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)

CLEAN COALITION OPENING COMMENTS ON PROPOSED DECISION RE RAM SOLICITATIONS

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I. INTRODUCTION

The Clean Coalition respectfully submits these opening comments on the proposed decision ("PD") per the instructions in the PD submitted on July 24, 2017.

The Clean Coalition's comments are summarized as follows:

- The Clean Coalition supports the PD's denial of Pacific Gas & Electric Company's ("PG&E") petition to modify D.14-11-042 and cancel the remaining Renewable Auction Mechanism ("RAM") auctions.
- The Clean Coalition agrees with the conclusion of the PD, but the Commission should modify the final decision to reflect additional supporting arguments, including those detailed in these comments.
- PG&E has been in direct violation of D.14-11-042 because it failed to hold its RAM 7 auction in 2016 and has made no public announcements of its required RAM 8 auction in 2017. The final decision should note this violation and discuss how such violations will be avoided in the future.
- The petition will lead to higher costs for ratepayers associated with weakened market stability and substantial losses realized by existing market participants. We strongly urge the Commission to deny the petition in order to lessen the uncertainty present in the small utility-scale renewables markets.
- If the Commission allows PG&E to cancel the auctions required by the 2014

decision extending the RAM program through 2017, higher costs for ratepayers will result. Due to the phased expiration of the Investment Tax Credit and Production Tax Credit, the delay in procurement resulting from granting the petition would impact developers' ability to utilize these subsidies. Granting the petition would further lead to higher costs by frustrating market expectations and discouraging participation.

- PG&E is incorrect that future cost potential reductions for renewable resources would justify further deferral of procurement. On the contrary, unreliability in procurement practices contributes to inflated risk and "soft costs" that prevent California from achieving the lower prices already realized in other states. If the Commission had accepted this rationale a decade ago, prices for renewables in California would have dropped even less than currently observed.

II. DESCRIPTION OF THE PARTY

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of distributed energy resources ("DER")—such as local renewables, advanced inverters, demand response, and energy storage—and we establish market mechanisms that realize the full potential of integrating these solutions. The Clean Coalition also collaborates with utilities and municipalities to create near-term deployment opportunities that prove the technical and financial viability of local renewables and other DER.

III. COMMENTS

The Clean Coalition supports the PD's denial of PG&E's Petition for Modification of D.14-11-042 ("PFM"), but we urge the Commission to supplement its reasoning with additional reference to arguments made by the various parties. We opposed the PG&E

PFM and submitted detailed comments explaining our opposition,[1] as well as a response on PG&E's later motion for abeyance.[2]

We urge the Commission to adopt the following additional arguments:

a. *Renewable energy developers require reasonable certainty and consistency in procurement programs.*

Uncertainty can be highly damaging to well-functioning markets. The Commission should be vigilant about the value of predictability in procurement and the need to avoid unnecessarily introducing more uncertainty regarding procurement programs—particularly for those focused on smaller project sizes than the RPS ("Renewable Portfolio Standard") Requests for Offers ("RFOs"). In these programs, developers are generally less capitalized and risks are concomitantly higher. The Clean Coalition supports the PD and strongly urges the Commission to deny the PFM in order to lessen the uncertainty in small utility-scale renewables markets. We discuss further below how PG&E has been in violation of Commission orders to hold RAM solicitations, making this a clear case of the utility undermining market certainty.

b. *Parties participating in RAM face substantial losses, and increased participant risk harms ratepayers.*

PG&E argued speciously that no parties would be harmed by cancelling the 2016 and 2017 RAM solicitations or by holding the solicitations in abeyance.[3] This argument was and remains faulty because parties participating in RAM face substantial losses from preparing for solicitations that didn't take place, and increased participant risk harms ratepayers. Several additional factors have increased costs and potential losses from cancelled solicitations, including the fact that the Commission, at the utilities'

[1] Clean Coalition Response to PG&E Petition for Modification of RAM Schedule (Feb. 22, 2016).

[2] Clean Coalition Response to PG&E Motion to Hold RAM Auctions In Abeyance (July 29, 2016).

