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 COMMENTS ON PROPOSED DECISION

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October 29, 2012

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The Clean Coalition respectfully submits these comments on the Proposed Decision filed on October 9, 2012.

The Clean Coalition is a California-based nonprofit organization whose mission is to accelerate the transition to local energy systems through innovative policies and programs that deliver cost-effective renewable energy, strengthen local economies, foster environmental sustainability, and enhance energy security.

To achieve this mission, the Clean Coalition promotes the vigorous expansion of Wholesale Distributed Generation (WDG) — a market segment defined by renewable energy generation that connects to the distribution grid and serves local load. The Clean Coalition drives policy change to remove major barriers to the procurement, interconnection, and financing of WDG projects. Furthermore, to enable higher penetration of clean local energy generation, the Clean Coalition drives policy innovations that support the deployment of Intelligent Grid (IG) market solutions — such as demand response, energy storage, and advanced forecasting.

In summary, we are commenting now to highlight the fact that the Commission, to meet the 2020 RPS mandate and the Governor's 12,000 MW DG goal, will need to dramatically expand SCE's and other IOUs' WDG programs.

I. Comments

a. Clean Coalition supports SCE's proposal to not hold an RFO in 2012

The Clean Coalition supports SCE's proposal to not hold a 2012 RPS RFO – and the Commission's decision to uphold SCE's proposal. We are commenting, however, primarily to demonstrate the numbers required to achieve the remaining RPS obligations from Wholesale DG ("WDG") programs, and to show that SCE's existing WDG programs are wholly inadequate for the scale required to meet the RPS.

The Clean Coalition fully supports SCE's stated intent to rely on WDG for meeting its RPS obligations, rather than traditional central station facilities. We also strongly endorse SCE's statement in its amended RPS procurement plan filed on Aug. 15, 2012 (p. 8), regarding the difficulties facing renewable energy developers in California today, and particularly those seeking to develop transmission-interconnected projects:

> While SCE will continue to seek and contract for renewable resources in the long-term, SCE expects most project proposals to be limited by the scarcity of transmission. Additionally, the long and complicated process for siting and permitting of renewable generation projects, the continued uncertainty surrounding the federal production and investment tax credits, a heavily subscribed interconnection queue, developer performance issues, curtailment, and lack of flexibility in established regulatory processes related to procurement are all major challenges to meeting California's renewable energy goals.

It is for these and other reasons that the Clean Coalition has consistently advocated Wholesale DG (WDG) as the preferred market segment for meeting California's ambitious renewable energy mandates.

b. SCE's WDG programs need to be dramatically expanded to meet SCE's renewable net short

While we support SCE's shifted focus on WDG, we are concerned that the WDG programs in place do not provide sufficient capacity to meet SCE's RPS obligations and do not come close to meeting the broader goal set by the Governor to achieve 12,000 MW of DG by 2020.

SCE states in its Sept. 5, 2012, response to the ALJ request for more information (p. 2):

> As discussed in SCE's First Amended 2012 Renewables Portfolio Standard Procurement Plan ("Amended Plan") and below, SCE is not ending its renewable procurement efforts. To the contrary, consistent with the State's focus on smaller-scale renewable resources and SCE's renewable procurement needs, SCE is temporarily focusing its attention on the numerous solicitations for small renewable resources that it will conduct in 2012 and 2013 pursuant to procurement programs implemented by the Commission. SCE expects to resume procurement of large-scale renewable resources to meet its long-term needs in the 2014/2015 cycle. Furthermore, renewable developers will continue to have many near-term contracting opportunities with SCE, as well as with the other investor-owned utilities, electric service providers, local publicly-owned utilities, and other load-serving entities.

SCE also states (*id*., p. 3):

> SCE intends to focus its near-term efforts on the many legislatively- and Commission-adopted programs establishing procurement goals from smaller renewable generators for the investor-owned utilities, including the Renewable Auction Mechanism ("RAM") program, SCE's Solar Photovoltaic Program "SPVP"), and the California Renewable Energy Small Tariff ("CREST") program, which will soon be expanded pursuant to Public Utilities Code Section 399.20 and re-named the Renewable Market Adjusting Tariff ("Re-MAT") program.

SCE does not, however, engage in any calculation of the capacity of these procurement programs. We do so below, demonstrating that significant expansion of these programs is very likely required to meet SCE's renewables net short and, more importantly, the Governor's 12,000 MW DG goal.

SCE has, essentially, the four WDG programs just described: RAM, SPVP, AB 1969 CREST and the upcoming SB 32/Re-MAT program. SCE's renewable net short is 11.7 billion kWh for the 2017-2020 period, as calculated by SCE itself (without banking) discussed further below. Table 1 shows the capacity remaining in SCE's WDG programs and compares the total capacity to SCE's renewable net short.

