BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration of California Renewables Portfolio Standard Program.	Rulemaking 11-05-005 (Filed May 5, 2011)

COMMENTS OF THE SOLAR ENERGY INDUSTRIES ASSOCIATION, THE LARGE-SCALE SOLAR ASSOCIATION, AND THE VOTE SOLAR INITIATIVE ON THE RENEWABLE AUCTION MECHANISM

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Pursuant to the December 31, 2013 Ruling of Assigned Administrative Law Judge De Angeles in the above caption proceeding (December 31 Ruling), the Solar Energy Industries Association (SEIA),[1] the Large-Scale Solar Association (LSA), and the Vote Solar Initiative (VSI), (collectively, "the Joint Solar Parties") comment upon issues pertaining to the Renewable Auction Mechanism (RAM) as set forth in Attachment A, Energy Division Summary & Questions on Future of RAM (Energy Division Summary) to the December 31 Ruling.

I. INTRODUCTION

Having analyzed the RAM procurement to date, the Energy Division determined that:

> The RAM program created a robust market for renewable energy projects sized 3 - 20 MW. The competition in this market has resulted in cost-effective procurement of viable projects, while minimizing transaction costs for the developer, the utilities, and the regulator relative to the annual RPS solicitations.[2]

In short, the RAM Program has been a success thus far. In undertaking its evaluation of the future of the RAM Program, the Commission should consider the program's value to consumers, its administrative efficiency, as well as the investment the Commission, the investor-owned utilities (IOUs), and market participants have made in the program. In addition, the Commission

[1] The comments contained in this filing represent the position of the Solar Energy Industries Association and the Large-scale Solar Association as organizations, but not necessarily the views of any particular member with respect to any issue.

[2] Energy Division Summary, p.13.

should consider the value to be captured from RAM projects as a separate procurement tool from their renewable benefits.

In this regard, while the Joint Solar Parties provide some very specific recommendations for improving the RAM program, we caution against wholesale changes to a program that is proving to be an efficient vehicle for delivering low-cost renewable energy to consumers.

II. RESPONSE TO QUESTIONS

Reauthorization of RAM

Question 1.a (i): Does the initial RPS program need that the RAM program sought to fulfill still exist?

Answer: As defined in the Energy Division Summary, the RPS program need targeted by RAM was to provide a "hedge against the potential failure of larger renewables projects to help ensure that PG&E, SCE, and SDG&E would meet their near-term RPS compliance obligations."[3] The Energy Division Summary illustrates that the IOUs' current RPS compliance positions are such that a hedge may no longer be necessary.[4] That, however, is not the case. Moreover, the RAM procurement tool continues to provide value and administrative efficiency and serves as a recognized means of procuring resources which can result in lowering utility infrastructure costs.

First, while the Staff's assessment is based on a 33% RPS requirement by 2020, recent amendments to the Public Utilities Code (AB 327, Perea) clarify that the 33% requirement is a floor, not a ceiling. Thus the bill authorizes the Commission to require the IOUs to procure eligible renewable energy resources in excess of the specified quantities. Even if the Commission determines not to do so, the IOUs will have ongoing procurement needs to maintain

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3 Energy Division Summary, p. 3.

4 *Id.*, p. 14.

the 33% renewables level as contracts end and are replaced over time. Thus the need for RAM procurement as a hedge against long-term RPS obligations still exists.

Second, the use of the RAM as a hedge against the failure of larger RPS project was not the sole driving factor behind the program. As stated by the Commission:

> Commission adopts RAM as a primary contracting tool for this market segment because doing so will promote competition *and elicit the lowest costs for ratepayers, encourage the development of resources that can utilize existing transmission and distribution infrastructure,* and contribute to RPS goals in the near term. We expect RAM to complement the RPS Program by reducing transaction costs and providing a procurement opportunity for smaller RPS-eligible projects, which have not been able to effectively participate in the annual RPS solicitations to date.[5]

In other words, the Commission viewed RAM-procured resources to be valuable outside the mandatory RPS requirements. The development of resources that can use existing transmission and distribution infrastructure results in the reduction of electric system infrastructure costs, to the benefit of consumers.

Finally, the Commission should bear in mind that the RAM program has proven to be effective at maximizing competitive pressure to the benefit of consumers. Average contract prices have declined over the span of the RAM Program.[6] In part, this is due to the predictable, transparent, and sequential procurement schedule and process offered by RAM. Losing these program qualities may disrupt the development and supply chain efficiencies that currently exist in the 3 to 20 MW renewable project space and slow down progress toward reaching cost parity with fossil resources.

