

**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 12, 2012

**NOTICE OF EX PARTE COMMUNICATIONS OF
THE CALIFORNIA ENERGY STORAGE ALLIANCE**

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Attorneys for the
CALIFORNIA ENERGY STORAGE ALLIANCE

February 4, 2013

**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

**NOTICE OF EX PARTE COMMUNICATIONS OF THE
CALIFORNIA ENERGY STORAGE ALLIANCE**

Pursuant to Rule 8.3 of the California Public Utilities Commission (“Commission”) Rules of Practice and Procedure, the California Energy Storage Alliance (“CESA”)¹ hereby gives notice of the following oral and written *ex parte* communications in the above-referenced proceeding.

On January 31, 2013, from 12:30 p.m. to approximately 1:00 p.m., Janice Lin, Executive Director of CESA, and Don Liddell, of Douglass & Liddell, counsel for CESA, met with Rachel Peterson, Interim Energy Advisor to Commissioner Carla J. Peterman. On the same day, Ms. Lin and Mr. Liddell met from 1:00 p.m. to approximately 1:30 p.m. with Damon Franz and Audrey Lee, Energy Advisors to Commission President Michael R. Peevey. In addition, Ms. Lin and Mr. Liddell also met with Colette Kersten, Energy Advisor to Commissioner Catherine J. K. Sandoval from approximately 1:45 p.m. to approximately 1:55 p.m. on the same day. All of the

¹ The California Energy Storage Alliance consists of A123 Systems, Beacon Power, Bright Energy Storage Technologies, CALMAC, Chevron Energy Solutions, Christenson Electric, Inc., Clean Energy Systems, Inc., Deeya Energy, DN Tanks, East Penn Manufacturing Co., Energy Cache, EnerVault, Flextronics, Fluidic Energy, GE Energy Storage, Green Charge Networks, Greensmith Energy Management Systems, Growing Energy Labs, HDR Engineering, Ice Energy, Innovation Core SEI, Kelvin Storage Technologies, LG Chem, LightSail Energy, NextEra Energy Resources, Panasonic, Primus Power, Prudent Energy, RedFlow Technologies, RES Americas, Saft America, Samsung SDI, Seo, Sharp Labs of America, Silent Power, SolarCity, Stem, Sumitomo Corporation of America, SunEdison, SunVerge, TAS Energy, UniEnergy Technologies, and Xtreme Power. The views expressed in these Comments are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. <http://storagealliance.org>

meetings took place at the Commission's San Francisco offices, at 505 Van Ness Avenue, and concerned the Track 1 Proposed Decision of Administrative Law Judge David Gammon, dated December 21, 2012. In each meeting Ms. Lin and Mr. Liddell stated that CESA supports the requirement imposed on Southern California Edison Company to procure 50 MW of energy storage to meet Local Capacity Requirements contained in the Proposed Decision, and explained that it is amply supported by substantial evidence in the record of the proceeding and represents sound public policy. No other aspects of the Proposed Decision were discussed.

On February 1, 2013, Ms. Lin and Mr. Liddell participated in a conference call from 10:00 a.m. to approximately 10:30 a.m. with Sara Kamins, Energy Advisor to Commissioner Mark J. Ferron regarding the same subject. All of the meetings were initiated by Mr. Liddell. The attached written handout material was physically distributed and discussed with each of the Energy Advisors, except that the material was sent by e-mail immediately prior to the telephone communications with Ms. Kamins.

To receive a copy of this *ex parte* notice please contact Michelle Dangott, at 818.961.3003 [e-mail address: mdangott@energyattorney.com].

