

**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 10-12-007  
(Filed December 16, 2010)

**REPLY COMMENTS OF PILOT POWER GROUP, INC. ON THE ASSIGNED  
COMMISSIONER'S RULING PROPOSING STORAGE PROCUREMENT  
TARGETS AND MECHANISMS**

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Dated: July 19, 2013

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**I. INTRODUCTION**

In accordance with the Assigned Commissioner’s Ruling Proposing Storage Procurement Targets and Mechanisms (the “Proposal”), dated June 10, 2013, Pilot Power Group, Inc. (“Pilot Power”) hereby submits the following Reply Comments regarding the above captioned proceeding addressing the issues identified in the Proposal and the Opening Comments filed by affected parties on July 3, 2013.

**II. REPLY COMMENTS**

The Assigned Commissioner’s Ruling (ACR) set forth specific issues on which Parties commented upon and submitted on July 3, 2013 . Pilot Power respectfully submits the following Reply Comments to specific issues identified by the Commissioner and commented upon by various affected parties.

**A. Overwhelming Consensus on Numerous Issues**

It seems important to acknowledge that there was an overwhelming consensus on many, if not most issues. At some level, a majority of the commenters seemed to agree on the following:

(1) Setting inflexible targets is premature. As the Division of Ratepayer Advocates (“DRA”) states in its Opening Comments, “Because the law only requires targets if they are “appropriate,” the Commission is not obligated to adopt targets in order to comply with the law. ” (DRA Comments, at p.1) Setting targets at this time is not appropriate. The Commission should exercise its discretion to delay the issue of setting targets until the many unanswered questions can be better understood, including, without limitation, does storage need to be a cost-effective solution compared to any other alternative? which, if any of the proposed technologies are viable? which are cost-effective? should grid needs determine when and what kind of storage is procured rather than arbitrary targets and/or buckets? (Naturally those companies who are engaged or are trying to engage in the business of selling energy storage all favor mandatory and inflexible targets, some even argue for higher targets. This is quite understandable given their financial self-interest in this issue. What business trying to survive and make a profit would not love to have the government compel people to buy their products?);

(2) The Reverse Auction Mechanism is not the appropriate tool for procurement of energy storage;

(3) Pumped Hydro should not be excluded from consideration if there are to be targets;

(4) Amounts which exceed a certain period’s target should be considered toward the next period’s targets;

(5) If there are to be targets for certain buckets, flexibility should be allowed;

(6) Off-ramps should be allowed for cost-effectiveness;

(7) There should be some coordination with the RPS and RA proceedings if only to acknowledge that storage procured for RPS or RA should count toward any energy storage targets; and

(8) Cost caps are not currently appropriate. With so many of the parties reaching similar conclusions on these issues, Pilot Power sees no reason to elaborate on them further as the Commissioner seems to have received sufficient feedback to make an informed decision.

**B. Underwhelming Responses on Options for ESP and CCA Participation**

In contrast, there was an underwhelming amount of response on the options presented in the Proposal for ESPs and CCAs. This lack of response could be due to the fact that energy storage is not truly meant to be implemented on a small scale, which is why most responses concentrated on the utilities' role and not the role of ESPs or CCAs.

**C. The Utilities Should Procure Energy Storage As Part Of Their Obligation To Own, Operate And Maintain Their Distribution Grid For All Their T&D Customers, Not Just For Bundled Customers.**

As Shell Energy North America ("Shell"), an ESP, stated in its opening comments, "The direct access and CCA programs were established to allow a customer and its supplier to work together to develop an energy procurement strategy and portfolio that best fits the customer's requirements...[E]nergy storage does not create energy. Energy storage merely moves energy to a higher valued time period." (Shell Opening Comments, at p.4) And while an ESP or CCA may want to utilize energy storage as part of its portfolio, energy storage in itself is not part of the energy procurement function that was unbundled from the Investor Owned Utilities ("IOUs") when the electricity market was restructured.

In its Comments, Shell effectively demonstrates that energy storage is really part of the grid reliability function for the transmission and distribution grid that is owned, operated and/or controlled exclusively by the IOUs and the California Independent System Operator ("CAISO"),

under the supervision of this Commission. Shell noted, “The Commission must recognize that ESPs and CCAs are not responsible for planning, operating or maintaining the IOUs’ transmission and distribution systems. ESPs and CCAs should not have an obligation to purchase storage to meet the IOUs’ transmission and distribution responsibilities.” (Shell Comments, at p.3) Pilot Power, shares Shell’s view that ESPs and CCAs should not be required to purchase a specific amount of energy storage. Imposing mandated targets on ESPs and CCAs to procure energy storage to fulfill the grid management and grid reliability functions of the IOUs and/or the CAISO (which under California’s restructuring of the electricity market are and remain the monopoly functions of the IOUs and the CAISO) undermines the very purpose of deregulation: to allow ESPs and CCAs to compete with the IOUs in the procurement of energy for retail customers.