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5 Decision 10-12-048, p.1.

6 *See* Energy Division Summary, pp. 6-7.

Question 1. a (ii): Is there currently a different specific RPS program or system need that would be effectively and efficiently fulfilled through a RAM procurement mechanism rather than through the annual RPS solicitation or other procurement mechanism?

Answer: The procurement obligations created by Green Tariff Shared Renewables Programs (GTSR) recently authorized by SB 43 and currently being implemented through ongoing application proceedings before the Commission could be partially met through the RAM procurement mechanism. The statute created a combined obligation across the three IOUs of 600 MW. It is anticipated that the IOUs' GTSR programs will be comprised of two components.[7] The Green Tariff component will allow the customer to receive a clean energy product generated from a generic pool of projects, while the shared or "community" renewables component will enable the customer to contract for services or attributes from a specific renewable energy project that offers distinct characteristics that particular customers want or need.[8] The RAM could be the procurement mechanism required to fulfill the Green Tariff mandate.[9] Use of the RAM is consistent with the statutory requirements that the IOUs use "commission-approved tools and mechanisms to procure additional eligible renewable energy resources for the green tariff shared renewables program from electrical generation facilities"[10] as well as the requirement that the participating electric generation facilities not exceed 20 MW.[11]

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7 *See, e.g.,* Opening Comments of San Diego Gas & Electric Company Per October 25, 2013 Scoping Ruling, A. 12-08-008 (November 15, 2013), pp. 3-7; Comments of the Interstate Renewable Energy Council, Inc., *et al* Regarding the Green Tariff Shared Renewables Proposal of Pacific Gas and Electric Company and San Diego Gas and Electric Company, A. 12-08-008 (December 20, 2013), pp. 6-10

8 *Id.*

9 SDG&E has stated its intent to use the RAM to procure MW for its Green Tariff. *See* Opening Comments of San Diego Gas & Electric Company Per October 25, 2013 Scoping Ruling, A. 12-08-008 (November 15, 2013), p.4.

10 Public Utilities Code Section 2833 (c).

11 Public Utilities Code Section 2833(b).

Furthermore, the RAM is an ideal mechanism for Green Tariff procurement because the IOUs will be procuring more finite quantities over time and will need to be flexible depending on customer subscription levels and its RPS portfolio. For example, SCE proposes to offer 68 MW in 2015 and 67 MW in each year thereafter through 2018.[12] The RAM program is an existing process that is well suited to the size and nature of Green Tariff procurement.

Question 1.b: Based on the response to question (a) above, what criteria should the Commission use for reauthorization of the RAM mechanism? If the Commission reauthorizes RAM, explain how reauthorization should or should not align with resource planning and the annual RPS Procurement Plan process.

Answer: The Joint Solar Parties recommend that the Commission authorize, at minimum, an additional 1,000 MW to be procured through the RAM program. This 1,000 MW accounts for (1) procurement in recognition of AB 327; (2) procurement necessary to address generation needs under an IOU's Green Tariff program, but outside the RPS; and (3) the transfer of MWs from PG&E's solar PV program to the RAM (see response to question 2.c below). The 1,000 MW procurement authorization is in addition to any remaining RAM procurement that exists after RAM 5 due to un-procured quantities or project failure.

Question 1.c: If the Commission determined that a future authorization of the RAM mechanism was needed to serve a specific goal of the RPS program, what criteria should be used to determine the frequency of auctions and overall duration of the reauthorized program?

Answer: The Commission initially authorized 1,000 MW of procurement through the RAM program. The IOUs were directed to conduct two auctions per year for two years, offering

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[12] A. 14-01-007, Prepared Testimony of Southern California Edison Company in Support of Application for Approval of Optional Green Rate (January 10, 2014), p. 8.

25 percent of their allocated MW at each auction.[13] The Commission believed that frequent auctions with a sizable amount of available capacity offered an important mechanism to measure the interest in and success of the program,[14] while also providing continuity to the market.[15] In Resolution E-4582, the Commission decided to reduce the RAM 4 procurement quantities and conduct an additional RAM 5 auction "in order to better align with utility need to delay some RAM procurement beyond the scheduled fourth RAM auction."[16]

Taking all these considerations into account, the Joint Solar Parties recommend that the RAM program be extended for a *minimum* of three years (to commence after RAM 5), with two auctions conducted each year. As addressed above, the procurement quantities to be allocated to the extended RAM program could be in excess of 1,000 MW depending on the amount of un-procured or failed procurement from the initial RAM auctions. The three year period allows the IOUs to better align their solicitations with their current need (*e.g.*, both RPS needs and to manage subscriptions to the Green Tariff program). The three year period also aligns with the GTSR programs implemented pursuant to SB 43, which sunsets on January 1, 2019. Furthermore, consistent periodic auctions are important to maintain a robust renewables market and reduce the premature bidding of projects that, given their stage in the development process, should wait for future solicitations (and thereby reduce risk of project failure).

