BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

RESOLUTION 3809-E RESOLUTION 2557-E	FILED November 9, 2010 SAN FRANCISCO, CALIFORNIA

CLEAN COALITION COMMENTS ON RESOLUTION 3809-E AND 2557-E

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CLEAN COALITION COMMENTS

The Clean Coalition respectfully submits these comments on SCE's Advice Letter 2557-E and PG&E's Advice Letter 3809-E.

The Clean Coalition is a California-based advocacy group focused on smart renewable energy policy. We advocate primarily for vigorous feed-in tariffs and "wholesale distributed generation," which is generation that connects to distribution lines close to demand centers. Our members are active in proceedings at the Public Utilities Commission, Air Resources Board, Energy Commission, California ISO, the California Legislature, Congress, the Federal Energy Regulatory Commission, and in various local governments around California.

In summary, the Clean Coalition recommends that:

- the utilities' proposed full deliverability requirements be disallowed because such requirements would impose a fatal flaw on the RAM program; in particular, only nine 20 MW and below projects state-wide have completed full capacity deliverability studies to date and, accordingly, PG&E's proposal to require full capacity deliverability studies for RAM bids would result in, at best, a tiny trickle of RAM bids for the first year of the program as developers await the results of the 2011 cluster deliverability studies
- full deliverability should, instead, be a choice made by developers who opt to pay for full deliverability studies and required network upgrades in return for a PPA price adder
- alternatively, developers' full deliverability costs should be capped, allowing RAM bids to include the worst-case scenario for future deliverability upgrades even before deliverability studies are completed

- SCE's interconnection map be improved dramatically, in line with D.10-12-048 ("the Decision"), and made comparable to PG&E's new map, which is the trend leader in this area
- utilities be required to offer two auctions per year, as specified in the Decision
- utilities be required to hold staggered auctions in order to mitigate gaming behavior by bidders and to provide more options per year for bids
- the COD clock "start ticking" upon final non-appealable PPA approval by the Commission
- no artificial limits be imposed on energy production from RAM projects (PG&E proposes a 20 MWh/h limit); to the contrary, production from RAM projects should be maximized, not disincentivized
- costs imposed by the utilities on developers with respect to data requirements be capped, and any costs above the cap be rate-based
- developer forecasting requirements and penalties should be more reasonable than proposed by the utilities – matching what is feasible given the state of the forecasting art today; we also recommend that forecasting responsibility be shifted from developers to the utilities, allowing for ratepayer savings and more consistency in methods
- the completion date for construction should not be a hard and fast deadline; rather, monetary damages should accrue if this deadline is exceeded, within reasonable limits, as is the case with PG&E's solar PV program
- SCE's request to hold only one annual auction should be denied because holding two annual auctions will allow for more responsive corrections to the program if these are required

- SCE's request to extend the COD from 18 months to 36 months should be denied because there will very likely be more than enough projects that are sufficiently developed to allow for an 18-month COD from the time of non-appealable contract approval by the CPUC; moreover, a key purpose of the RAM program is rapid deployment of wholesale DG
- no changes to the Decision's guaranteed energy production requirements should be allowed
- SCE should provide dates for its proposed termination rights provisions
- the threshold for "non-competitive" bids must be clarified; we recommend that any bids up to 10 percent higher than the median bid for the same technology, state-wide, be considered competitive
- no floor price for guaranteed energy production penalties should be allowed; rather, actual damages (as low as zero, but no higher than 5 c/kWh) should be imposed
- similarly, no network upgrade cost cap in evaluating bids should be allowed because this may result in increased costs to ratepayers if, for example, net costs for a proposed bid are lower even though network upgrade costs are higher than the cap

I. Comments

a. Resource Adequacy costs must be capped for developers

PG&E proposes that there be no compliance cost cap on developers for obtaining full deliverability. PG&E states (p. 14, emphasis added): "Seller is responsible for obtaining Full Capacity Deliverability Status. In the case of WDT interconnections for which such status is not available initially, Seller is

responsible for securing such status as soon as it is available, and the cost of doing so is not subject to the Compliance Cost Cap."

