

**California Energy Commission
Transmission Research
Paving the Way for Renewables**

**October 25, 2010
8:00 AM –4:00 PM**

**Sacramento Public Tsakopoulos Library Galleria
828 I St. Sacramento 95814**

8:00 AM Registration

8:30 AM California’s Policy Goals: (Commissioner Jeff Byron, Energy Commission)

California is committed to 33% renewable generation by 2020.

8:45 AM Research Innovations Enable More Renewables: (Mike Gravely, Energy Commission)

PIER’s research in demand response, electric energy storage, and transmission are enabling renewable generation.

9:00 AM Demystifying the Electric Grid: (Alexandra Von Meier, Sonoma State)

Learn the ABC’s of the California electric grid: How does it operate and how can it accommodate renewable generation?

9:20 AM Panel 1: A New Grid for California (Merwin Brown, CIEE)

Renewables and Storage - Together for California’s Benefit: Karin Corfee, KEMA

Modeling provides insight into more effective and economical integration of storage and renewable generators.

Managing Energy Storage and Renewables for California: Jeff Dagle, PNNL

More renewables on the grid by using a variety of energy storage technologies.

Microgrids for Distributed Renewables - An Owners Perspective: John Dilliot, UCSD

The use of new software demonstrates customers’ ability to utilize electric energy storage and renewables in a microgrid.

10:40 AM Break

11:00 AM Panel 2: Managing the California Grid with Renewables (Jim Cole, CIEE)

An Introduction to Synchrophasors: Joe Eto, LBNL

Synchrophasors; enabling the grid to operate with higher levels of renewables.

Synchrophasors in Action: Jim Detmers, former VP for CAISO

How synchrophasors monitor renewable generator performance.

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Grid Oscillations, Limiting Your Power: Jeff Dagle, PNNL

Using synchrophasors to increase the amount of renewable power transmission lines can carry.

Protecting the California Grid: Lloyd Cibulka, CIEE

Smarter protection systems to improve reliability of renewable generation.

12:30 PM Lunch

1:30 PM Panel 3: New tools to Manage Loads and Integrate Wind (Larry Miller, CIEE)

Demand Response - Innovation for Renewable Support, Mary Ann Piette, LBNL

Advances in demand response technologies that facilitate renewable integration and allow customers to make decisions about their electricity use.

Wind Generator Modeling: Charlie Smith, Utility Wind Integration Group

New generator models to accurately represent modern wind machines and expedite reliable and economic wind deployment.

2:15 PM Smart Grid for Renewables and Much More (David Geier, SDG&E)

Renewable generators and electric vehicles are challenging the existing electric grid. SDG&E is investigating how a smarter grid can meet these challenges.

2:45 PM Break

3:00 PM Closing Comments:

Jeff Byron, California Energy Commission

Bob Weisenmiller, California Energy Commission

David Geier, San Diego Gas & Electric Company

Kevin Dasso, Pacific Gas & Electric Company

Percy Haralson, Southern California Edison

Ken Edwards, Bonneville Power Administration

Jim McIntosh, California Independent System Operator

Charlie Smith, Utility Wind Integration Group

Phil Overholt, U.S. Department Of Energy

4:00 PM Adjourn