



**DOCKET**

**11-IEP-1N**

DATE

RECD. MAR 11 2011

**California Energy Commission  
IEPR Committee Workshop  
Energy Storage for Renewable Integration**

**April 28, 2011 – 9:30 AM**

**Hearing Room A**

**AGENDA**

**Introduction**

Suzanne Korosec, IEPR Lead

**Opening Comments**

Chair Robert Weisenmiller, Presiding Member  
Commissioner Karen Douglas, Associate Member

**Presentations**

**Workshop Overview - Energy Storage for Renewable Integration**

Mike Gravely, Energy Commission

**Strategic Analysis and 2020 Energy Storage Vision for California**

Ethan Elkind, University of California, Berkeley / Byron Washom, University of California, San Diego

**CPUC's AB 2514 Energy Storage Systems Proceeding - An Update**

Michael Colvin, California Public Utilities Commission

**Energy Storage for Managing the California Grid and Integrating 33% Renewables**

Mark Rothleder, California Independent System Operator

**Federal Perspective of Energy Storage and its Role in the Energy System**

Imre Gyuk, United States Department of Energy

**Panel Moderator: Mike Gravely**

**PANEL 1: Need for Energy Storage (Renewable Portfolio Standard, AB 32 Greenhouse Gas Reductions,  
Smart Grid and Demand Response)**

Amanda Stevenson, XtremePower (California Energy Storage Alliance)

Mark Rothleder, California Independent System Operator

Robert Schainker, Electric Power Research Institute

*How can Energy Storage help California achieve the Renewable Portfolio Standard?*

*How will Energy Storage help California achieve AB 32 Goal?*

*How can distributed energy storage be used to help California achieve its future energy goals?  
What can be done to better define the role of energy storage in the California Grid of the future?  
What can be done to support the implementation of the Assembly Bill 2514 Energy Storage  
development, demonstration, and deployment plan activities?*

**LUNCH (12:30 p.m. – 1:30 p.m.)**

**PANEL 2: Energy Storage Applications and Economics (Costs, Benefits and Revenue)**

**David Nemptow**, Ice Energy (California Energy Storage Alliance)

**Dave Hawkins**, KEMA Inc.

**Robert Schainker**, Electric Power Research Institute

**Doug Divine**, Eagle Crest Energy

*What are the costs estimates for the increased use of energy storage?*

*How can the benefits of energy storage best be quantified?*

*What revenue mechanisms are available to ensure energy storage plays the appropriate role in the  
California grid of the future?*

*What will be the specific economics and cost-benefit data that needs to be developed to support  
the implementation of the Assembly Bill 2514 Energy Storage development,  
demonstration, and deployment plan activities?*

**PANEL 3: Utilities' (Investor and Publicly Owned) Perspective of Energy Storage**

**Mark Irwin**, Southern California Edison

**Antonio Alvarez**, Pacific Gas and Electric

**Mike Turner**, San Diego Gas and Electric

**Mark Rawson**, Sacramento Metropolitan Utility District

**Mohammed Beshir**, Los Angeles Department of Water and Power

**Roger VanHoy**, Modesto Irrigation District

*How does the role of energy storage differ from the utility or market perspective?*

*Who should own grid connected energy storage?*

*How will the utilities implement the Energy Storage development, demonstration and deployment  
plan for meeting the AB 2514 requirements?*

**Next Steps for Developing Recommendations on Energy Storage**

**Mike Gravely**, Energy Commission

**Public Comments**

**Closing Remarks**

**Adjourn**