Southern California Edison (“SCE”) had a frank and honest assessment of its role in energy storage. In its Opening Comments, SCE unambiguously stated:

“Distribution assets play a distinct role within the power system compared to generation assets and thus require different regulatory treatment. Power generation and wholesale power transactions are open to competition in California and the wholesale energy markets enable sellers to be paired up with buyers. By contrast, utilities have the sole responsibility and obligation to ensure the safe and reliable delivery of power at the local level. Accordingly, a utility is responsible for operating its own electric distribution grid, including . . . owning, controlling, operating, managing, maintaining, planning, engineering, designing, and constructing its own electric distribution grid.” Consequently, utilities have the right to own and operate the distribution assets that comprise the distribution grid, which will allow utilities to facilitate the deployment of distribution technologies encouraged by the Commission such as distributed generation.

Energy storage assets that provide a distribution reliability function are part of the distribution grid and are ‘distribution assets’ that should be owned by the utility that provides distribution services.”

(SCE Opening Comments, at p. 9) With respect to ESPs, CCAs, and/or CAs energy storage procurement obligations, SCE concludes quite forcefully that the utilities should procure energy storage, not ESPs, CCAs, or CAs. SCE argues,

Storage provides much of its value through “grid services,” or the ability to improve the reliability of the grid beyond simply scheduled energy. To provide this value, it must be procured and deployed according to the grid’s needs. It may be more effective for utilities (rather than ESPs, CCAs, or CAs) to do this because utilities as grid operators can best assess this value. From a grid perspective, the non -utility-procured storage might end up being deployed in a random manner and is thus unlikely to maximize the potential grid services value of storage. Moreover, the procurement of larger quantities of storage by the utilities may allow for greater cost reductions that come with large-scale procurement.

(SCE Opening Comments, at p. 18) SCE further notes that , “Establishing individual procurement targets for each ESP, CCA and CA would be difficult and will likely result in costly and inefficient energy Storage deployment without achieving the Commission’s objectives of market transformation and technology deployment.” (SCE Opening Comments, at p. 18) SCE concludes that as the overwhelming majority of functions provided by energy storage are transmission and distribution related functions that are the sole responsibility of the utilities and/or the CAISO, the utilities (not ESPs, CCAs, or CAs) should procure energy storage when, where, and as needed. With respect the issue of fair allocation of costs among all retail end use customers, SCE agrees with Pilot Power that energy storage that performs a distribution function should be part of the utilities ’ distribution wires charges to all customers, including Direct Access (“ DA”) customers—no special charge or mechanism is needed. (SCE Opening Comments, at p. 19) With respect to behind the meter (“BTM”) energy storage that may be installed, SCE again agrees that it can be handled like energy efficiency, demand response, and similar programs through existing distribution charges—again no special charge or mechanism is needed. (SCE Opening Comments, at p. 19) Finally, with regard to energy storage that provides

a transmission function, SCE states that all customers can be fairly charged through either 1) CAISO TAC charges, 2) utility distribution charges, or 3) through a Cost Allocation Mechanism (“CAM”). (SCE Opening Comments, at p. 19) With the exception of the third option, use of a CAM, Pilot Power agrees with SCE. Because of the difficulties of establishing a CAM that achieves true bundled customer indifference, because of the inefficiencies of such an approach, it makes far more sense to employ CAISO TAC and/or existing distribution charges as the means to fairly ensure that all customers pay their fair share.

While San Diego Gas and Electric (“SDG&E”) does not go nearly as far as SCE in their analysis of these issues, SDG&E agrees that the IOUs should own, operate and/or control energy storage. With respect to distribution level storage, SDG&E argues, “The IOUs should be able to own up to 100% of distribution sited storage. For distribution applications the utility has the responsibility for planning and operating the distribution system.” (SDG&E Opening Comments, at p. 9) With respect to transmission level storage, SDG&E similarly stated, “The IOUs should be able to own up to 100% of transmission sited storage. As a practical matter, locating transmission level energy storage systems at existing transmission substations will be less costly than connecting these systems at other transmission locations. For safety, reliability, maintenance and liability reasons, SDG&E is unlikely to permit third party ownership of facilities within SDG&E transmission substations.” (SDG&E Opening Comments, at p. 11) With respect to ESPs, CCAs and CAs, energy storage procurement, SDG&E states, “SDG&E preference would be to own and operate the energy storage systems for ESPs and CCAs customers and assess the costs through a cost allocation mechanism on a non-bypassable basis. (SDG&E Opening Comments, at p. 17) As Pilot Power argued in its Opening Comments, and above in this Reply, since energy storage really addresses transmission and distribution grid

management and grid reliability functions (as opposed to energy procurement which is the portion of the electricity market open to competition by ESPs, CCAs, and CAs), a CAM is not the appropriate mechanism. Instead, the existing transmission and distribution wires charges (including charges similar to DR or EE charges for BTM applications) are the appropriate mechanism to ensure that all retail electricity consumers pay their fair share of the costs associated with maintaining grid reliability and grid integrity through IOU procurement of cost-effective energy storage systems. No special CAM is required or warranted.