This requirement will very likely, all by itself, introduce a fatal flaw into the RAM program. This is the case because for smaller projects and even those up to 20 MW, full deliverability costs may be substantial as a share of the total project cost. However, even if full deliverability costs are not found to be substantial in specific cases, when the studies and upgrades are completed, no developer will be able to make a firm RAM bid (as is required under PG&E's proposal) prior to knowing its financial obligations for full deliverability. The net effect of these proposed requirements will be to delay the RAM program by a year or more while CAISO completes its deliverability studies under the cluster study beginning on June 1 (the window closes March 31 for all cluster studies, transmission or distribution).

This is the case because a very limited number of 20 MW and below projects have completed full deliverability studies to date, as revealed from the CAISO queue[1]: only nine projects, with seven more in progress during Clusters 1-3, have completed full deliverability studies at this point. There are, accordingly, only nine 20 MW and below projects that could bid in to the first auction for all three utilities under the RAM program, pursuant to PG&E's proposed rule, with any certainty regarding their deliverability costs. PG&E's full deliverability proposal would delay the program substantially – up to a year or more as developers work to obtain full deliverability studies from CAISO. This is an unacceptable delay in the program.

[1] http://www.google.com/url?sa=t&source=web&cd=1&ved=0CBUQFjAA&url=http%3A%2F%2Fwww.caiso.com%2F2826%2F2826b8435fe20.xls&rct=j&q=caiso%20queue&ei=DG96TbfkK4jmrAHg0Kn2BQ&usg=AFQjCNEKcnXo5DYzPF2kRFg4CKRsFDU92A&sig2=32PDNMKzz1IAdooNf3I6Zg&cad=rja

The Clean Coalition proposes two possible solutions:

1) Make full deliverability an option for developers. This is our preferred solution. We have yet to understand utility demands for full deliverability and we have found it very difficult to obtain reliable information on this issue. The most recent CAISO assessment (May 2010) found 34.5% planning reserves on the CAISO grid.[2] State rules require 15-17% planning reserves, so we are a little mystified by the utilities' demands for full deliverability in RAM and other renewables programs. We also have no documented information regarding the prices paid by utilities for full deliverability. There is, in sum, a major question mark surrounding the nature of full deliverability and the utilities' strong drive to require full deliverability in all renewable energy procurement programs. Accordingly, obtaining full deliverability should be a developer choice, not a requirement.

2) If the Commission nevertheless agrees with the utilities that full deliverability should be required for RAM projects, we strongly urge the Commission to impose a compliance cost cap for full deliverability. Beyond this cost cap, any additional costs should be rate-based and no additional costs passed on to developers (regardless of whether the RAM project is interconnecting to distribution or transmission lines). This will allow developers to make RAM bids with the worst-case compliance costs in mind (if they don't already have a completed deliverability study in hand, as is the case for a very limited number of projects) – which is far better than the fatal "X factor" of no limit on compliance costs, as PG&E proposes.

An equally important question that is not answered by PG&E's proposal is whether projects would have to complete full deliverability upgrades by the 18-

[2] http://www.caiso.com/2793/2793ae4d395f2.pdf. P. 4.

month COD deadline? Again, with interconnection and deliverability studies taking on average two years under the new cluster process, it would be literally impossible for any projects that don't already have deliverability studies in hand or have the required upgrades completed to qualify for RAM in the first year. If the Commission agrees with PG&E that full deliverability should be required of RAM projects, the Commission should at the least allow network upgrades required for full deliverability to be completed after the required COD.

b. Map updates

The Clean Coalition commends PG&E for an exemplary job on improving its interconnection data map. PG&E is truly the role model on this key improvement in the interconnection process. PG&E's RAM Advice Letter ("PG&E AL") is unclear, however, on how often the map will be updated (p. 21 doesn't specify and p. 22 mentions monthly updates). We urge the Commission to clarify that the maps shall be updated on a monthly basis in terms of new interconnection application data and on a quarterly basis for infrastructure additions.

SCE's map (Exhibit F, p. 679), to the contrary is highly inferior and in our view fails to meet Commission requirements in the Decision. The map sample provided is only shown at a scale of approximately 1:1,200,000, identifying only broad geographic regions and making it impossible to evaluate the adequacy or value of the proposed Preferred Location Map. SCE's posted map shows only a single threshold of available capacity, and is limited to sub-transmission system between 55 kV and 115 kV with less than 150 MVA of connected or queued generation; but no information on differences between circuits or substations, and no further information is provided. The RAM map is supplemented by

SCE's SPVP map which identifies only distribution lines in preferred areas with 1-2 MVA Fast Track processing capacity.