Respectfully submitted,



Donald C. Liddell
DOUGLASS & LIDDELL

Attorneys for the
CALIFORNIA ENERGY STORAGE ALLIANCE

February 4, 2013

Energy Storage Value

The California Energy Storage Alliance (CESA)

Janice Lin | C E S Executive Director and Managing Partner of Strategen Consulting

Don Liddell | C E S General Counsel and Principal, Douglass & Liddell

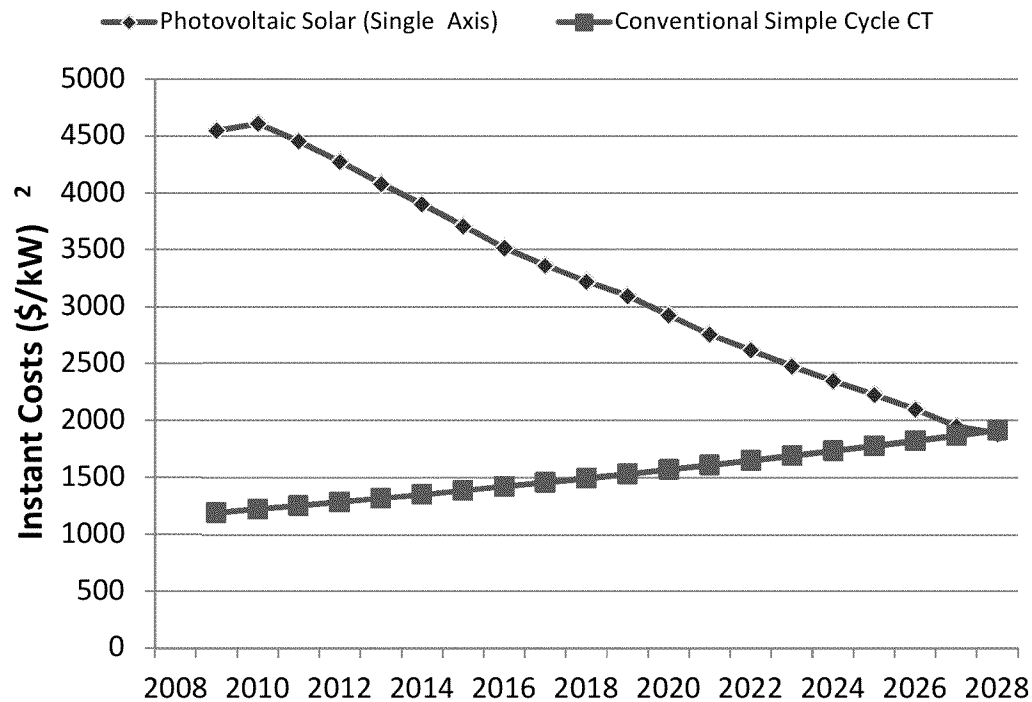
Cedric Christensen | C E S Director of Operations & Development

