BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.	Rulemaking 12-03-014 (Filed March 22, 2012)

CLEAN COALITION REPLY COMMENTS ON DECISION AUTHORIZING LONG-TERM PROCUREMENT FOR LOCAL CAPACITY REQUIREMENTS

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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 proven best practices, including the vigorous expansion of Wholesale Distributed Generation (WDG) connected to the distribution grid and serving local load. The Clean Coalition drives policy innovation to remove major barriers to the procurement, interconnection, and financing of WDG projects and supports complementary Intelligent Grid (IG) market solutions such as demand response, energy storage, forecasting, and communications.

The Clean Coalition is active in numerous proceedings before the California Public Utilities Commission and other state and federal agencies throughout the United States, in addition to work in the design and implementation of WDG and IG programs for local utilities and governments. The Clean Coalition has intervened before the Commission on many areas surrounding including SONGS OII (I. 12-10-013), Resource Adequacy (RA), Energy Storage (ES) and various Smart Grid proceedings.

I. Summary of Recommendations

a. The 50 MW of energy storage (ES) procurement target should remain in the Final Decision in the interest of demonstrating ES cost effectiveness and reliability value to the Southern California region and, contrary to the comments of several parties, SCE comply with this target;

b. The 400 MW (excluding the 50 MW for ES) is a relatively low procurement target for renewable resources (including DG) that have substantial potential in the Southern California region in ensuring that there is no shortfall in meeting LCR needs in Southern California, therefore

procurement levels for renewables should be as high as possible;

c. The Commission should eliminate the procurement target of 1,000 MW for fossil fuel conventional generation, as this is not compliant with the State's established Loading Order, established goals such as GHG reduction mandated by AB 32, the RPS goals or the Governor's 12 GW of Distributed Generation (DG) goals, as noted in the opening comments of numerous parties

d. The Commission should give greater consideration to Demand Response in meeting LCR requirements, as noted in opening comments by DRA and CEJA in addition to our own.

II. Discussion

The Clean Coalition would like to reiterate its general support for the Proposed Decision and its importance in the long term planning process. However, as also addressed by a number of other parties, the PD still requires some modification, with specific regard to preferred resources and procurement targets. Due to the high volume of comments submitted by parties, the Clean Coalition will be addressing specific issues of particular relevance to our organization.

a. The 50 MW of energy storage (ES) procurement target should remain in the Final Decision

The Clean Coalition wishes to emphasize that the inclusion of the 50 MW of energy storage (ES) procurement in the PD is an important positive step forward for ES in the state. Several parties in Opening Comments (including PG&E and SCE) recommend that the Commission disregard the procurement target set for ES. The Clean Coalition disagrees. ES is a greatly underappreciated resource in the state and due to the

possibility that SONGS may not return (as addressed by the ISO), we need to ensure that the shortfall can be made up, especially with preferred resources in the interest of long-term planning. While PG&E stated that "…creating a set-aside for storage will only increase customer costs to the extent that storage is not competitive relative to available alternatives,"[1] the Clean Coalition respectfully disagrees with PG&E. Creating a set-aside for ES will both develop and demonstrate cost effective installation of ES and its ability to perform well in the Southern California region. Without establishing both market and operational experience with ES, development of cost effective applications will be greatly delayed. The Clean Coalition remains in full agreement with ALJ Gamson as noted in our Opening Comments, "this [is] a modest level of targeted procurement of emerging resources, and [this is] an opportunity to assess the cost and performance of energy storage resources."[2]

DRA recommends that the 50 MW of ES be designed as a pilot program.[3] The Clean Coalition does not necessarily oppose this, but we emphasize that a pilot program may not be needed, as ES is quickly dispatchable and available now. As we have demonstrated in our Opening Comments, the technology for preferred resources (including ES) are readily available today and the Commission should retain the procurement target for ES. Energy storage (used in conjunction with other resources such as distributed generation and demand response) can provide many benefits to this process, often without the need to build expensive transmission. A few of these benefits include: improved efficiency and reliability from generation to customer, lowered capital investments requirements, and lowered emissions.[4] While SCE claims that "...[the PD] indicate[s] the considerable uncertainty regarding the cost effectiveness of energy storage resources to meet the LCR need in SCE's service territory,"[5] the Clean Coalition believes that SCE should comply with this procurement target in

[1] PG&E at 4
[2] PD at 60
[3] DRA at 8
[4] *Updating the Electric Grid: An Introduction to Non-Transmission Alternatives for Policymakers,* US Department of Energy, September 2009, pg. 13
[5] SCE at 3

consideration of cost effective LCR needs as well as meeting and exceeding established State goals.

