Agenda for Energy Storage Procurement Workshop
10 am – 3 pm
January 14, 2013
CPUC Auditorium

The goal: To establish a record for decision making in R.10-12-007 to satisfy the terms of AB 2514 (PUC Section 2836) with regard to establishing potential energy storage procurement targets for load-serving entities (LSEs).

Responsive to AB 2514, which requires the CPUC:

1. To open a proceeding to determine appropriate targets, if any, for each load-serving entity to procure viable and cost-effective energy storage systems.

2. By October 1, 2013, to adopt energy storage procurement targets, if determined to be appropriate, to be achieved by each LSE by December 31, 2015, and a 2nd target to be achieved by December 31, 2020.

AB 2514 specifically requires that the CPUC:

> (a) Consider existing operational data and results of testing and trial pilot projects from existing energy storage facilities.
>
> (b) Consider available information from the California Independent System Operator testing and evaluation procedures.
>
> (c) Consider the integration of energy storage technologies with demand-side management or other means of ensuring the most efficient use of generation resources and cost-effective energy efficient grid integration and management.
>
> (d) Ensure that the energy storage system procurement targets and policies that are established are technologically viable and cost effective.

Note: CPUC President Michael Peevey will speak briefly via video bridge, estimated at 10:45 am.

10 am – 10:10 am - Introduction

10:10 am - 11:30 am Panel One – Procurement Options
Janice Lin - California Energy Storage Alliance
David Castle - Southern California Edison
Armando Infanzon - San Diego Gas & Electric
Daidipya Patwa - Pacific Gas & Electric

Presentations by representatives of CESA and IOUs on principles to consider in deciding whether and how to order LSE procurement of energy storage systems. Options for consideration include:

- Procurement targets as a fixed percentage of load-serving entities' load, structured as a capacity (Megawatt) threshold, or for specific applications for storage.

- Pilots or "Market Tests" focused on specific priority applications or end uses, to correspond with the expressed intent of further developing the tools for cost-effectiveness analysis.

- Setting aside a dynamically adjusted portion of procurement for Local Capacity Requirements (LCR) or System need determination for "preferred" resources, specifically including storage (this could also be referred to as the "portfolio" approach).

- Also, as noted by legislative analysis of AB 2514, the Commission's determination could also result in a finding that no target level is appropriate.

- In addition, there will be some discussion of the issue of whether energy storage should be designated a "preferred resource" for policy and procurement purposes.

11: 30 am – Noon CAISO Markets and Testing
Don Trethaway, Senior Market Design and Policy Specialist, Market Design and Regulatory Policy

Status of CAISO development of "pay for performance" rules for fast-acting frequency response and other market mechanisms including: Market Simulation for Non-Generation Resources and Phase 1 of the Renewable Integration – Market and Product Review (RI-MPR)

Noon – 1 pm Lunch

1 pm – 2:15 pm Operational Experience and Pilots
Jack Ellis, Independent Engineer and Consultant - Select Projects
Praveen Kathpal, AES Energy Storage – Lessons from the Field
Vic Romero, SDG&E Director – Asset Management & Smart Grid Projects – SDG&E Pilots

A description of several operational energy storage projects and demonstrations that illustrate relevant opportunities for energy storage in utility system end uses.

2:15 pm – 2:25 pm Energy Storage in EPIC plans
Arthur O'Donnell, Energy Division

A brief rundown of how energy storage research is being considered in the 2012-2014 Investment Plans from CEC and IOUs for Electric Investment Program Charge (EPIC) applications currently pending at CPUC.

2:25pm – 2:35 pm Cost-Effectiveness Analysis
Aloke Gupta, Energy Division

A brief update on efforts to conduct cost-effectiveness analysis and application of computer models to specific storage Use Cases.

2:35 – 2:50 pm Open Discussion on Storage Issues in Staff Report

2:55 pm – 3 pm **Next Steps in Proceeding**