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13 Subsequently, the authorized procurement amount was increased to 1,330 MW, as both SCE and SDG&E transferred MW from their PV programs to the RAM, but, the same two year program length was retained. *See* D.12-02-035 (moving 225 MW from SCE's Solar Photovoltaic Program into RAM), and D.12-02-002 (moving 74 MW from SDG&E's Solar Energy Program into RAM).

14 D. 10-12-048, p. 31

15 Id., pp. 32-33.

16 Resolution E- 4582, p. 5.

Question 1.d: Please comment on potential scenarios for reauthorization of the RAM Program.

Answer: The Joint Solar Parties support the reauthorization of the RAM Program for 1,000 MW (plus any rollover from the first five RAM auctions) over a minimum three-year period, with two auctions each year. As evidenced in the Energy Division's Summary, thus far the RAM has been a successful, efficient program for a subset of renewable procurement. Such procurement has ratepayer value both within and outside of the RPS paradigm. However, the RAM should not be used as the primary RPS procurement mechanism as it is not designed to address specific needs or to value unique attributes. Other contracting mechanisms and opportunities are needed in order to allow the IOUs to address specific locational needs/requirements, value additional attributes such as storage, and emerging technologies. In addition, the broader RPS solicitations should continue to be used for projects that require non-standard power purchase agreements for a variety of reasons such as repowering of existing resources or combining renewables resources such as solar with wind.

RAM Program Elements

Question 2. a.: Based on the response to question (1.a) on the purpose of RAM, please comment on whether the RAM program would benefit from a modification to the locational eligibility requirement.

Answer: The Joint Solar Parties do not recommend modifications to the locational eligibility requirement at this time. Limiting RAM projects to within the three IOU service territories appears to be sufficient to accommodate the requirements of the Green Tariff Shared Renewables Program, the consolidation of PG&E's PV Program, and any incremental RPS needs that may be satisfied through RAM solicitation at this time.

Question 2.b. Based on the response to question 1.a, please comment on whether the eligible project size for the RAM program should be adjusted from the current 3-20 MW requirement.

Answer: The Joint Solar Parties recommend that the project size for the RAM program remain at 3-20 MW. As illustrated by the analysis contained in the Energy Division Summary, projects of varying sizes within the range have been successful at securing contracts, illustrating that smaller projects within the range can be competitive with larger projects.[17] Moreover, as stated above, projects of less than 20 MW are consistent with the requirements of SB 43 and, therefore, retaining the current size requirements would allow for alignment with the GTSR Program. Lastly, continuing a program in this eligibility range allows the Commission to build on its efforts to maximize existing distribution and transmission infrastructure by interconnecting resources that do not require extensive upgrades, which can in turn come online more expeditiously.

Question 2. c.: Please comment on whether the renewable market, the utilities, regulators, and ratepayers would benefit from further consolidation of the utilities' unsubscribed PV program capacity allocations into the RAM program.

Answer: Consistent with the position taken in response to PG&E Advice letter 4161, whereby PG&E sought authority to utilize the RAM to accommodate the procurement of 252 MW of solar PV originally authorized for its solar PV program, the Joint Solar Parties support consolidation of the PG&E unsubscribed PV program capacity allocation into the RAM program.[18] As noted by PG&E in that Advice Filing:

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[17] Energy Division Summary, pp. 8-9.

[18] *See* the December 31, 2012 Solar Energy Industries Association and the Large Scale Solar Association Response to PG&E Advice 4161 (at that time SEIA/LSA caveated their support with

> Since the establishment of PG&E's PV Program in 2010, the Commission has designed and implemented additional procurement programs, such as the RAM Program, targeted at a similar sector of smaller-scale renewable projects. While the new projects from RAM are still under development, the solicitations have received robust and highly competitive responses, and PG&E therefore no longer needs to procure similarly-sized projects through a separate procurement process using a similar (and ideally, the same) form contract and process for selecting winning projects. Administration of multiple, overlapping solicitations targeted at the same market segment can lead to inefficiencies, increase the complexity of market participation and regulatory oversight.

