BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Consider Policy and Implementation Refinements to the Energy Storage Procurement Framework and Design Program (D.13-10-040, D.14-10-045) and Related Action Plan to the California Energy Storage Roadmap.	Rulemaking 15-03-011 (Filed March 26, 2015)

CLEAN COALITION REPLY COMMENTS ON TRACK 2 ISSUES

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CLEAN COALITION REPLY COMMENTS ON STORAGE TRACK 2 ISSUES

I. INTRODUCTION

Pursuant to the January 5, 2016, *Assigned Commissioner and Assigned Administrative Law Judge's Scoping Memo and Ruling Seeking Party Comments* ("Scoping Memo"), the January 14, 2016, *Email Ruling in R.15-03-011 Granting request for an extension of time to file comments on Track 2 issues in response to the Assigned Commissioner and Administrative Law Judge's Joint Scoping Memorandum and Ruling Seeking Party Comments,* and the February 10, 2016 *Email Ruling in R.15-03-011 Granting Request for an Extension to Reply to Track 2 Opening Comments,* the Clean Coalition hereby submits these reply comments on Track 2 issues. The Clean Coalition appreciates this opportunity to comment on the energy storage program.

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.

The Clean Coalition provides a reply to various issues related to Questions 1 and 3 from the Scoping Memo, which cover revision of the Energy Storage Procurement Targets and Multiple-Use Applications, respectively.

II. REPLY COMMENTS

1. Revision of Energy Storage Procurement Targets

While the Clean Coalition supports taking decisive steps to avoid excess curtailment of renewable energy, we believe this will be most effectively addressed through development of a technology-agnostic planning and market system to manage energy load and supply. It is important and appropriate for the Commission to support the development of immature technologies and their participation in the market. However, at this stage in the State's storage procurement process, increasing the level of procurement of this specific technology is not warranted. While increased storage procurement would certainly provide means to avoid curtailment, it may not be the most cost-effective solution. Instead, the Commission should focus on building a system that sends useful market signals to encourage the most precise matching of resources to need while ensuring that the full capabilities and value of those resources are recognized and employed. The best vehicles for designing a competitive and responsive market are the Integrated Distribution Energy Resources proceeding and the recently instituted Integrated Resources Planning proceeding.

The Clean Coalition supports the Environmental Defense Fund's suggestion that the Commission consider having third parties manage the utilities' request for offer processes. As mentioned by EDF, the third-party approach has led to significant savings in other jurisdictions.[1] Separating the procurement process from utilities would also ensure that procurement decisions are based purely on cost-effectiveness and the strength of individual proposals. The Clean Coalition has also highlighted the need to improve transparency in the procurement process in order to lower costs for ratepayers and

[1] *See, e.g.*, GridSolar, LLC, *Interim Report Boothbay Sub-Region Smart Grid Reliability Pilot Project*, Central Maine Power Request for Approval of Non-Transmission Alternative (NTA) Pilot Project for the Mid-Coast and Portland Areas, Docket No. 2011-138 at 2-3 (Mar. 4, 2014).

support a more robust energy storage market supplying the resources best matched to the system's functional and location specific needs.[2]

2. *Multiple-Use Applications*

a. Use Cases

The Clean Coalition supports prioritizing the use cases described in the California Energy Storage Alliance's ("CESA's") comments. We are particularly supportive of addressing issues with behind-the-meter ("BTM") storage systems providing services to the host customer (such as demand charge management) while participating in the CAISO energy markets through aggregation. This storage configuration will potentially proliferate with SCE's contracting of 135 MW of BTM systems that will come online within the next few years, and we agree with CESA that a variety of metering issues will need to be addressed—namely the overlapping of compensation and potential conflict of services.

b. Cost-Recovery Issues and Double-Charging

Pacific Gas & Electric ("PG&E") suggests that the Commission should not allow net energy metering ("NEM") paired storage to participate in the wholesale market because it would result in double compensation. The Clean Coalition disagrees with this characterization and recommends that the Commission not categorically prohibit NEM-paired storage from participating in the wholesale market. Instead, the Commission should carefully review the services that NEM-paired storage can provide in order to prevent improper double-counting.