Pacific Gas and Electric (“PG&E”) agrees with SCE and SD G&E that it should own and operate distribution level energy storage, stating “The ACR should be modified to clarify that the Commission is not intending for third parties to own and operate storage projects that perform utility distribution reliability functions. Public utilities code 399.2(a)(2) requires that a utility to be responsible for owning and operating the distribution grid. ” (PG&E Opening Comments, at p. 13)

But in discussing ESP, CCA and CA involvement in energy storage, PGE took an entirely inconsistent position than the one cited above,, regardless of the fact that ESPs and CCAs, do not have any right or obligation to plan, manage, maintain or otherwise operate the transmission and distribution grid. PGE argues that ESPs and CCAs should be required to procure their own energy storage separate from the utilities, and also to pay “their share” of the Commission’s administrative costs (without any explanation of the basis for such administrative cost payments). (PG&E Opening Comments, at p. 16) This seeming inconsistency in PG&E’s position is never explained. If as PG&E argues earlier in its Opening Comments that PG&E **must** own and operate energy storage that performs a transmission or distribution grid function and third parties cannot own or operate such systems, then it would be impossible, as PG&E later



argues, for ESP's and CCAs to own or operate energy storage systems within PG&E's service territory. How would those systems owned, operated or controlled by ESPs and/or CCAs be integrated into PG&E's transmission and distribution system? It appears that rather than take a thoughtful approach as SCE has done, PGE inserted their "go-to" reflex argument that ESPs and CCAs have to do everything a utility has to do. While in some contexts that is true, transmission and distribution grid management and grid reliability are not areas where ESPs and CCAs are even permitted to operate. Perhaps PG&E merely wants to put ESPs and CCAs at a competitive disadvantage by compelling them to perform a utility function --procuring grid management and grid reliability assets.

The Alliance for Retail Energy Markets ("AREM") made a passionate and well-reasoned argument against the use of a CAM for assessing costs to ESPs and CCAs. Pilot Power endorses AREM's arguments regarding the CAM and the avoidance of DA customers paying twice for energy storage resources. Where Pilot Power and AREM part company, is exactly by whom and how energy storage should be procured for DA customers. Perhaps because the utilities have been so critical in the past of ESPs and CCAs not doing their "fair share", AREM does not want to appear to be shirking responsibility for energy storage. Looking at PG&E's Opening Comments one can understand AREM's sensitivity. However, rigid adherence to ideology as opposed to common sense, practical approaches has caused significant problems in the electricity market in California in the past. As a result, California retail electricity customers are paying more for their electricity than they should. The Commission has the opportunity to avoid that pitfall here. Both SCE and SDG&E clearly recognize that it is far better, more efficient, and better recognizes the vast difference in transmission and distribution system responsibilities between IOUs and ESPs and CCAs, to have the IOUs procure energy storage for all of its

transmission and distribution customers (which include all DA customers) , and charge for such procurement in the existing transmission and distribution wires charges. This ensures that all customers pay their fair share without lengthy and confusing disputes over a CAM, avoids any issues with customer migration, and allows the IOUs to own, control and manage the transmission and distribution assets, as they must under law. As stated in the opening comments of Pilot Power, Shell and SCE, energy storage supports grid reliability and primarily concerns Transmission and Distribution (T&D) of which ESPs and CCAs have no control. The simplest and most cost-effective approach is for the utilities to procure storage for all of its T&D customers and charge all ratepayers in their T&D charges.

### **III. SUMMARY**

It is not appropriate at this time to set targets for any LSE to procure energy storage. It is too soon to determine whether the majority of energy storage technologies are viable, it is also too soon to determine whether any are cost-effective. The Commission, therefore, should exercise the discretion granted to it by the legislature in Assembly Bill 2514 and find that it is not appropriate at this time to set targets for any LSEs.

In the event the Commission does establish targets for LSEs, neither option presented in the Proposal is the correct route for ESPs and CCAs. ESPs and CCAs are not T&D service providers. Restructuring of the electricity market separated energy procurement from T&D services. Only energy procurement was unbundled - T&D services remain the monopoly business of the utilities. Energy storage is primarily a grid reliability issue and not an energy procurement issue. Storage does not create energy; it simply defers usage of energy from the time it is created to a later time when it is needed on the grid. The CAISO and the utilities own and/or control the transmission and distribution systems. They have the obligation and the

monopoly control over the systems to ensure grid reliability. They know where storage is needed, how to integrate it with their systems, and in many cases already have the land and rights of way necessary to site storage. It is far simpler, more direct, and more likely to achieve the legislative goal of cost-effectiveness if the utilities handle energy storage as part of their transmission and distribution grid management and grid reliability obligations.

Dated July 19, 2013

Respectfully submitted,

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/s/ Michelle Middleton

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## VERIFICATION

I, Thomas R. Darton, am an officer of Pilot Power Group, Inc. and am authorized to make this verification on its behalf. The matters stated in the foregoing **REPLY COMMENTS OF PILOT POWER GROUP, INC. ON THE ASSIGNED COMMISSIONER'S RULING PROPOSING STORAGE PROCUREMENT TARGETS AND MECHANISMS** are true of my own personal knowledge, except as to matters which are stated therein on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this Verification is executed this 19th day of July, 2013, at San Diego, California.

/s/ Thomas R. Darton  
Thomas R. Darton