



DOE ENERGY STORAGE SYSTEMS RESEARCH PROGRAM ANNUAL PEER REVIEW



September 27, 2007
Westin St. Francis Hotel, San Francisco, California (USA)

PRESENTATIONS

(click on blue text to view presentation)

OVERVIEW OF PROGRAM

– John Boyes (Mgr, ESS Program/Sandia National Laboratories)

ECONOMICS — BENEFIT STUDIES

[Evaluating Value Propositions for Four Modular Electricity Storage Demonstrations in California](#)

– Jim Eyer (Distributed Utility Assoc.)

[Update on Benefit and Cost Comparison of Modular Energy Storage Technologies for Four Viable Value Propositions](#)

– Susan Schoenung (Longitude 122 West, Inc.)

ECONOMICS — ENVIRONMENT BENEFITS STUDIES

[Emissions from Traditional & Flywheel Plants for Regulation Services](#)

– Rick Fioravanti (KEMA, Inc.)

UTILITY & COMMERCIAL APPLICATIONS OF ADVANCED ENERGY STORAGE SYSTEMS

[Application of Large-Scale Energy Storage Systems in AEP](#)

– Ali Nourai (American Electric Power)

[The Iowa Stored Energy Park](#)

– Kent Holst (Iowa Stored Energy Park)

[Design of the FSS 20 MW Frequency Regulation Plant](#)

– Rob Rounds (Beacon Power)

RAIL APPLICATIONS

[Long Island Rail Road \(LIRR\) High-Speed Flywheel Demonstration](#)

– Guy Sliker (N.Y. Power Authority)

INTERNATIONAL ENERGY STORAGE PROGRAMS

DOE(SNL)/CEC Energy Storage Program FY07 Projects

– Daniel Borneo (Sandia National Laboratories)

Status Update on the NYSERDA/DOE Joint Energy Storage Initiative Projects

– Jeff Lamoree (EnerNex)

POWER ELECTRONICS

STATCOM with Energy Storage to Smooth out Intermittent Power Output of Wind Farms

– Mesut Baran (North Carolina State Univ.)

Cyber-Physical Systems Distributed Control: The Advanced Electric Power Grid

– Mariesa Crow (Univ. of Missouri – Rolla)

An SiC Power Converter System – Thermal Management and High Temperature Packaging

– Timothy Lin (Aegis Technology, Inc.)

INNOVATIONS IN ENERGY STORAGE SYSTEMS

Evaluation of Lead-Carbon Storage Devices for Utility Applications

– Enders Dickinson (MeadWestvaco)

High Voltage Electrochemical Capacitor

– David Ingersoll (Sandia National Laboratories)

U.S. Coast Guard National Distress System Performance Optimization using the ACONF System Controller

– Garth Corey (Sandia National Laboratories)

Testing and Evaluation of Energy Storage Devices

– Tom Hund (Sandia National Laboratories)

Design, Fabrication, and Test of a 5 kWh Flywheel Energy Storage System Utilizing a High Temperature Superconducting Magnetic Bearing – Phase III

– Phil Johnson (Boeing Phantom Works)