The ES proceeding on AB 2514 has established the variety of direct and ancillary functions storage can provide. The Governor's Clean Energy Jobs Plan also "envisions, accelerated development of energy storage capacity to support integration of renewable resources into the California grid. "In addition, storage has been found to be more effective than conventional peaking generation, and may provide greater than one–to-one benefits relative to conventional capacity, particularly as it can provide the equivalent of both generation or load as required. A report by SCE found that CAISO's "control area may require … additional regulation/ramping services from fast (5-10 MW per second) resources. . . Fast (defined as 10 MW per second) storage is two to three times more effective than conventional generation in meeting ramping requirements. Consequently, 30-50 MW of storage is equivalent to 100 MW of conventional generation."[6]

Advanced inverters for distributed renewable energy and battery storage have advanced features that can actively control real and reactive power outputs to support distribution grid reliability and power quality. These advanced functionalities transform distributed renewables from simply reducing load into highly flexible "grid assets" that facilitate much higher penetrations of distributed generation in utility distribution networks. ES and DG resources utilizing these advanced features are the most cost-effective way to enhance grid stability and resilience while integrating high levels of renewable energy, a key enabling technology for the creation of smarter, more efficient, and more reliable local energy systems.

In testimony last year before the CPUC it was noted that: "Many [storage] technologies are approaching commercial availability. These have been tested for viability, are actively looking for partnerships, and are beginning to sign substantial contracts with

[6] Southern California Edison, Moving Energy Storage from Concept to Reality (May 20, 2011) p. 14

customers. Energy storage companies are actively targeting the utility storage market and have established strong external support and momentum. Storage companies are developing internal knowledge about utility interests and priorities and are providing more sophisticated value propositions for their products."[7]

Finally, load shifting storage can provide a complement to DR and efficiency measures. The Southern California Public Power Authority will install more than 6,000 ice storage air conditioning units at 1,500 government and commercial buildings in the next two years representing 53 MW of cost effective peak demand reduction. Even this form of storage may provide some flexible ramping services if used effectively.

b. 400 MW (excluding the 50 MW for ES) is a relatively low procurement target for renewable resources

The Community Environmental Council and the California Cogenerational Council bring up very important points regarding the MW allotted for DR, DG and other renewables. The California Environmental Council claims that only 250 MW is set aside for procurement of preferred resources (excluding the 50 MW for ES)[8] which may be a missed opportunity for this Commission to fill LCR shortfall with renewables (which includes DG). Distributed generation has massive capacity especially in Southern California with the aforementioned transmission constraints and procurement for this resource should be as high as possible. While only several hundred MW are set aside for preferred resources[9], the Energy Action Plan and procurement order requires preferred resources to be given priority where cost effective. Since the proportion of the overall portfolio will include an increasingly smaller share of conventional resources, care should be taken to avoid procuring capacity or encouraging investment in facilities that will become redundant. The Clean Coalition has every reason to believe that DG

[7] Testimony of Bill Powers on behalf of the California Environmental Justice Alliance, CPUC R.12-03-014, June 25, 2012.
[8] SBCEC at 5
[9] The PD (at 2) states that up to 450 MW of preferred resources can be procured

can fill up to at least 100 MW of capacity in SDG&E territory alone, with much greater potential for neighboring areas with additional resources. [10] With this in mind, higher procurement levels of preferred resources should be encouraged in order to meet State goals for GHG reduction and the continuing RPS. The California Cogeneration Council (CCC) recommended setting minimum and maximum procurement target ranges for each preferred resource (similar to the PD's approach for ES).[11] The Clean Coalition does not necessarily recommend setting resource or technology specific targets for each procurement, or to place caps on preferred resources. However, we do support clear overall targets and minimum floors to be achieved across all aggregated procurement, in line with state goals.. In addition, whether or not procurement targets are set for each resource, this Commission should ensure that the overall procurement target for preferred resources should not merely match current RPS targets, but contribute toward improving the overall portfolio; if only 33% of all new procurement were renewable, California would not meet the RPS until all existing generation was retired and would never exceed this minimum. We recommend that new procurement set renewable minimums at the highest level that is practical and cost effective.