We recommend that SCE simply emulate what PG&E has done in providing a single map, rather than two, and provide the same information as PG&E has.

c. When does the clock start ticking on COD?

We agree with PG&E (p. 4) that the appropriate time for the clock to start ticking on COD requirements under RAM is when the Commission approves the contract and any appeals period expires.

d. No artificial limits on delivered energy or contract capacity should be imposed

PG&E suggests that a 20 MWh/h limit be imposed on delivered energy (p. 11). We can see no rationale for this limit – particularly because PG&E is suggesting that all projects obtain full deliverability status. Many RAM projects will surely be sized at the upper limit of 20 MW, and if this is the case any production above this nameplate capacity – as can happen on a regular basis with wind and solar technologies (because the nameplate capacity is an estimate based on *normal* production, not *peak* production) – will be uncompensated. This is a perverse disincentive against maximizing production from renewable energy facilities. PG&E will also benefit in terms of RPS compliance from any generation above 20 MWh/h.

Similarly, PG&E states on page 12, under Contract Capacity, that "overgeneration" should be disincentivized. To the contrary, the Clean Coalition feels strongly that generation from all renewable energy facilities should be

maximized as long as no grid reliability issues occur as a result. Again, full deliverability is proposed to be required for these projects and it seems that, by the very nature of full deliverability, no reliability issues will result. Even without full deliverability, however, the purpose of any interconnection study (whether it's Fast Track, ISP or the full cluster process) is to ensure that no grid stability issues result from the proposed project. We urge the Commission to disallow any limitations on Contract Capacity for RAM projects as long as these projects otherwise meet program requirements (20 MW or less being the key contract requirement).

e. Developer data requirement costs should be established with far more certainty and/or capped

The Clean Coalition has been surprised to learn that new utility telemetry requirements can be very burdensome on developers. For example, SCE is requiring that a single 1.5 MW solar project pay $150,000 for telemetry alone. This seems clearly exorbitant. We urge the Commission to set limits on what the utilities can require in the RAM program for telemetry and any other data requirements before these costs become even more exorbitant.

Similarly, PG&E is requesting in its AL that it be allowed to request data from developers with no cost cap. Page 13 states (emphasis added): "PG&E has flexibility in requiring the generator to alter the data delivery requirements or provide additional data as requested by PG&E at Seller's cost."

We urge the Commission to, instead, set clear limits on data requirements that utilities may impose on developers under RAM and other renewable energy procurement programs. The Commission should also clarify that any

requirements beyond these limits must be paid for by the requesting utility – not at "Seller's cost," as PG&E proposes.

f. Developer forecasting requirements and penalties should be reasonable

An even more serious concern arises with respect to utility proposals for forecasting requirements. PG&E states (p. 13):

> Seller shall provide annual forecasts of Available Capacity no later than the earlier of July 1 of the first calendar year following the Execution Date or 180 days before the first day of the first Contract Year of the Delivery Term, and on or before July 1 for each subsequent calendar year.
>
> Seller shall provide monthly forecasts of Available Capacity 10 business days before the beginning of each month during the delivery term and non-binding forecasts of the hourly Available Capacity for each day of the following month.
>
> Seller shall provide a binding day ahead forecast of Available Capacity for each day no later than 14 hours before the beginning of the "Preschedule Day." For Baseload Product, the forecasted Day-Ahead Availability Notice will be the scheduled output of the Project.

The first two requirements seem reasonable. The third requirement, for a "binding day ahead forecast," is, however, very troubling because PG&E is also proposing financial penalties attached to this binding forecast. PG&E states (p. 14):

> For As-Available Product, Forecasting Penalties equal to 150% of the Contract Price for each MWh of Energy Deviation outside the Performance Tolerance Band of 3%. For Baseload Product, Forecasting Penalties include all costs, charges, imbalances and

> penalties assessed by CAISO for any Variation outside the Performance Tolerance Band (which equals the greater of 3% multiplied by the Contract Capacity or 1 MW, divided by the number of Settlement Intervals in the hour.)