January 31th, 2013

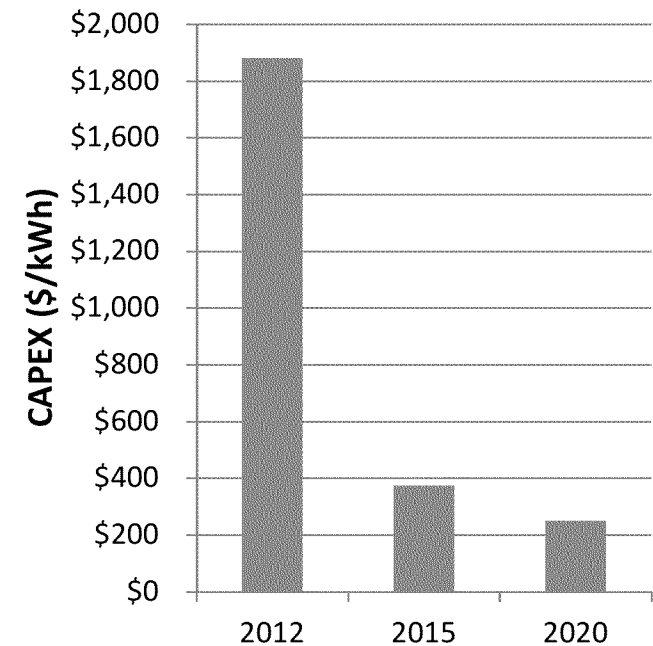


Upfront costs: Traditional Generators, Solar, Storage

Upfront Cost of Solar vs. Traditional Generators¹



NEDO/DOE 2010 Li Ion Cost Projections



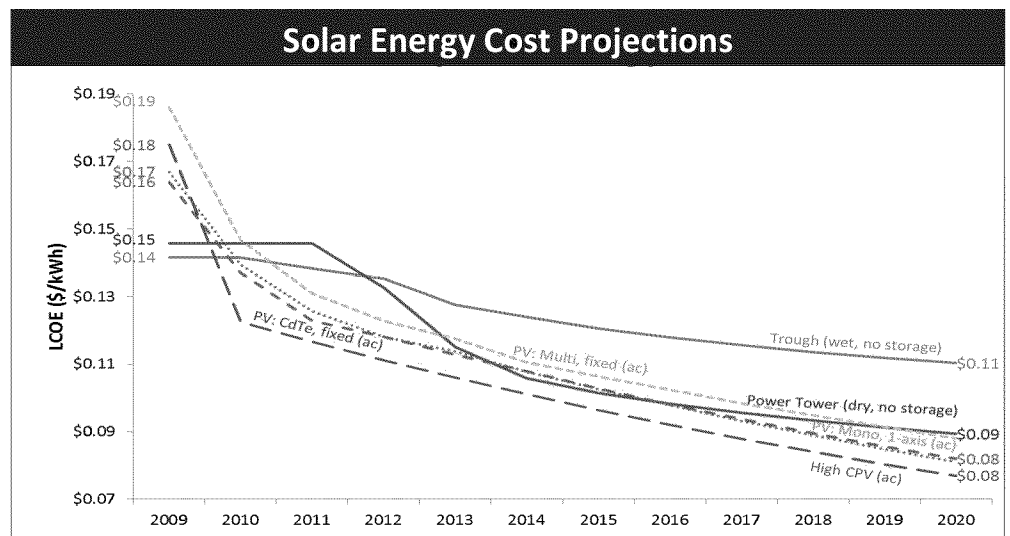
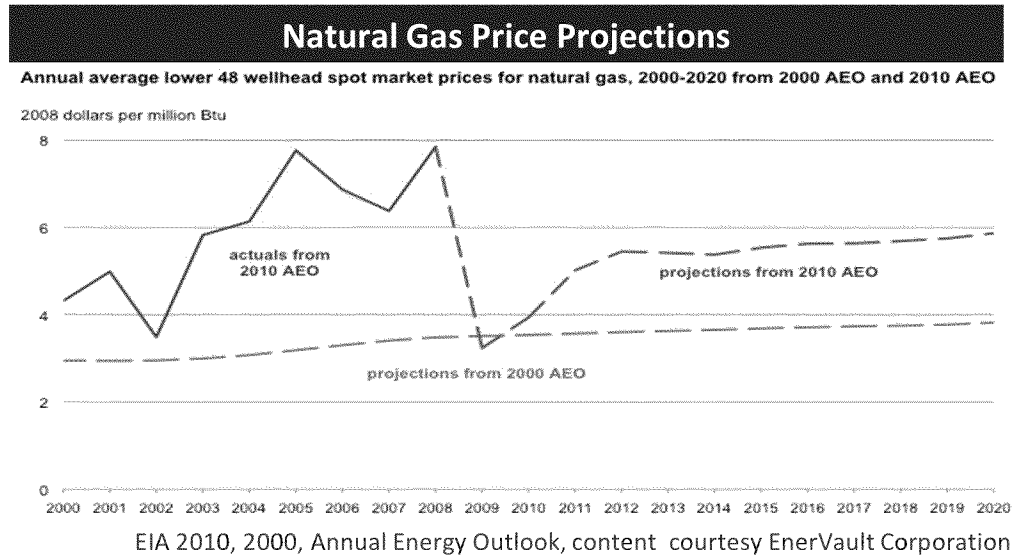
Key Trends

- » Industry is tracking DOE & NEDO cost reductions for Li-ion (10X improvement in ten years)
- » Upfront costs for traditional generators are increasing
- » Renewable costs are decreasing, reducing the charging costs for energy storage