In cases where a storage system provides multiple services that would otherwise be individually compensated, the system owner should receive full compensation for each service. Where facility owners are able to more fully utilize the capacities of their system and spread the cost of operation across multiple revenue sources, those facilities can afford to offer services at lower unit prices and drive downward market pricing, which benefits ratepayers. Rather than restrict facilities from accessing markets or fully utilizing their capacity, the more efficient approach would be to coordinate between the sectors purchasing and receiving these services. If the utility contracts for the control of the facility, it can then optimally utilize that facility to meet both local and system level

[2] *Clean Coalition Reply Comments on Track 1 Issues*, R.15-03-011, filed August 3, 2015.

requirements, rather than neither contracting for operational control nor allowing the operator to utilize that control to meet other market demands. When an IOU or CAISO would each compensate storage owners for individual services, there is no reason to prevent compensation of both.

In comparison to schemes where utilities pay separate resources for separate services, it would be improper to deny a storage system owner payment for both services without further explanation. While a facility owner might receive compensation from two sources for a single action, we note that the single action will also influence both markets—by responding to demand in one market, the need for additional procurement in both markets is reduced, and it is not evident that ratepayers will in fact incur excess costs. On the contrary, a properly operating market will be better optimized for efficient use of resources. For this reason, the Clean Coalition urges the Commission to provide a much more careful review of potential double-counting scenarios before adopting PG&E's suggestion that NEM-paired storage be wholly prohibited from wholesale market participation. The compensation system should focus on the services delivered and be agnostic to both the technology and contractual relations in the independent provision of other services.

The Clean Coalition disagrees with Southern California Edison's contention that the IOUs need tools beyond contractual obligations and potential penalties to prevent conflicting uses from occurring. The flexibility afforded to parties in contracting are the best and most efficient way to manage conflicting uses. Contracts provide parties with clearly demarcated responsibilities, penalties, and dispute resolution procedures. The Clean Coalition does not agree that initial locational analysis and screening would be necessary to manage contracts with storage systems providing multiple services.

However, the Clean Coalition strongly supports the use of locational analysis to both determine any location specific variation in the value of services and encourage siting storage in areas of the grid where it would be most beneficial. Much of this work will be performed in the DRP proceeding, but in the meantime, the IOUs could publish information showing specific areas where storage systems would provide the highest level of locational benefits. The Clean Coalition urges the Commission to require the utilities to make this information available to potential bidders in the request for offer

process. Bidders could then see constrained areas on the grid and tailor their proposals to best meet the needs of the utilities. Lastly, information on local constraints of the distribution system should be used in determining dispatch and compensation processes.

Using locational analysis as a screening tool would be a highly inefficient approach because it judges proposals based on criteria that the bidders cannot review ahead of time. The quality of proposals would improve if potential bidders had access to information on system constraints and opportunities. Additionally, suppliers could self-select out of the process when their proposals are not feasible under the published location specific valuations or constraints. Compensation schemes for storage systems should also capture locational benefits that are providing unique value. This would further incentivize storage projects that meet local needs.

c. Interconnection Requirements

PG&E also noted in its interconnection comments on this matter that current interconnection processes do not take into account the stresses that aggregations of DERs participating in the wholesale market may place on the distribution system. The Clean Coalition understands that this may be a possibility and urges the Commission to consider a Distribution System Operator ("DSO") model as a solution under which the distribution operator coordinates the aggregate response of distribution resources to respond to system level needs and dispatch signals, while optimizing the response of individual facilities in relation to local distribution level needs and value. A DSO approach would be more efficient than managing conflicts through piecemeal regulatory fixes. A DSO system would allow individual operators to manage the unique constraints and opportunities of DERs, enabling the optimal use of resources while also ensuring the integrity of the distribution grid. This would provide for more finely-tuned management of the distribution system, rather than placing onerous constraints on DER projects. The Clean Coalition believes the DSO model to be the obvious solution to a range of issues surrounding DER.

d. *Metering and Submetering Requirements*

The Clean Coalition does not have any reply comments on this subject.

e. Dispatch and Prioritization

With respect to prioritization, the Clean Coalition agrees with PG&E's suggestion that the Commission should establish the requirement that any contracted reliability services for multiple-use storage applications be prioritized ahead of any retail load shifting or wholesale market participation. Reliability of the grid should be the primary obligation of any storage unit contracting for that service. On the topic of dispatching issues related to storage systems, the Clean Coalition again renews its recommendation that the Commission encourage the adoption of DSO systems to manage dispatch of storage resources.

III. CONCLUSION

The Clean Coalition appreciates this opportunity to respond to parties' comments on Track 2 issues in this proceeding and supports the Commission's continued work on the energy storage program.

Respectfully submitted,

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