Tom Hoff, with Clean Power Research, informed us by private communication: "I do not think that we are at a 3% error band right now on forecasting." Accordingly, we urge the Commission to require a less stringent forecasting penalty threshold – or no threshold at all – for developers. As the scheduling coordinator for RAM projects, forecasting responsibility most naturally falls on the utility, not the developer. Moreover, each purchasing utility can aggregate its forecasting work from numerous projects, saving ratepayers money and avoiding a proliferation of forecasting techniques from each developer or developer consultants (as is more likely the case).

g. Construction completion date flexibility damages

PG&E states (p. 7): "Seller is subject to contract default if project milestones are not met. This ensures that Seller has incentive to bring the project online as promised." The rationale offered for this draconian requirement is that the Decision requires an 18-month COD.

The Clean Coalition does not support this approach. We recommend instead that COD deadlines be subject to damages, not a hard "finish exactly on time or lose it" approach. For example, PG&E's solar PV program requires that developers pay PG&E damages for missing the COD deadline instead of having the PPA annulled. PG&E's Advice Letter describes the solar PV solution next to PG&E's proposal for RAM, in a table on p. 14: "If Seller misses the Guaranteed Construction Start Date or Guaranteed Commercial Operation Date (as extended for Permitting Delay, Transmission Delay or Force Majeure), then Buyer can

draw upon the Project Development Security equal to Daily Damages for each day after the deadlines for up to sixty days. The extension cannot cumulatively exceed 360 days."

We feel that this is a better solution than a hard deadline because it may be the case that a developer seeks a six month extension beyond the 18-month deadline, due to regulatory delays outside of its control, only to obtain approval during that period and then rush to finish the job. It would be supremely unfair, and counter-productive for ratepayers, for a developer to do its best to finish a project by the COD deadline only to miss the date by a few days or weeks – and have the PPA annulled during construction of the project. It makes far more sense for ratepayers and developers to allow developers to pay reasonable penalties for missing the COD, as in PG&E's solar PV program.

h. SCE's request to hold only one annual auction should not be granted

SCE proposes annual auctions instead of semi-annual because SCE is grandfathering 250 MW of recent RSC contracts into RAM, leaving behind a RAM tranche that SCE feels is too small to justify semi-annual auctions.

The Clean Coalition believes, to the contrary, that 65 MW is not too small for an auction, particularly when compared to SDG&E, for example. Semi-annual auctions were required in the RAM decision in order to avoid a one-year delay between bid opportunities, and allow all parties to develop experience with the RAM process. Reducing the initial number of auctions from four to two eliminates much opportunity to gain experience with the process and institute any required changes. An unknown but potentially very significant number of projects that would have participated in the second semi-annual auction may not be ready for the initial auction, which would reduce participation. This results in

twice as many bids being selected at a higher cost from a smaller pool (instead of taking just the three or four lowest-priced bids, the three next higher-priced bids will also be included, while those that would have been ready to participate in the second semi-annual auction will not bid at all in the first year).

i. Auctions should be staggered throughout the year in order to mitigate gaming opportunities and to provide more bid opportunities

The Clean Coalition is worried that allowing three simultaneous RAM auctions, as contemplated in the Decision, will allow bidders to present three different bids and consent to the highest winning bid. We urge the Commission to require staggered bids in order to mitigate this potential detriment to ratepayers and to provide additional opportunities throughout the year for developers to make bids.

j. SCE's request to extend the COD should be denied

SCE requests an extension to 36 months instead of 18 months for the COD deadline. The Clean Coalition does not support this extension because a key goal of RAM is rapid deployment. 18 months to COD (with one six-month extension allowed) will require only projects that are mid-stream in terms of development to apply. Additionally, smaller PV projects (1 MW or so) will be able to meet the 18-month COD deadline even if they are starting "from scratch" because the interconnection and permitting requirements for these types of projects are much less stringent. RAM's expedited 18-month COD will ensure that those projects that are already being developed, or can be completed quickly, will be the first to win bids under RAM, ensuring, in turn, that we see rapid deployment of RAM projects. This will, in turn, allow for more prompt evaluation of the program and any resulting changes to be completed.

The Clean Coalition's default approach to new renewable energy procurement programs is to attempt to ensure the broadest possible participation. But at the same time a key concern of ours is that WDG projects come online quickly, creating jobs, boosting the economy, helping to meet the state's renewable energy and greenhouse gas emissions goals, and demonstrating the ability of WDG to play a large role in our energy mix. Accordingly, in this case we support a shorter COD deadline because we want to see RAM projects come online quickly and we are comfortable that there are more than enough projects being developing at this time that can bid into the RAM program and come online within 18 months (plus a possible six-month extension for regulatory delays).