1. Source: California Energy Commission
 2. 2009 starting dollars, escalated at 2.5% per year

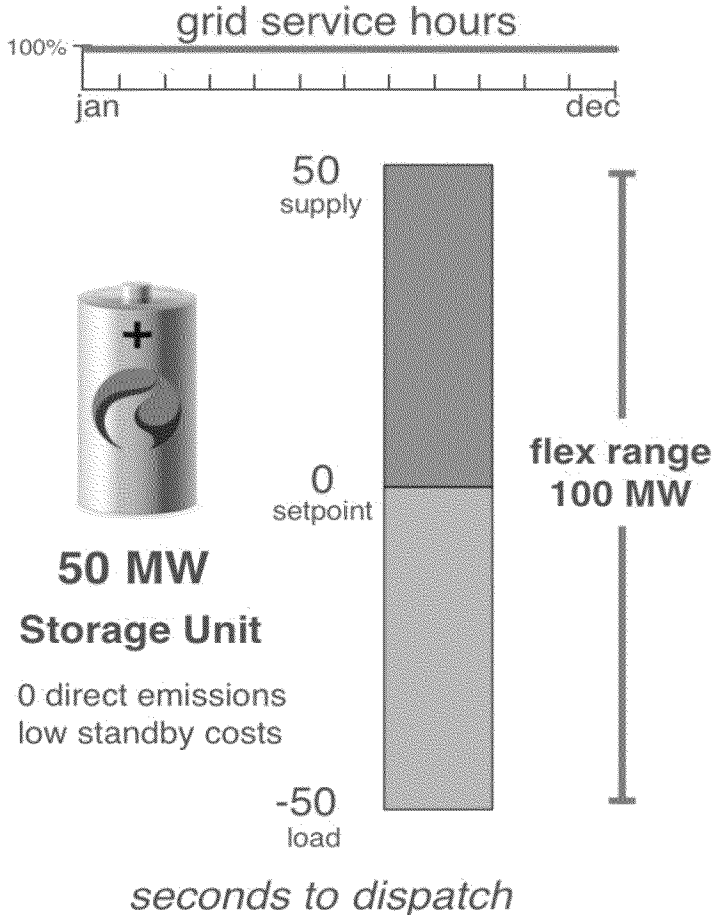
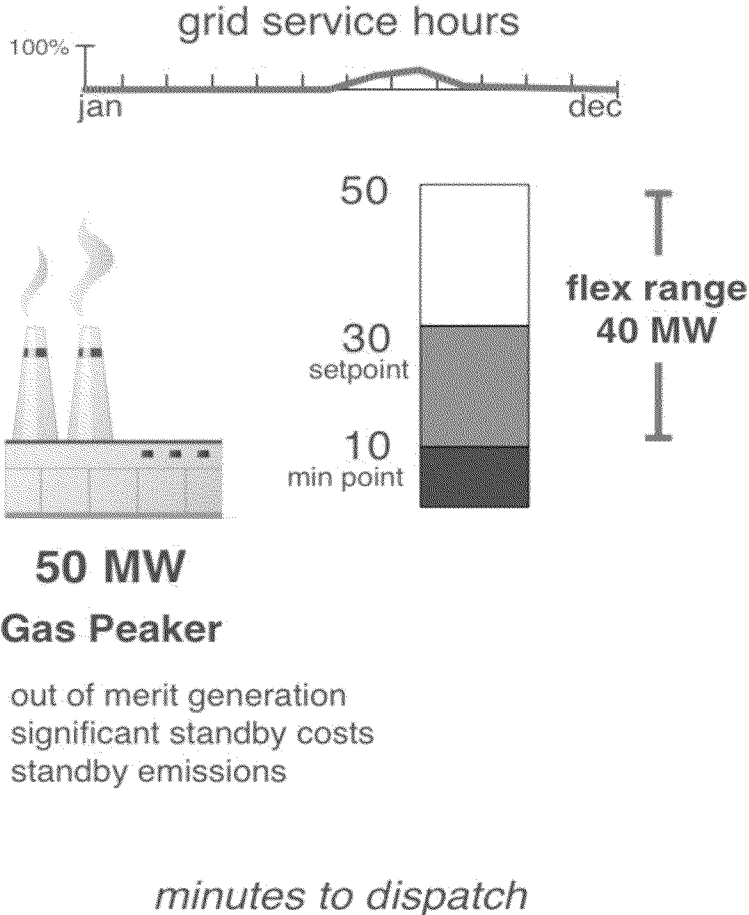
Operating Costs: Natural Gas vs. Renewable Energy