The PD accepts SCE's assertions regarding the ability of WDG and future RPS RFOs to meet SCE's renewable net short. The PD states (p. 42): "This decision directs PG&E and SDG&E to amend their 2012 RPS Procurement Plans so that the minimum size of projects measured by the nameplate capacity is greater than three MW. Sufficient opportunities for sellers with smaller projects exist in other renewable programs." The PD also states (p. 52, citing SCE's First Amended RPS Procurement Plan, Appendix A at 5): "SCE reasonably explains that during the time period covered by the 2012 RPS Procurement Plans, it will address any unmet RPS compliance needs through smaller-scale renewable facilities that are less than 20 MW in size."

However, as mentioned, SCE provides no calculations in its amended RPS Procurement Plan, in the pages cited by the PD, or elsewhere. Rather, SCE simply cites the DG programs mentioned above and states that these programs will be sufficient for meeting SCE's RPS needs, with a possible need for additional RPS RFOs subsequent to the 2012-2013 cycle. With respect to additional RPS RFOs at a later date, there will be insufficient time for SCE to meet its 2017-2020 net short by issuing RFOs after the 2012-2013 cycle, due largely to new transmission requirements for most RPS projects (SCE correctly cites, in its amended RPS procurement plan, the lack of available transmission capacity as a major hurdle to achieving the state's RPS mandates). To be clear, if SCE issues an RPS RFO in the 2014/2015 cycle, these projects will not come online before 2019-2020 in most cases, and could take far longer in many cases due to the 7-9 year development cycle for large-scale renewable projects that need new transmission. This problem further exacerbates our key point in these comments: <u>the Commission will need to dramatically expand SCE's and other IOUs' WDG programs to meet the RPS mandate</u>.

The PD cites SCE's planned QF solicitation (PD, p. 53, citing SCE's Amended RPS Procurement Plan, Appendix A at 5) as a viable program for WDG. However, SCE recently presented the details of this program for stakeholders and developers (Oct. 9, Rule 21 Settlement and procurement opportunities conference call) and acknowledged that the pricing available for QFs under this program would be around 4-5 c/kWh. This price is far too low for wind, solar, biomass, geothermal or small hydro, making this new QF program very likely ineffective for most renewables.

The PD appears to make a mistake on p. 54 in citing SCE's calculated net short for the 2017-2020 period. The PD states that this figure is 99,000 GWh. However, SCE's amended plan states that its forecast "procurement quantity requirement" is 99 billion kWh (99,000 GWh) but that its calculated net short is 14.7 billion kWh without banking and 0.4 billion kWh with banking. Using the Commission's methodology, SCE calculates a net short without banking of 11.7 billion kWh.

It would be unwise to rely at this time wholly on banking to meet the 2017-2020 net short, and SCE acknowledges that the potential for banking to meet the net short is uncertain. Unfortunately, SCE's amended RPS procurement plan redacts the numbers necessary to determine how much contracted capacity is likely to be available for banking for the 2017-2020 period. Accordingly, we calculate herein the WDG capacity required to meet the Commission's methodology projected net short without assuming banking is available to meet the full net short.

11.7 billion kWh, or 11,700 GWh, is equivalent to the power produced from 5,342 MW of solar facilities with an average capacity factor of 25%, or 4,452 MW of wind facilities with an average capacity factor of 30%. If we assume, however, that half of the calculated net short will be met with banking, the figures just stated that are required to meet the net short are reduced to 2,671 MW of solar or 2,226 MW of wind. This is far more than is available in SCE's WDG programs, as Table 1 demonstrates.

Table 1. *Remaining MW in SCE's WDG programs.*

Program	MW contracted	MW remaining
SPVP[1]	~94	~156
RAM	262	481[2]

