

**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 RESPONSE TO
PG&E PETITION FOR MODIFICATION OF RAM SCHEDULE**

Tam Hunt, J.D.
Consulting Attorney

Kenneth Sahm White
Director, Policy and Economic Analysis

Clean Coalition
16 Palm Ct
Menlo Park, CA 94025
(805) 705-1352

February 22, 2016

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The Clean Coalition respectfully submits this response to Pacific Gas & Electric's (PG&E) Petition for Modification (PFM) of the RAM schedule, submitted on Jan. 22, 2016.

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.

I. Discussion

a. PG&E's petition is not timely, coming two months after the one-year deadline for such a filing.

PG&E's rationale for requesting permission to file after the one-year deadline is not convincing given that the only reason PG&E cites for missing the deadline is a Commission decision on PG&E's RPS RFO, which decision has little bearing on the facts otherwise argued by PG&E. That is, the only fact not available to PG&E before missing the deadline was the Commission's decision on PG&E's request to not hold its 2016 RPS RFO. This should not be deemed sufficient to excuse PG&E's missed deadline.

More importantly, the decision cited by PG&E on its RPS RFO explicitly rests on the Commission's assumption that PG&E would engage in other planned renewables procurement, including the RAM, so PG&E can't reasonably cite that decision as support for canceling the upcoming RAM RFOs. D.15-10-025 states (p. 22):

Since it believes it is well positioned to meet its RPS targets under both a 33% RPS target and a 40% RPS scenario, PG&E proposes that it not issue a 2015 RPS solicitation. PG&E will continue to procure RPS-eligible resources in 2016 through other Commission-mandated programs, such as the ReMAT and RAM Programs.

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

As discussed further in Sec d. below, uncertainty is contrary to well-functioning markets. There is never complete certainty in any market, but the Commission should be vigilant about the value of predictability in procurement and the need to avoid unnecessarily introducing increased uncertainty when it comes to procurement programs, particularly for those focused on small project sizes than the RPS program, where developers are generally much less well-capitalized and risks are concomitantly higher. The Commission has, however, in recent years approved a number of renewable energy program changes that go against this long-standing market rule – including shifting hundreds of megawatts from the IOU PV programs prematurely into RAM and REMAT, for example – and we strongly urge the Commission to deny the PFM in this case as a counter-trend.

c. The RPS is a floor not a ceiling, and there is new data suggesting that the 2030 RPS targets must be met by 2024 in order to meet the state’s GHG reduction targets

As Governor Brown has highlighted, the RPS is a floor, not a ceiling.¹ In addition, while RAM projects do directly count toward meeting RPS requirements, RAM procurement was established independently and is not contingent upon any projected net short in meeting RPS targets. As such, arguments that PG&E is on track to meet its RPS requirements are not truly germane to this PFM, and ignore the fact that there is good reason to go beyond the RPS requirements, particularly when the Commission has already ordered PG&E to conduct the 2016 and 2017 RAM RFOs in its previous program changes to the RAM and PG&E’s PV program.

Moreover, new data, described in a recent report² from the Union of Concerned Scientists, suggest that meeting the state’s 2030 greenhouse gas emissions reductions targets may require achieving 50 percent renewables by 2024, which will require an accelerated pace of renewables procurement, not a slowdown as PG&E is calling for.

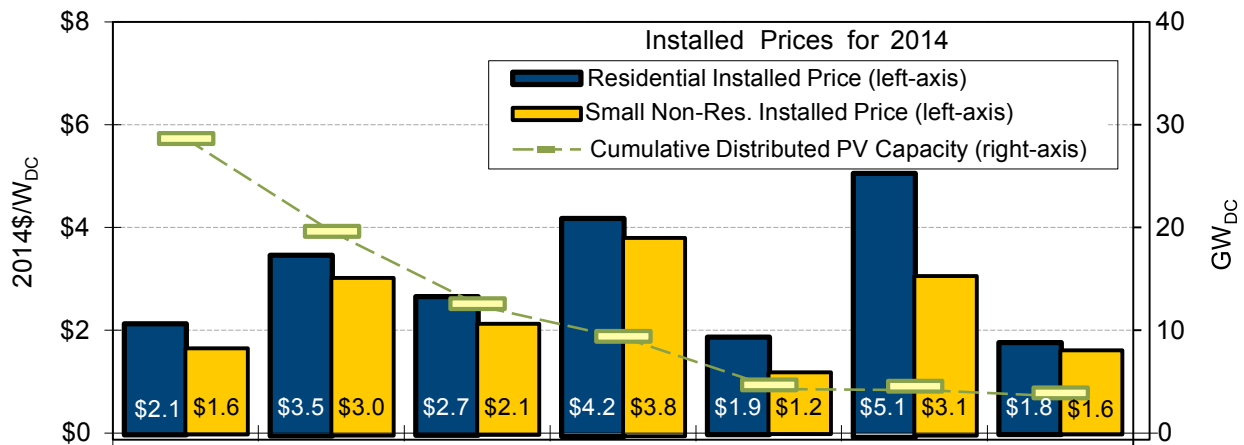
d. Conducting the 2016 and 2017 RAM RFOs will not increase ratepayer costs and PG&E presents no good data that it will

PG&E’s argument that the future may bring further cost reductions in renewables, and thus further procurement should be deferred, is not well supported by evidence, and is contradicted by other factors described below. Moreover, waiting for prices to drop is a recipe for inaction and fails to contribute to the circumstances necessary for this to occur. If the Legislature and the Commission had followed this rationale a decade ago we wouldn’t have any renewables installed over the last decade and the prices would be higher than we have seen since California decided to “go big” and benefit from scale and experience with renewables.