[3] PG&E states in its motion for abeyance: "No party will be harmed by holding the 2016 solicitation in abeyance. PG&E has not yet issued any solicitation materials, and thus it is unlikely that any party has expended time or resources preparing for the solicitation."

urging, recently changed the requirement from a Phase 1 interconnection study for a RAM bid to a Phase 2 interconnection study. Obtaining a Phase 2 interconnection study can take two years or more and result in costs up to $70,000 for study fees alone. The fee required for Wholesale Distribution Tariff ("WDT")/Wholesale Distribution Access Tariff ("WDAT") detailed study is $50,000 plus $1,000 per megawatt, which equals $70,000 for a 20 MW project. When engineering, site negotiation and legal costs are added, the cost easily exceeds $100,000. PG&E misleadingly claims that developers who have expended this level of funds and have taken 2-3 years to prepare for the upcoming RFOs will not be harmed by either cancelling the auctions or holding the auctions in abeyance.

Southern California Edison, in its reply to protests on its 2016 energy storage RFO application stated succinctly: "[I]n reality, it can take almost two years simply to get a Phase 2 interconnection study."[4] Accordingly, developers seeking to bid into the 2016 and 2017 RFOs would have already entered the interconnection queue long before the PFM was filed. Furthermore, entering the interconnection may only be done after acquiring site control (required for the interconnection application to be submitted), negotiating a land lease (required for site control), and performing the initial permitting work (economically required before negotiating a land lease).

Accordingly, arguing that developers had not expended substantial money and time to prepare for the Commission-required RAM 6 and 7 auctions is belied by overwhelming evidence.

Moreover, uncertainties in the interconnection process can force developers to forfeit these fees, should problems arise that require projects to start over and trigger an entirely new sets of fees. Under the interconnection rules, projects may be removed from the interconnection queue should the projects miss required milestones in both the application study process and post-Interconnection Agreement development phases.

[4] Southern California Edison Company's (U 338-E) Reply to Protests and Responses to Its Application for Approval of Contracts Resulting from Its 2014 Energy Storage Request for Offers (ES RFO) at 15, A.15-12-003 (Jan. 25, 2016).

When projects lose their queue position, the developers forfeit the fees and time spent to obtain a Phase 2 study.

When a developer loses a queue position, the process must be started over again and much the same funds expended again. The Rule 21 tariff, for example, requires that an Independent Study Process project submit a financial security posting, totaling 15 percent of the total cost responsibility, within 60 days of issuance of the final System Impact Study report.[5] The second (30 percent of the total cost of required upgrades, due 120 days after the final Facilities Study) and third postings (the remainder of the cost of upgrades, due upon start of construction) are due after completion of the final Facilities Study.

Thus, in light of these substantial costs, a developer will not make these financial security postings without a power purchase agreement ("PPA"). Therefore, if a PPA is not obtained by the deadline, the project would have to withdraw from the queue, and the time and funds required to obtain the final System Impact Study and/or Facilities Study would have been wasted. This issue is common to all types of projects that will be seeking a RAM PPA because similar requirements exist under the WDAT and California Independent System Operator ("CAISO") interconnection tariffs for other interconnection procedures.

These mandatory timelines and milestones were adopted to prevent projects from remaining in the queue indefinitely while waiting for contracts, permits, or financing to prevent numerous projects pending uncertain development from impacting the interconnection queue and study processes. The Clean Coalition supported this approach, but the subsequent, poorly coordinated interconnection status eligibility requirements in RAM and Renewable Market Adjusting Tariff ("ReMAT") has meant that projects must make major financial commitments with critical timing to participate in RAM. These issues were both acknowledged and addressed by the

[5] SCE Rule 21 Tariff § F.3.b.iv.

Commission in BioMAT,[6] adopting recommendations from the Clean Coalition and the Bioenergy Association of California. However, they remain major obstacles in RAM.

