7%	-7.1%	-7.7%	-8.3%	-8.3%	-8.3%	-8.3%
Force Average Parity (constant \$ decrease)																	
Percent change	\$ 439	\$ 404	\$ 368	\$ 332	\$ 297	\$ 261	\$ 225	\$ 190	\$ 154								
	-26.0%	-8.1%	-8.8%	-9.7%	-10.7%	-12.0%	-13.7%	-15.8%	-18.8%								
Force Average Parity (constant % decrease)																	
Percent change	\$ 435	\$ 382	\$ 335	\$ 294	\$ 259	\$ 227	\$ 199	\$ 175	\$ 154								
	-26.8%	-12.2%	-12.2%	-12.2%	-12.2%	-12.2%	-12.2%	-12.2%	-12.2%								
\$100 SACP by 2025																	
Percent change	\$ 433	\$ 392	\$ 350	\$ 308	\$ 267	\$ 225	\$ 183	\$ 142	\$ 100								
	-27.0%	-9.6%	-10.6%	-11.9%	-13.5%	-15.6%	-18.5%	-22.7%	-29.4%								
\$100 SACP by 2021																	
Percent change	\$ 400	\$ 325	\$ 250	\$ 175	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100								
	-32.7%	-18.8%	-23.1%	-30.0%	-42.9%	0.0%	0.0%	0.0%	0.0%								

3. The Prior-Established Eight-Year SACP is Inflated

Rate Counsel believes that a more aggressive future year schedule for SACP price reductions is necessary to correct for a number of significant deficiencies that have materialized since the original eight year SACP schedule was set.

Over the past several years, OCE has relied very heavily upon the modeling approach established by Summit Blue Consulting in the Generic SREC Proceedings.⁵ OCE's straw recommendation extending the current SACP values to 2025 are based upon a similar, albeit slightly different approach. While the approach and model are relatively sound, their accuracy depends on the assumptions made when applying the model.

New Jersey solar projects have historically depended upon four important revenue streams for investment recovery and return that include: (1) SREC revenues; (2) tax incentives; (3) Clean Energy Program (CEP) rebates; and (4) electricity savings. At this point, CEP rebates have been eliminated, increasing the relative importance of the other revenue streams.

Past solar analyses and policies have focused almost exclusively on SREC revenues as the revenue/financial support mechanism and have paid relatively little attention to electricity savings and the financial support role they play. Electricity savings can comprise close to half of the total financial support associated with a solar project.

Higher electricity savings result in higher returns and faster paybacks. These savings are a function of electricity prices, so if electricity prices increase rapidly, then other revenue streams (like rebates and SRECs) do not need to be as high in order to reach the same internal rate of return ("IRR") for a project.

OCE's original 8-year SACP schedule, approved by the Board in the 2005 Generic SREC Proceedings Order,⁶ was premised upon an assumption that electricity prices would increase by 3.34 percent per year. However, actual New Jersey electricity prices, as reported by Energy Information Administration ("EIA"), are much higher. In the last four years, rates have increased 10 percent, 12 percent, 11 percent, and then a decrease of 4 percent. This results in an annual average of 7.1 percent -- not 3.34 percent as assumed by OCE. Thus, the revenue streams that have accrued to solar energy developers over the past several years have been considerably in excess of what was needed to meet the threshold IRRs assumed by OCE. This difference has important implications for the estimation of SACP values, not only in the past, but on a forward-going basis, and serves as further support for Rate Counsel's recommendation of a more aggressive reduction in SACP values after 2016.

⁵ New Jersey BPU Docket No. EO06100744, Order dated December 6, 2007.

⁶ Ibid.

Future SACP values need to recognize that actual New Jersey electricity price escalation has averaged almost two times what was assumed in the original OCE models forming the basis for its original 8-year SACP recommendation. This simply means that SACP prices were set at levels considerably higher than necessary. Since the solar market has been in short-fall in every year since this 8-year SACP schedule was adopted, the SACP sets the opportunity cost for SREC scarcity, and therefore, developers have been allowed to “extract” extra profits from these unnecessarily high SACPs.

The following charts and tables provide a number of examples of how OCE’s past forecasting assumptions for setting SACPs proved to be incorrect and how the difference translates into both higher SREC prices and SACPs.