As noted by PG&E, the RAM shares many similarities with the PG&E PV Program: both programs use procurement mechanisms for system-side renewable generation up to 20 MW through a reverse auction using a standard, non-negotiable contract. The market segment that participated in the PG&E PV program is generally eligible to participate in the RAM Program. These similarities indicate that there are significant administrative efficiencies in utilizing the RAM procurement process for the remaining PG&E PV program capacity, thus reducing overall costs to the benefit of ratepayers. Moreover, consolidation will allow the market to focus on project development to meet the criteria of a single program, which will lend to more efficient design and financing of projects.

Question 2. d. (i): Please comment on whether product category distinctions (peaking, non-peaking, baseload) and requirements should be maintained or adjusted.

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the requirements that the MW transferred (1) would be transferred to the as-available peaking bucket of the RAM program; and (would be available to projects from 1 to 20 MW). Given the advancements of the market since that time, SEIA/LSA no longer believe such caveats are necessary.

Answer: In adopting the RAM program, the Commission authorized each IOU "to solicit product-specific megawatts in a quantity that reflects [that] IOU's portfolio need."[19] Thus, the stated intent was that the IOUs:

> "define the products they wish to procure in their implementation advice letter filings. IOUs may choose to procure baseload, peaking as-available, and non-peaking as-available products, or a combination of the products. Once approved, the utilities are to solicit the minimum amounts of products approved through the implementing advice letter."[20]

In reviewing the IOUs' implementing Advice Letters, however, the Commission determined that each IOU should establish a minimum amount of procurement in each product category to be targeted through the RAM auction.[21] The required procurement quantity set-aside is unnecessary. In addition, requiring procurement of specific types of renewables undermines the ability of the program to dynamically adjust and properly value energy over time. Instead, the Commission should rely on the Time of Delivery ("TOD") and capacity values to determine the resources that provide the best value to the consumer. Accordingly, the Joint Solar Parties recommend that the product categories be eliminated.

Question 2. e. (i): Should any other resource valuation factors [besides levelized post-TOD price ($/MWh) with adjustments for transmission network upgrade costs and resource adequacy benefits] be included in the project ranking value?

Answer: The Joint Solar Parties are not taking a position on this issue at this time, but reserve the right to respond in reply comments.

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19 Decision 10-12-048, p. 35

20 *Id.*

21 Resolution E-4414, pp. 9-10

Question 2. e. (ii): If proposing additional resource valuation factors, please present and explain the methodology for calculating the specific factor.

Answer: The Joint Solar Parties are not taking a position on this issue at this time, but reserve the right to respond in reply comments.

Question 2. f: Aside from actual bid evaluation criteria, are there other ways the bid submission and evaluation process could be streamlined on the developer or the IOU side?

Answer: Currently, PG&E's RAM protocol requires that the project development security (PDS) be submitted within five business days following Commission approval of the RAM power purchase agreement (PPA). SCE currently requires half of the PDS be submitted within 30 days of PPA execution, with the second half to be posted within 30 days following Commission approval of the PPA. Given the lag time between PPA execution and Commission approval, a minimum of several months will transpire prior to the developer having to submit the PDS. This time lag detracts from the purpose behind the required security -- to ensure the most viable projects move forward and that speculative projects do not. Under the current protocol, the IOU does not know for several months whether the developer has the financial means to submit the development security. If after this protracted period, the developer cannot, in fact, post the security, then, under the terms of the PPA, the contract can be terminated. In order to ensure that the timing of the payment of the PDS corresponds to the purpose of such payment, the Joint Solar Parties recommend that each IOU require that the full PDS be submitted due five business days after PPA execution. If a developer fails to submit the security at that time, its project will be disqualified and the IOU can select the next-best offer on the project waiting list without needing to wait until subsequent solicitations.

RAM Eligibility and Viability

Question 3. a. (i): Should subdivided projects be eligible to participate in RAM? If so, should there be specific requirements on how subdivided projects may be bid?

Answer: The Joint Solar Parties support subdivision of projects for purposes of RAM eligibility, subject to some limitations. There is an opportunity for the Commission to leverage improved process efficiencies both for permitting and interconnection that is of value to ratepayers by allowing subdivision of projects. In addition to ratepayer benefits, subdivided projects can be beneficial to the wholesale market generally as by allowing more than one project to share an interconnection point, they can help alleviate interconnection processing and implementation bottlenecks.