Thus, PG&E's failure to hold the 2016 or 2017 solicitations, despite the Commission's order to do so, has further harmed these developers seeking to make a RAM bid. For the reasons stated above, delays in the RAM schedule have already harmed market participation. Canceling the 2016 and 2017 RAM auctions will raise costs for ratepayers in the future as developers respond by withdrawing and decreasing competition and passing on the increased risks and costs of participation by raising bids in later solicitations.

c. PG&E is in direct violation of D.14-11-042 and a recent ruling so the final decision must note this important fact

PG&E is currently in violation of D.14-11-042 by failing to issue the ordered solicitation. That decision concludes unequivocally with respect to PG&E's RAM program: "One half of the remaining capacity in the Solar PV program is transferred to RAM 6 [for the 2015 solicitation]. The remaining 1/2 is transferred and shall be offered in two future solicitations, one in 2016 and one in 2017."[7] PG&E issued its Petition for Modification and a motion to hold the auctions in abeyance while the Commission deliberated on the Petition. The Commission, by an Administrative Law Judge ("ALJ") ruling in Nov. 2016,[8] denied PG&E's motion for abeyance. The Nov. 2016 ruling stated: "The Commission is considering the January Petition and will decide it in due course. In the meantime, the procurement authorized in D.14-11-042 should proceed."[9] Accordingly, PG&E's obligations remained in full effect, yet PG&E did not issue its required 2016 solicitation and has not issued any notification of a 2017 RAM solicitation either.

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[6] Decision 16-10-025, at 16-26.

[7] Decision 14-11-042, at 92.

[8] Online at: http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M169/K669/169669156.PDF.

[9] At 3.

The final decision must note these important facts, at the very least in the procedural history section of the final decision, and weigh in on how the Commission will treat direct violations of Commission orders in the future. The rule of law and the ability of regulators to do their jobs requires compliance with direct orders from regulatory bodies. That system broke down in this case, and we strongly urge the Commission to prevent this from happening again.

d. *PG&E provides no convincing evidence that conducting the 2016 and 2017 RAM RFOs will increase ratepayer costs.*

PG&E's argument that the Commission should defer further procurement of renewables because costs may decline in the future is not well supported by evidence. In fact, the claim is contradicted by other factors described below. Waiting for prices to drop further than they already have is a recipe for inaction, and such a course of inaction fails to help bring about the circumstances necessary for further price drops. If the Commission had followed this rationale a decade ago, prices for renewables would not have dropped to the levels currently observed.

California's leadership on renewables procurement has played a role in lowering the cost of deployment of renewables in the last decade. These market trends do not justify delaying these procurements or pulling back from that leadership. Much of this prior decline has been led by falling material and solar equipment costs, as these have become global commodities, but they represent an increasingly small share of total costs. With equipment price declines stagnating, as is expected in a maturing market, most forecasts do not expect to see the same rate of price reduction in the coming years. Even if prices do drop further, however, the impact of such cost reductions would be small because they represent only a fraction of current project costs. Looking forward, the key factors driving cost reductions are low interest rates, increasing access to capital, and most importantly, business cost reductions resulting from robust industry

participation in a highly competitive market.[10] These factors are related to development of a mature industry supported by RAM and ReMAT programs. Indeed, a major reason for the establishment of the RAM and ReMAT procurement mechanisms was to develop a medium- and small-scale renewable industry in California with experience and supply chains to support efficient project development and a steady pipeline of qualified proposals competing for procurement. Extended failure to offer procurement in this market sector will risk the progress that has been made in bringing costs down, and inhibit further experience based price reductions.

With commodity equipment costs representing a smaller fraction of the total cost of energy from RAM projects, the primary opportunity for renewable energy cost reductions has shifted to the "soft costs."[11] As noted in the conclusion of the most recent LBNL annual report on Photovoltaic system costs:

> Unlike module prices, which are primarily established through global markets, non-module costs consist of a variety of soft costs that may be more readily affected by local policies – including deployment programs aimed at increasing demand (and thereby increasing competition and efficiency among installers) as well as more-targeted efforts, such as training and education programs. The heightened focus on cost reductions within the solar industry and among policymakers, and recognition of the importance of soft costs for achieving further price reductions, has spurred a flurry of initiatives and activity in recent years, aimed at driving reductions in solar soft costs. The continued decline in installed prices, despite level or slightly rising module prices, suggests that these efforts have begun to bear fruit.
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> Nevertheless, lower installed prices in other major international markets, as well as the wide diversity of observed prices within the United States, suggest that broader soft cost reductions are possible. Although such cost reductions may accompany increased market scale, it is also evident that market size alone is insufficient to fully capture potential near-term cost

[10] Galen Barbose & Naïm Darghouth, Lawrence Berkeley Nation Laboratory, Tracking The Sun Report VIII: The Installed Price of Residential and Non-Residential Photovoltaic Systems in the United States (Aug. 2015), *available at* https://emp.lbl.gov/sites/all/files/lbnl-188238_1.pdf.

