BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Pursuant To Assembly Bill 2514 to Consider the Adoption of Procurement Targets for Viable and Cost-Effective Energy Storage Systems.	Rulemaking R-10-12-007

REPLY COMMENTS OF THE GREEN POWER INSTITUTE ON THE AC'S RULING PROPOSING STORAGE PROCUREMENT TARGETS

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Introduction

Pursuant to the June 10, 2013, *Assigned Commissioner's Ruling Proposing Storage Procurement Targets and Mechanisms and Noticing All-Party Meeting*, in Proceeding R.10-12-007, the **Order Instituting Rulemaking Pursuant to Assembly Bill 2514 to Consider the Adoption of Procurement targets for Viable and Cost-Effective Energy Storage Systems**, the Green Power Institute (GPI), the renewable energy program of the Pacific Institute for Studies in Development, Environment, and Security, provides these *Reply Comments of the Green Power Institute on the AC's Ruling Proposing Storage Procurement Targets*. Our *Reply* discusses the topics of procurement targets, the RAM procurement mechanism, definition of use cases, ownership and operation of storage systems, and commercialization of emerging technologies.

There were more than forty sets of *Comments* filed in this docket on July 3, 2013. Due to limited time and resources we were unable to review and analyze all of them, but we did review enough of them to get a flavor for what the most important issues are. Thus our *Reply* addresses the issues that we believe are most important to the parties, without being able to address individually the *Comments* of all of the filing parties.

Procurement Targets

Based on the sampling of *Comments* that we were able to review, there is a good deal more sentiment opposing the setting of procurement targets for storage systems than supporting it. In our own *Comments* we supported the concept of setting overall procurement targets, provided that they are separate from any particular procurement mechanism or program, can be satisfied by any kind of storage technology, and are set for

the two dates specified in the statute, Dec. 31, 2015, and Dec. 31, 2020. We continue to support setting these kinds of overall procurement targets, but we agree with a number of the parties that we really ought to be further along in terms of understanding the cost-effectiveness and greenhouse-gas-reducing effectiveness of storage systems before rational and reasonable target levels can be set.

In our remarks at the all-party meeting on June 25, 2013, and in our *Comments*, we urged the Commission to specify that whatever overall procurement targets, or allocations for specific procurement mechanisms, that are formulated in this proceeding be expressed in terms of on-line, operating storage capacity, rather than in terms of contracts signed for some amount of capacity from projects-in-development. We note that CESA is also concerned about the proposal's use of the term procurement targets to refer to contracts for new capacity, rather than to capacity in operation. They offer a slightly different approach to dealing with the issue, but their intended endpoint is the same – procurement targets and allocations for procurement mechanisms should only be able to be fulfilled with actual operating capacity, not with contracts for projects-in-development.

The RAM Procurement Mechanism

Based on our sampling of the *Comments*, there was even more opposition to the use of the reverse-auction mechanism (RAM) for the procurement of storage than there was to the setting of procurement targets. All three IOUs oppose it, as do a variety of parties representing developers, environmental interests (including GPI), and ratepayers (DRA). Of the *Comments* that we were able to review, only those of TURN and the Consumer Federation supported the use of the RAM. We continue to believe that the RAM is not a good fit for storage, which is both in the early stages of commercial development, and composed of too broad a range of products and services to be adequately targeted in a RAM solicitation. We continue to recommend that the Commission consider other procurement mechanisms that may be more suitable for this still emerging market, such as demonstration projects and targeted RFOs.

Definition of Use Cases

The proposal in the AC's *Ruling* sets procurement targets for each IOU in three categories: transmission, distribution, and customer. In their *Comments*, CAISO and SCE, among other parties, ask for a clarification of the definition of the use categories that are used in the proposal. They point out that the use cases that were developed for the previous phase of this proceeding are based more on the applications for the defined storage installations than on the voltage of the circuit they are connected to. We agree that the driving factors behind the use cases is applications, and that dividing targets among transmission, distribution, and customer categories does not really ensure a diversity of technologies or applications for storage systems. We join their request for clarification of the use-case categories, if the Commission decides to use market segmentation in future procurement targets, or allocations for storage procurement solicitations.

Ownership and Operation of Storage Systems

The GPI has emphasized throughout this proceeding the fact that storage is fundamentally different than generation, and that some of the policies that have been developed for the procurement of generation may not be optimal for the procurement of storage. On area in which we believe this to be the case is in the rules governing the ownership of storage installations. The proposal in the AC's *Ruling*, which is modeled on rules that were developed for the RPS program, would restrict utility ownership of storage systems qualifying for the target to a maximum of fifty percent. The IOUs argue that there should be no such limitation, and that they should be able to be sole owners of storage installations that are designed to provide operational services to parts of the grid that they own and/or operate.

We agree with the IOUs that there is no compelling reason to place restrictions on utility ownership of storage systems. Storage systems do not add new generation to the integrated grid, rather they are tools that allow the energy fed into the grid to be used

more efficiently and effectively. Storage systems that are dedicated to providing operational services to the grid might very well be operated more effectively if they are under the full operational control of the grid operator, rather than being operated subject to terms and conditions in a contract that may be far from optimal in terms of allowing the full suite of the services that the storage installation is capable of delivering to be effectively utilized. Please note: We are not in any way arguing against providing for the development of non-utility (private) ownership and operation of storage systems of all varieties. We are simply arguing against imposing limitations on utility ownership.

Commercialization of Emerging Technologies

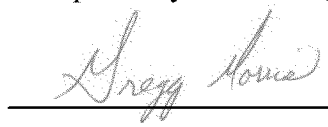
In their *Comments*, DRA and a number of other parties argue that storage should compete unfettered in the greater energy marketplace with generation and other resources for the provision of goods and services. We agree that this is the desirable long-term goal for storage systems. However, simply allowing storage to compete in the general electricity marketplace at this point in time is not appropriate for this promising set of technologies, many of which are still in the early stages of market commercialization. An effective policy for promoting the development of the emerging marketplace for storage will have to provide some means of underwriting the one-time, above-market costs associated with commercialization, in order to allow the process of market conditioning to proceed expeditiously.

The storage-policy design question that ought to be asked is: What is the most efficacious way to provide commercialization support to a variety of energy storage technologies and applications in order to allow storage to achieve a state where it can compete without incentives or support in the greater energy marketplace? The GPI believes that the most effective way to facilitate the commercialization of energy storage at this point in time is by supporting a series of demonstration projects and targeted solicitations for storage systems, as well as supporting other procurement programs that

can elicit storage-system installations, such as the RPS in its efforts to promote renewable generators that include storage systems in their projects.

Dated July 19, 2013, at Berkeley, California.

Respectfully Submitted,



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