Figure 1. New Jersey Average Retail Electricity Price

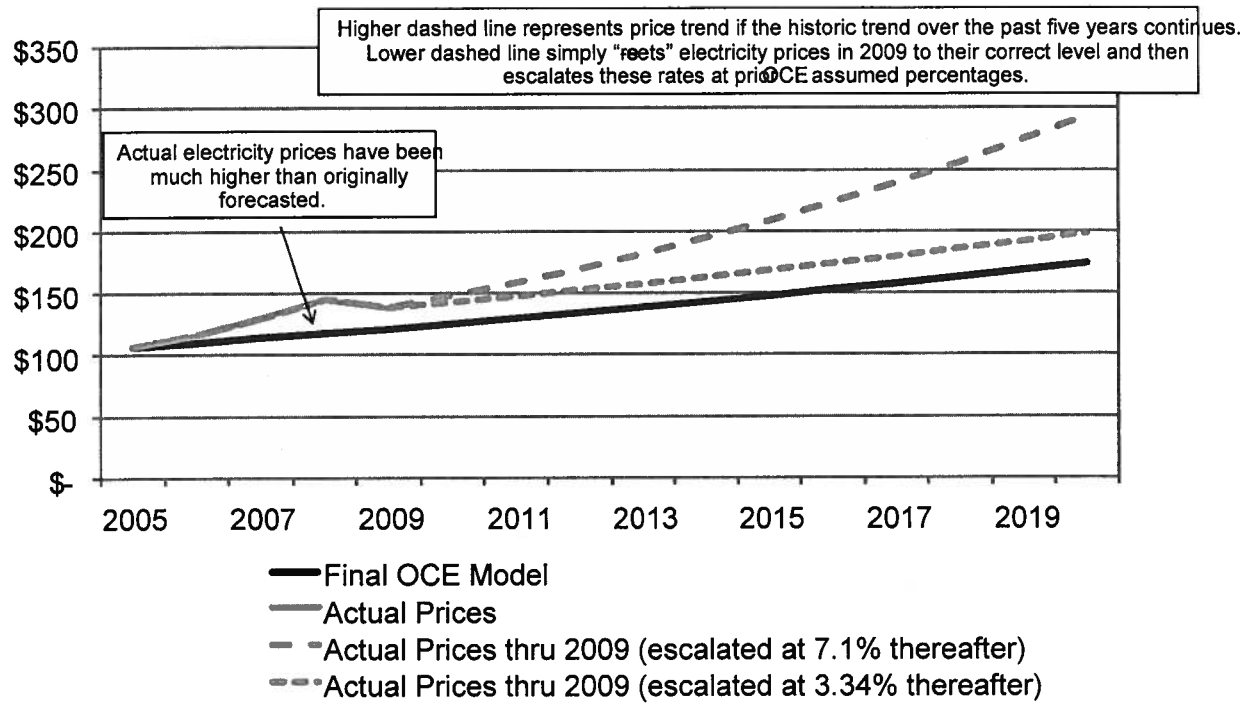
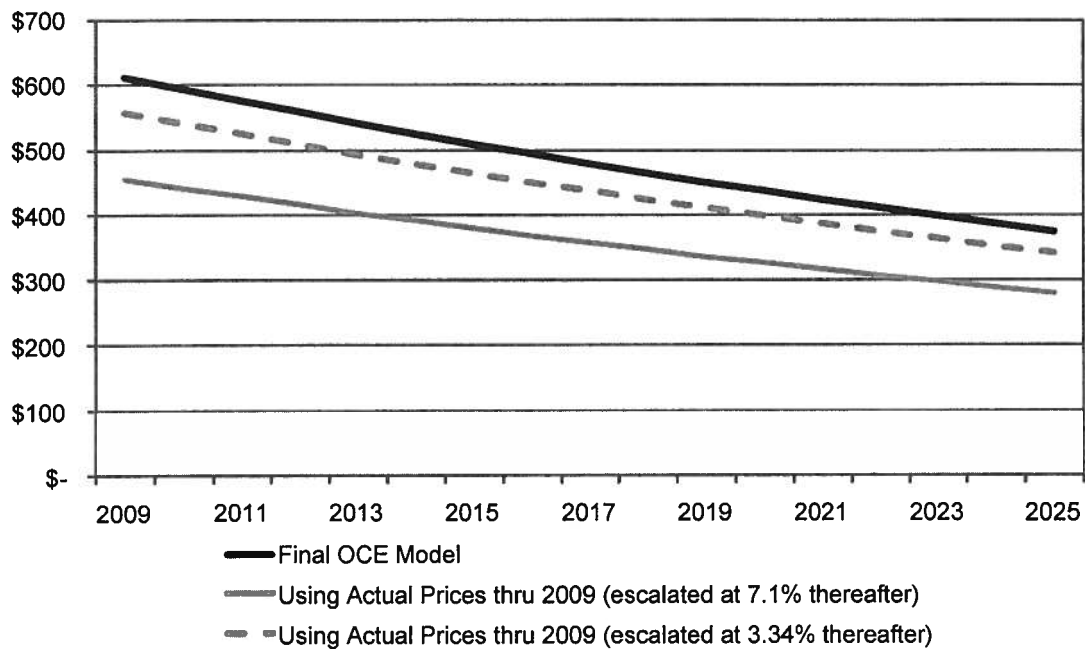
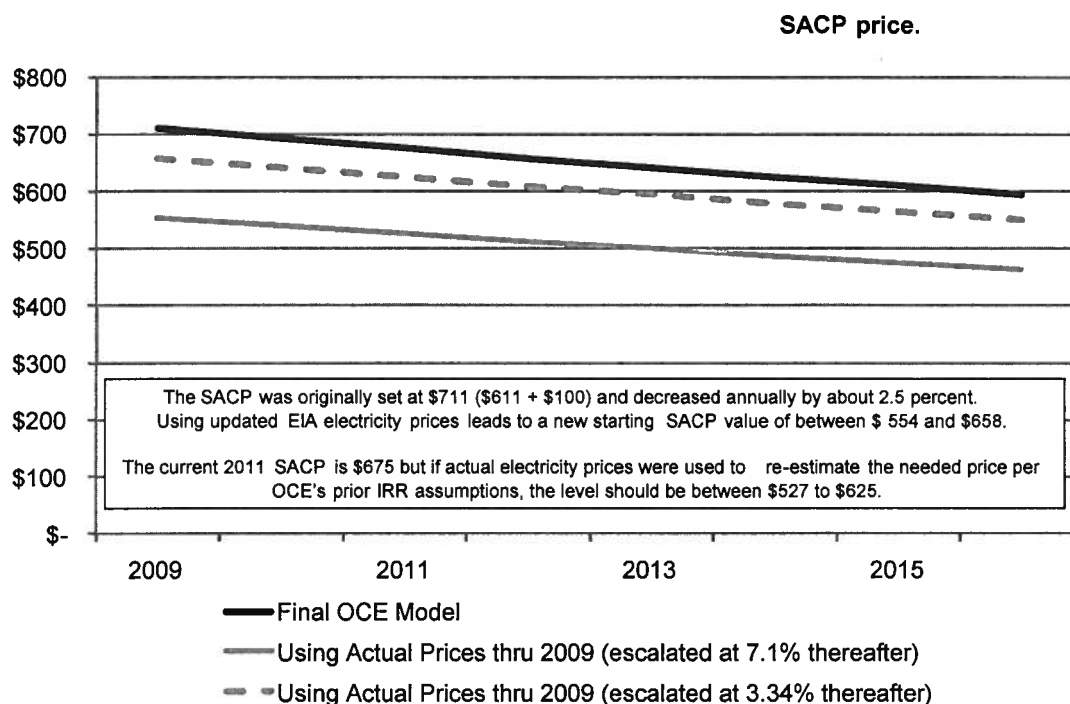