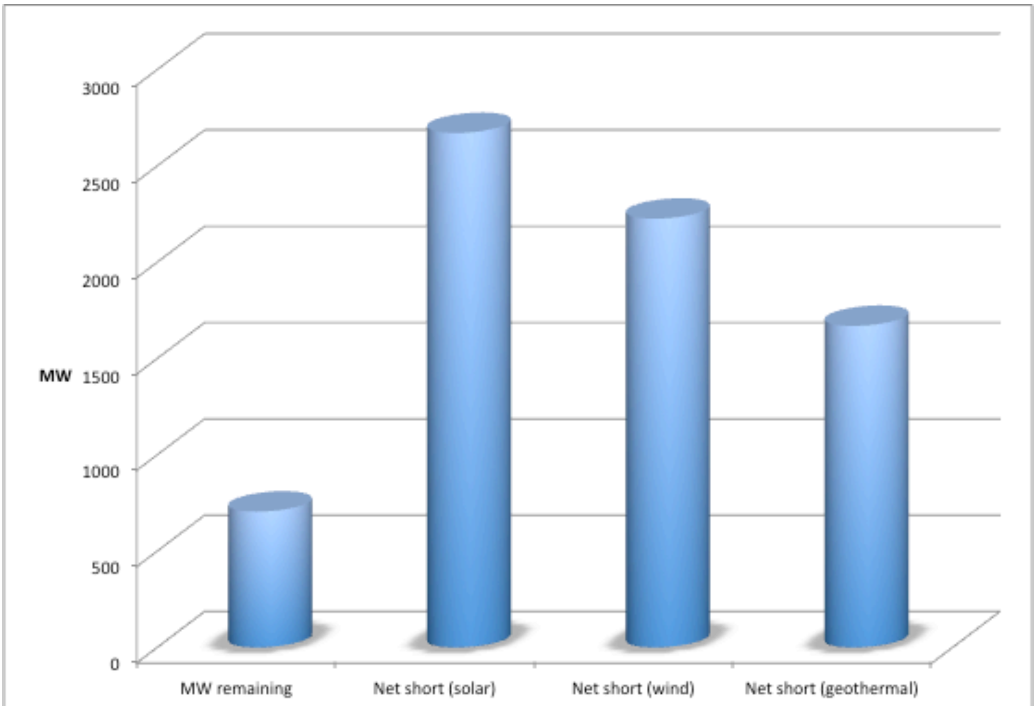
[1] SCE's SPVP was originally a 500 MW program, with half to be owned by SCE (UOG) and half by third parties (IPP). D.12-02-035 upheld SCE's proposal to shift 250 MW of this program to RAM. D.12-02-035 states that approximately 25 MW of UOG is to be procured each year under the new program and the original IPP component was to be 50 MW per year. Three years have been completed now, resulting in our estimate of 75 MW UOG plus 19 MW of IPP contracted so far (according to a communication from SCE's George Wiltsee), for 94 MW total, leaving 156 MW in the program. SCE has not yet issued any public information showing how many UOG MW have been contracted thus far, so the actual figures may be different than our estimates here.

SB 32 Re-MAT	157	68[3]
QF	0	NA[4]
Bilaterals	NA	Disallowed by PD
	Total remaining MW in SCE's WDG programs	705

With only 705 MW likely to be available in SCE's WDG programs, Figure 1 shows graphically how large a discrepancy there is between meeting the 2017-2020 net short using existing WDG programs. If all of this net short is met with solar at a 25% net capacity factor, about four times the existing WDG program capacity will be required, about 3.2 times for wind and about 2.4 times for geothermal. In reality, the WDG programs will contract with a mix of these resources, but very likely with a predominance of solar facilities, bringing the total MW required to meet the net short far closer to the solar calculation than the geothermal calculation.

Figure 1. *Comparing SCE's renewable net short for 2017-2020 with existing SCE WDG programs.*

[2] SCE RAM Advice Letter AL 2785-E-A (Oct. 1, 2012).
[3] This figure is less than SCE's CREST website shows because D.12-05-035 actually reduced SCE's AB 1969 allocation in allocating MW for the new SB 32 program (246 MW to 226 MW).
[4] As discussed above, the pricing provided by the QF Settlement for new QFs is very unlikely to lead to any new projects, so we assume this figure is negligible or zero.



Based on this information, we urge the Commission to reconsider promptly the appropriate size of the existing WDG programs for SCE and the other IOUs. We have been recommending in this proceeding, in various filings, a doubling of the capacity of the SB 32 Re-MAT program and we reiterate that recommendation here. We also believe that the SPVP and RAM programs should be expanded sufficiently to allow these combined programs to meet not only SCE's net short but also to meet the Governor's 12,000 MW DG goal by 2020.

c. SCE is wrong on the impact of ITC on the cost of solar

While we support SCE's decision to not hold a 2012 RPS RFO we feel obligated to point out an error in SCE's reasoning. SCE argues that the Investment Tax Credit (ITC) expiration will have only an 8-10% increase in the price of solar, all else equal:

> [Ev]en if the 30% ITC credit is not extended, and the ITC is reduced to 10% beginning in 2017, the ITC impacts only one portion of a renewable plant's overall costs – financing. While financing can be a substantial portion of overall costs, a reduction in the ITC from 30% to 10% will not necessarily correlate to a 20% increase

> in the overall costs of the project. Instead, keeping all other costs equal, it will more likely result in only an 8-10% increase in overall project costs, since financing generally accounts for about 40-50% of the total cost of a project.

SCE is incorrect in this analysis. The ITC is a direct one-to-one reduction to the cost of a solar project because it allows developers to take a credit equal to 30% of the cost of the project. Accordingly, if there is sufficient tax liability, this reduction is exactly commensurate to a reduction in the cost of the project. The increase in price for a solar project not receiving the currently available ITC, and having to take the 10% ITC instead, will be exactly 20% (30% falling to 10%), all else equal, not the 8-10% that SCE calculates.

III. Conclusion

The Clean Coalition requests that the Commission promptly reconsider the appropriate size of SCE's and other IOUs' WDG programs, in order to meet both SCE's RPS goals and the Governor's 12,000 MW DG goal.

Respectfully submitted,

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Dated: October 29, 2012

VERIFICATION

I am an attorney for the Clean Coalition and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in the foregoing pleading are true.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 29th day of October, 2012, at Santa Barbara, California.

Tam Hunt

Clean Coalition