[11] Tracking The Sun Report IX: The Installed Price of Residential and Non-Residential Photovoltaic Systems in the United States, Lawrence Berkeley National Laboratory (2016) at 2

> reductions – as suggested by the fact that many of the U.S. states with the lowest installed prices are relatively small PV markets. Achieving deep reductions in soft cost thus likely requires a broad mix of strategies, including: incentive policy designs that provide a stable and straightforward value proposition to foster efficiency and competition within the delivery infrastructure, targeted policies aimed at specific soft costs (for example, permitting and interconnection), and basic and applied research and development."[12]

This is an area is which California is notably lagging, demonstrating the highest average costs of any region in the US,[13] and well above leading international averages. Because these costs vary by state and region, we cannot rely upon soft cost reductions and efficiencies realized in other states to lower future costs in California. On the contrary, it is policies and programs such as RAM that are necessary for California to establish efficient markets and realize the lower supplier costs already achieved in other states. The delays in implementing RAM and ReMAT programs, and in addressing program barriers identified through experience with these programs, has deeply frustrated market participants and slowed progress in achieving faster cost reductions.

Nationally, and to a large degree in California, installed costs and PPA prices in the RAM and ReMAT project size ranges have been competitive with larger projects.[14] At the same time, distribution connected facilities avoid use of limited existing transmission capacity and construction of new transmission to deliver remote resources, contributing to the substantial additional ratepayer savings by avoiding these costs. CAISO is also actively considering proposed modifications in Transmission Access Charges ("TAC") such that utilities would only pay TAC on energy delivered through the transmission system.[15] If adopted, this stakeholder initiative, already

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[12] *Ibid* at 42.

[13] *Utility-Scale Solar 2015 An Empirical Analysis of Project Cost, Performance, and Pricing Trends in the United States*, Lawrence Berkeley National Laboratory (2016) at 17.

[14] *Ibid* at 16.

[15] http://www.caiso.com/informed/Pages/StakeholderProcesses/ReviewTransmissionAccessChargeStructure.aspx

supported by a wide range of parties, would mean that many RAM projects would realize a levelized 3¢/kWh savings for ratepayers associated with these twenty year contracts compared to all projects larger than 20 MW, renewable or not.

Delaying procurement also prohibits qualified competitive projects from proceeding, forcing them to withdraw and discouraging participation in the market. In order to maintain an active competitive market, participants must have a reasonable expectation of market demand (i.e., that there will actually be an opportunity to bid and potential to win a contract).

In terms of costs to ratepayers, PG&E's motion ignores the impact of tax credits on the cost of renewables. Congress has agreed to extend the ITC—and PTC for wind—at the current 30 percent rate through 2019, after which it will fall to 26 percent in 2020, 22 percent in 2021, and 10 percent in 2022. Because these credits are gradually phased out in that timeframe, RAM projects that do not commence construction by 2019 will add a 4% ITC reduction to their costs, and additional 4% the following year, and 12% the next year. This economic reality weighed heavily in favor of procurement in 2016 and 2017, and now 2017 and 2018, per the RAM schedule put in place by the Commission for this period, because these procurements typically require at least 24-36 months to start delivery. If the Commission grants PG&E's request, ratepayers will lose the opportunity to realize these ITC and PTC benefits and will likely pay higher prices for RAM procurement—not lower, as PG&E argues. PG&E provides no realistic projections supporting its position that costs will decrease at a rate sufficient to offset the scheduled reductions in ITC value.

IV. CONCLUSION

For the reasons discussed above, the Clean Coalition supports the PD and respectfully urges the Commission to reject PG&E's motion.

Sincerely,

Tamlyn Hunt
Consulting attorney for the Clean Coalition

VERIFICATION

I, Katherine A. Ramsey, am the representative for the Clean Coalition for this proceeding. I am authorized to make this verification on the organization's behalf. The statements in the foregoing document are true of my own knowledge, except for those matters that are stated on information and belief, and as to those matters, I believe them to be true.

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

Executed on August 14, 2017, at Redwood City, California.

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