Question 3. a. (ii): What are the appropriate technical criteria for determining whether a project is a standalone project or a subset of a larger project?

Answer: The Joint Solar Parties are not taking a position on this issue at this time, but reserve the right to respond in reply comments.

Question 3. b. (i): Please comment on whether the existing RAM Program viability requirements are adequate or whether adjustment should be made (e.g., add completion of a Phase II interconnection study).

Answer: As stated by the Commission:

> One of the primary goals of RAM is to support the development of small generation that can interconnect quickly to the distribution system, thereby avoiding the significant time and economic investment required for larger projects requiring transmission upgrades before they can be operational.[22]

[22] D. 10-12-048, p 65.

In conjunction with this goal, the Commission set a strict commercial operation date of 18 months from Commission contract approval.[23] Thus, the viability criteria adopted by the Commission were tailored to ensure that projects which bid into the RAM were not speculative, and, once selected through the bidding process, could come on line within the adopted time frame.

Commission Resolution E-4489 extended from 18 to 24 months the time period afforded projects to reach commercial operation. This extension served to better align the program criteria with practical development requirements. The Joint Solar Parties submit that certain further adjustment to the criteria should be made to ensure that they better serve the stated intent and the realities of project development.

Question 3.b. (ii): If they are not, please provide recommendations on adjustments to the criteria and a rationale for each proposed adjustment.

Answer: One of the critical viability criterion adopted by the Commission pertained to interconnection status. The Commission recognized that the "interconnection process is a critical milestone to a project becoming operational."[24]

Currently, a RAM participant must have completed a System Impact Study, a Phase I interconnection study, or have documentation showing that the project passed the distribution level or CAISO Fast Track screens at the time of bid submittal. This requirement has not been sufficient to ensure that commercial operation commitments align with interconnection requirements. Interconnection delays have been cited as a primary reason why some RAM projects have not met their projected commercial operation dates or required the one-time, 6-

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23 The Commission initially set the time frame as 18 months from contract execution. See D. 10-12-048, p. 52. Subsequently The Commission, in Resolution E-4414, modified the time frame to 24 months from the date of Commission approval.

24 *Id.*, p. 68.

month extension.[25] Accordingly, the Joint Solar Parties recommend that at the time of offer submittal, a RAM participant must have completed a Phase II interconnection study or equivalent. This change also aligns with what is required under the most recent RPS Procurement Plans and is supported by the number of advanced projects in the interconnection queue.

RAM Contract Terms and Conditions

Question 4.a.: Are the terms and conditions of the IOUs' standard RAM contracts adequate for the RAM Program as currently implemented?

Answer: Through Resolution E-4489, the Commission found that "it would be an improvement to the RAM program to give producers the option to bid a project as energy-only or to bid a project with FCDS [full capacity deliverability status]."[26] The Commission further clarified that "if a producer chooses the option to bid a project with FCDS, attainment of FCDS will not be a condition precedent to achieving commercial operation, but a producer bidding a project with FCDS will be obligated to attain such status by a date certain as established by the PPA."[27] The Joint Solar Parties agree that projects that can economically provide resource adequacy provide a greater value to ratepayers and thus should be recognized for that value. In this regard, the Joint Solar Parties recommend that the terms and conditions of the standard RAM contract be modified to recognize a situation in which a project signs an energy-only PPA but subsequently pays (without reimbursement) for the network upgrades necessary to receive FCDS. Such a project should be allowed to modify the status under its contract from energy-only to full deliverability, and be compensated accordingly.

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25 *See, e.g.* Resolution E-4489, p.10.

26 *Id.,* pp.12-13.

27 *Id.*, p. 13.

III. CONCLUSION

The Joint Solar Parties appreciate this opportunity to comment on the continuation of the RAM Program and look forward to working with all stakeholders to shape the program's future.

Respectfully submitted this January 30, 2014, San Francisco, California.

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VERIFICATION

I am the attorney for the Solar Energy Industries Association (SEIA) in this matter. SEIA is absent from the City and County of San Francisco, where my office is located, and under Rule 1.11(d) of the Commission's Rules of Practice and Procedure, I am submitting this verification on behalf of the SEIA for that reason. I have read the attached "Comments of the Solar Energy Industries Association, the Large-Scale Solar Association, and the Vote Solar Initiative on the Renewable Auction Mechanism." I am informed and believe, and on that ground allege, that the matters stated in this document are true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 30th day of January, 2014, at San Francisco, California.

/s/ Jeanne B. Armstrong
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