c. The Commission should eliminate the procurement target of 1,000 MW for fossil fuel conventional generation

As addressed in our joint Opening Comments with NRDC and the SBCEC, the Clean Coalition joins in support of CEJA and DRA in opposing the minimum procurement level of fossil fuel conventional generation. This is wholly inconsistent with the Loading Order and in GHG reduction goals. This PD makes important strides for preferred resources and the minimum procurement level of 1,000 MW for conventional generation contradicts this progress.

[10] SDG&E has over 1,500 MW of commercial rooftop PV potential and twice as much ground based and residential rooftop. SDG&E CSI projects alone are on track to provide over 100 MW by 2016. SCE has over 100 MW of commercial rooftop PV online by the end of 2012. LADWP announced an initial 150 MW program. SCE projects that it will have 1,900 MW of DR by 2014

[11] CCC at 2

Our support for DRA, CEJA and other parties in opposing any and all procurement target set aside for fossil fuel conventional generation is made in the interest of moving this Commission towards a realistic and achievable renewable future, made more possible by the procurement targets set in this PD. All additional resources beyond the minimum preferred procurement should be considered without implicit or explicit exclusion to avoid undue reductions in the procurement of any preferred resource.

d. The Commission should give greater consideration to Demand Response in meeting LCR requirements

DRA recommends that the Commission direct SCE to work with the California Independent System Operator (CAISO) to develop, identify, and quantify demand response programs that are locally dispatchable and are capable of reducing LCR need. (DRA at 3) DR is an important resource and its examination by the Commission, utilities and the ISO is important, as its benefits are often not fully appreciated (especially by SCE or the ISO). As mentioned in our Opening Comments, PJM has had success with DR programs in their capacity and their success should be a clear example of best practices for this resource. We support the recommendation of DRA to study DR programs that would reduce LCR need in Southern California and look to best practices and success with this program (such as PJM) and the exhibit submitted into the record by CEJA (which identifies differing DR programs in the LA Basin). CEJA identifies over 1,000 MW of DR value in the LA Basin: this should be heeded by the Commission and included in modeling.

The Clean Coalition estimates (based on information from the 2010 LTPP) that 2,842 MW of DR resources would be available in the SCE territory in 2020[12], much of which

[12] CPUC, R.10-05-006, December 2010 Scoping Memo, Appendix 1 at p. 60.

can be made available by the 2013 and 2014 peak demand periods. The Clean Coalition also estimates 100 MW of additional DR in the next year for SDG&E, and we predict much greater potential for DR in the following years and neighboring areas. SCE projects that it will have 1,900 MW of DR by 2014, a corresponding 250,000 MWh per year of energy savings by 2014, and an additional 1,000 MW of AMI-enabled DR by 2017[13]; these timetables could be advanced. All of these projections demonstrate that DR is a viable option and should be reflected in the Final Decision.

The Clean Coalition is in complete agreement with EnerNOC in expressing concern that the Commission's adoption of CAISO's view that "demand response resources cannot now meet or reduce local capacity requirements."[14] To discount DR the way that the Commission does in this PD is to disregard existing policy in DR from the RA proceeding. In addition, this policy is not consistent with the Loading Order, which places DR at the top with EE. The PD supports strict adherence to the Loading Order, and as such, DR should be regarded as a priority. In addition, as discussed in our Opening Comments, the Clean Coalition continues to recommend that aggregated EV DR and residential DR can and should be considered as additional DR potential and be further analyzed. The Final Decision in this proceeding should heed all recommendations to include DR procurement targets and to recognize its ability to provide decreased local capacity requirements, consistent with the RA proceeding and existing Commission policy.

III. **Conclusion**

The Clean Coalition is appreciative of the opportunity to provide reply comments on the PD and we urge the Commission to incorporate our recommendations into the Final Decision.

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[13] CPUC, Commission Decision 12-04-045, (Apr. 19, 2012), at p. 13.

[14] EnerNOC at 5

Respectfully submitted,

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