- » DOE EIA natural gas price projections cannot forecast market disruptions and historically have underestimated trends.
- » Excessive expansion of natural gas-fueled generation bears risks associated with natural gas availability and pipeline and gas storage capacity.
- » Uncertainties include:
 - » AB 32 auction prices
 - » OTC retirement
 - » SONGS restarting



Compare benefits, not MW

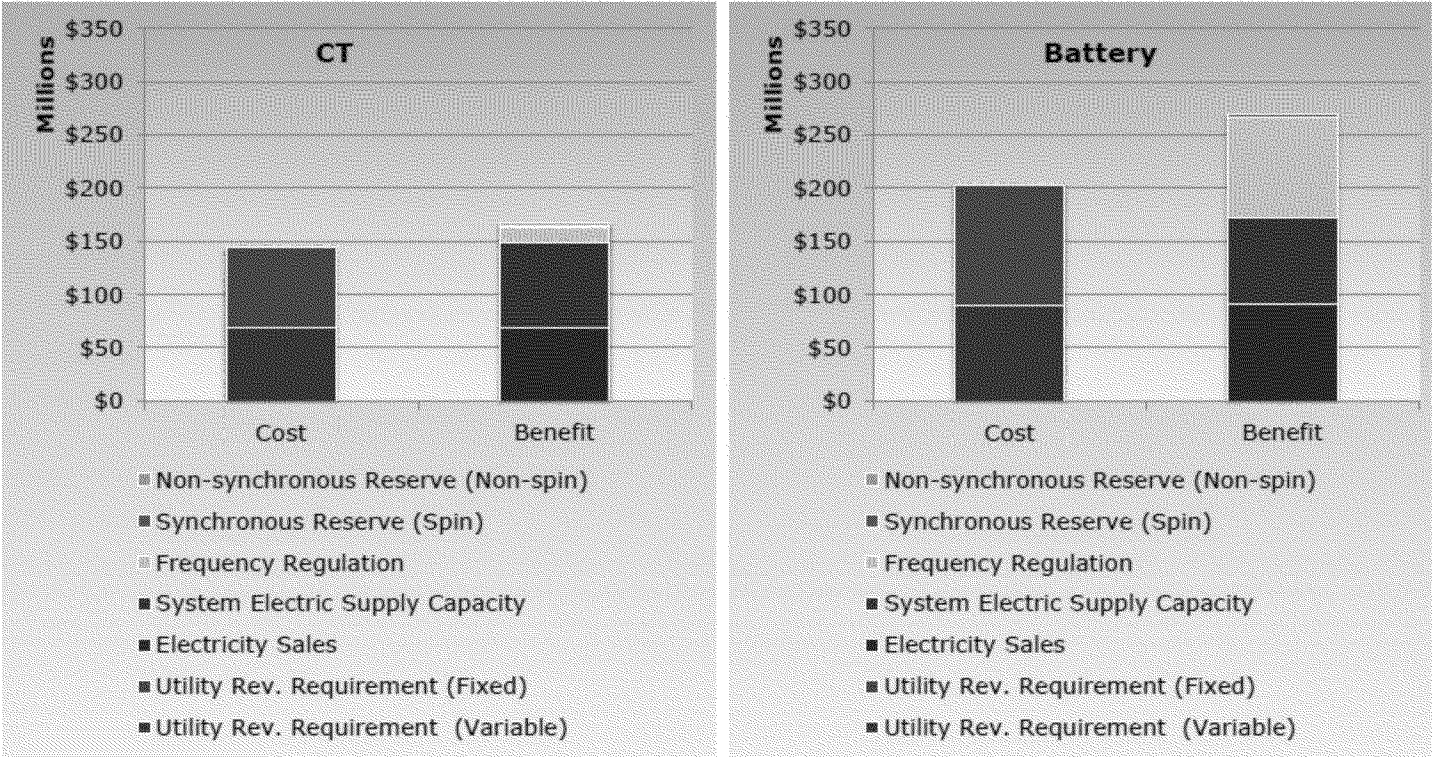
Energy storage has double the bandwidth of new gas CTs instantaneously with far more service hours and less waste