Figure 2. Forecasted Annual SREC Prices Under Different Electricity Price Scenarios and Forecasts



OCE's original SACP recommendations were based upon an assumed 12 percent IRR and target SREC price of \$611. If the model upon which this assumption were updated for actual electricity prices observed since 2005, target SREC prices should have started at a level between \$454 or \$558 (depending on electricity price escalation rate assumptions for 2010 and forward).

Figure 3. Forecasted Annual SACP Prices Under Different Electricity Price Scenarios and Forecasts



While OCE does not technically “set” the SREC prices, it does make SACP recommendations to the Board, who in turn sets SACP for an 8 year period. In a tight solar market, like the one that has existed over the past several years, owners of SRECs will have effective “market power”.

4. Conclusions and Recommendations

Rate Counsel suggests the Board take into account the numerous uncertainties associated with setting future SACP values and the restrictions that allow SACP values to increase, but never decrease. Rate Counsel believes that the existing eight-year SACP schedule is already in error relative to the assumptions upon which these prices were set and approved by the Board, and that future SACP levels should not compound that problem.

The uncertainties, and opportunities for compounded errors, suggest that the Board should choose a cautious and conservative approach at setting SACP values low. The fact that the SACP can be increased, but never decreased, creates asymmetrical risk

for ratepayers since developers always have the potential for increasing SACP prices, but ratepayers never have the opportunity for comparable decreases.

Given this asymmetrical risk, the Board needs to be conservative. The SACP values can be reconsidered for upwards revisions in the future if market conditions change and create a need to raise the ceiling.

The Board should, therefore set SACP prices with a policy goal of getting New Jersey's solar energy market prices into line with those in other Atlantic states, or alternatively, setting a date for grid parity in an attempt to force greater efficiencies and lower costs. Rate Counsel recommends the adoption of the option that would bring costs into line with other Atlantic states through a constant percentage decrease, but recognizes that all of the options set forth in Table 2 will assist in meeting the goals of the recently-released EMP which seeks to continue the state's progress in encouraging solar development which reducing the cost of solar energy for New Jersey ratepayers.

Thank you for the opportunity to provide these comments.