¹ Online at <https://www.gov.ca.gov/news.php?id=16974>.

² Online at <http://www.ucsusa.org/sites/default/files/attach/2015/08/Achieving-50-Percent-Renewable-Electricity-In-California.pdf>.

The cost of renewables has dropped very impressively in the last decade, in part because of California’s push for robust renewables procurement, but this is no reason for delaying procurement. Much of this decline has been led by falling material and equipment costs, as these have become global commodities, and they represent an increasingly small share of the total cost of energy from these sources. With equipment price declines stagnating, as is expected with a maturing market, most forecasts do not expect to see the same rate of price reduction; even if these prices drop further, the impact of such cost reductions would be small because they represent only a fraction of current project costs. Other factors that have driven cost reduction are low interest rates, increasing access to capital, and most importantly, business cost reductions resulting from a robust industry participation in a highly competitive market. Indeed, a major reason for the establishment of the RAM and ReMAT procurement allocations and schedules was to develop an 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.



Germany Japan Italy USA China France Australia
Comparison of Installed Prices in 2014 across National Markets (Pre-Sales Tax/VAT)³

At a high-level, differences in soft costs between countries may be attributable partly to differences in market size, on the theory that larger markets facilitate cost reductions through learning-by-doing and economies of scale that enable reductions across the broad swath of soft cost elements. As shown in the chart above, studies of smaller installations (where more data is available) indicate cumulative distributed PV capacity in several of the lower-priced national PV markets (Germany, Japan, and Italy) is greater than in the United States. That said, China and Australia – also relatively low-priced compared to the United States – have much smaller distributed PV markets in absolute terms (though China has a larger base of installed capacity if utility-scale is included, and Australia has a larger distributed PV market on a per-capita basis). It is therefore clear that other factors, beyond absolute market size, contribute to installed price differences across countries. These may include things such as differences in: incentive levels and incentive design, solar industry business models, demographics and customer awareness, systems sizing and design, interconnection standards, labor wages, and permitting and interconnection processes.

The Commission has also adopted amendments to both the interconnection application, queue waiting, and bid qualification process that require projects to move forward in a timely manner or withdraw. These amendments were appropriate, but predicated upon procurement opportunities for which these applicants were queuing. Delaying procurement 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.

³ Tracking The Sun Report VIII; Lawrence Berkeley Nation Laboratory 2015

PG&E also ignores the impact of tax credits on the cost of renewables. Congress has agreed to extend the solar ITC 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 not achieving delivery 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 weighs heavily in favor of procurement in 2016 and 2017, per the current RAM schedule put in place by the Commission for this period, since these procurements typically require 24-36 months to start delivery. If PG&E's request is granted, ratepayers will lose the opportunity to realize these ITC benefits and will likely pay higher prices for RAM procurement. California has been granted an opportunity to benefit from an extension of the ITC, while there are no realistic projections that costs will decrease at a rate sufficient to offset the scheduled reductions in ITC value.

e. Developers will be harmed through PG&E's sought cancellation of the 2016 and 2017 RFOs because they have already conducted significant activities necessary to bid into these RFOs

PG&E argues in its petition that developers will not be damaged by the sought cancellation of the 2016 and 2017 RFOs. This is inaccurate because PG&E itself, along with the other utilities, have sought successfully to change the interconnection requirements for the RAM RFOs such that a completed Phase 2 study or its equivalent is required just to bid into the RAM. Southern California Edison, in its reply to protests on its recent energy storage RFO application (A.15-12-003) stated succinctly (SCE reply comments, p. 15): "[I]n reality, it can take almost two years simply to get a Phase 2 interconnection study." Accordingly, developers seeking to bid into the 2016 and 2017 RFOs have long ago been forced to enter the interconnection queue, which itself comes after some time spent acquiring site control (required for the interconnection application to be submitted), negotiating a land lease (required for site control) and initial permitting work (economically required before negotiating a land lease). Just

entering the interconnection queue for a Phase 1 study costs \$50,000 plus \$1,000 per megawatt, plus related engineering and legal work, so quite substantial costs have already been expended by many developers.

II. Conclusion

For the reasons discussed above, the Clean Coalition urges the Commission to reject PG&E's petition.

Sincerely,

A handwritten signature in black ink, appearing to read 'TH', with a long horizontal stroke extending to the right.

Tamlyn Hunt

Consulting attorney for the Clean Coalition

VERIFICATION

I, Tamlyn Hunt, am the attorney for the Clean Coalition and am the organization's representative 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 which are stated on information and belief, and as to those matters, I believe them to be true.

I am making this verification on the Clean Coalition's behalf because I have unique personal knowledge of certain facts stated in the foregoing document. I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 22, at Santa Barbara, California.

A handwritten signature in black ink, appearing to read 'TH' followed by a stylized flourish.

Tamlyn Hunt