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Compare benefits, not MW



Storage has a higher utilization factor

And earns more revenues in energy and AS markets

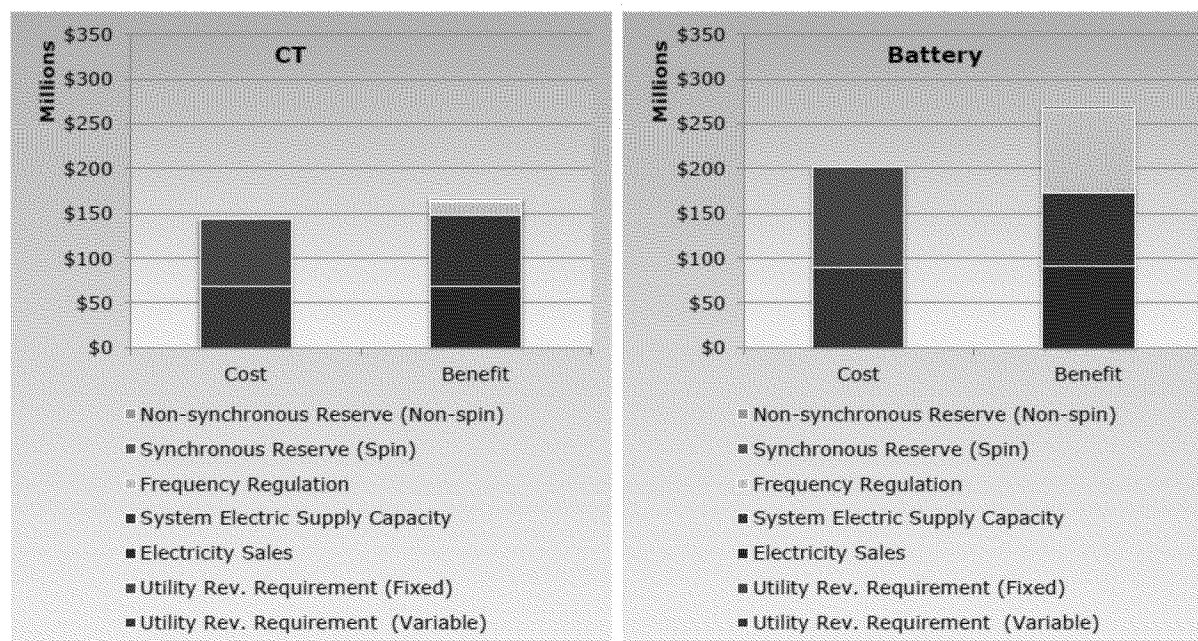
According to E3 analysis, each dollar invested in a CT provides ~\$0.13 net benefits
 Each dollar invested in a battery provides ~\$0.36 in net benefits

Source: E3 and EPRI Comments, Storage OIR



Additional Factors ...

Cost effectiveness evaluation will consider benefits and costs beyond the present day



Storage benefits will increase

- » Pay for performance will increase regulation pricing by 1.5x-2.5x
- » New products like ramping are ideal for fast response storage
- » Increased renewable generation will increase the need for regulation and ramping

Traditional generator costs will increase

- » Fuel prices are trending upward
- » GHG auction prices are likely to increase over time

Source: E3 and EPRI Comments, Storage OIR