An examination of the CAISO and IOU interconnection queues reveals a great number of renewable energy projects 20 MW and below, so there is unlikely to be any shortage of qualified bids in terms of the 18-month COD requirement. (Full deliverability requirements are a different story entirely, however, as discussed above, with very few projects available today under this requirement).

A 36-month COD would mean that the two-year RAM program probably wouldn't see any deployments for three years and half of all RAM projects would not come online until 2016! This would severely impede the ability of the Commission and parties to evaluate the program prior to its expiration and inhibit the WDG market more generally.

k. Changing guaranteed energy production requirements is unwarranted

Both PG&E and SCE propose to increase the stringency of the Decision's requirements for guaranteed energy production.

SCE proposes a requirement of 140% of expected production over two years for wind, 170% over two years for all other intermittent technologies, and 90% over one year for baseload. PG&E states similarly (p. 6): "GEP [Guaranteed Energy Production] = 140% of contract quantity measured over a two year period for as-available resources. GEP = 180% of contract quantity measured over a two year period for baseload resources."

The Clean Coalition does not support these proposals to change the energy production requirements in the Decision because the Decision already struck the appropriate balance between requiring that developers produce sufficient power to justify ratepayer investment and the need to not penalize developers where penalties are not warranted. Variable renewables are, by definition, "variable." Forecasting techniques are improving, but are far from perfect. When we combine the utilities' proposed energy production guarantee requirements with the extremely stringent proposed penalties, the balance is shifted far too much away from what is reasonable to expect from developers.

l. Termination rights need to be clarified

SCE should clarify its contract termination rights further. 2.04(a) (i) (3) does not specify termination periods:

> *Either Party has the right to terminate this Agreement on Notice, which will be effective five (5) Business Days after such Notice is given, if Seller has not obtained Permit Approval of the Construction Permits within [number] (#)months after the Effective Date and a Notice of termination is given on or before the end of the [number] (#) month after the Effective Date.*

m. Threshold for "non-competitive" bids must be defined

SCE fails to provide the threshold above which SCE may reject offers because they are deemed non-competitive.

PG&E also fails to provide this threshold, writing (p. 4 of the proposed RFO): "PG&E retains the discretion, subject as applicable to the approval of the CPUC, to: (a) reject any Offer on the basis that it is the result of market manipulation or is not cost competitive."

The Clean Coalition supports the right of each utility to reject any offer where there is evidence of market manipulation. However, we certainly do not support the utilities' right to reject offers based on an undefined criterion of cost-competitiveness. We propose, instead, that the Commission create a definition of cost-competitiveness for RAM. In particular, we suggest that utilities should be allowed to reject any offer with a base bid price (c/kWh) that is more than 10 percent above the median for the technology at issue for all RAM bids state-wide within the previous six months (allowing previous auctions to count will mitigate the problem of having no appropriate comparisons due to staggered utility auctions)

n. No floor price for energy production damages should be allowed

Accion writes of SCE's RAM proposed floor and ceiling for guaranteed energy production penalties (p. 4): "The risk of extreme situations would fall on SCE who has a mechanism to recover those costs, while providing a reasonable incentive to bidders for performance. For this reason, the 5 cent cap is beneficial

to all parties. However, Accion does not recognize the rationale for the 2 cent floor."

PG&E is also requesting a 2 c/kWh floor for not meeting the Guaranteed Energy Production (see Appendix V to its proposed PPA).

We agree with Accion that there should be no floor price on damages because it could well be the case that failure by a RAM project to meet the Guaranteed Energy Production requirements would result in purchasing spot or short-term contract renewable energy at a lower price, saving ratepayers money. If this is the case, it would be perverse to impose a 2 c/kWh penalty on the RAM project. As such, any penalties below the 5 c/kWh cap should be assessed based on actual damages to the purchasing utility, not an artificial floor.

o. No network upgrade cap should be allowed

SCE proposes a $2.50/MWh network upgrade cap. The Clean Coalition does not support this cap because pre-identified network upgrade costs should simply be part of each bid. SCE's proposed cap would unnecessarily exclude projects that may be more economical on a net basis than those that meet the network upgrades cost cap but have higher net costs. This would perversely lead to higher ratepayer impacts.

The Clean Coalition urges the Commission to disallow any network upgrade cost cap and, instead, clarify at what level IOUs will be allowed to reject bids, as described above.

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/s/

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