



May 2, 2018

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San Francisco, CA

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Galloping technological advances, shifting consumer preferences and aggressive public policies are transforming California's electricity industry. An increasingly digital grid brings new strengths and vulnerabilities to meet the challenge of delivering an increasingly renewable power supply. Procurement is becoming more decentralized while new markets are emerging to enhance coordination throughout the West. Electrification of transportation and buildings will bring new, potentially flexible loads that may help with renewable integration-- if we get the incentives right. At PANC's 2018 Spring Seminar you will hear experts share views on how these trends are reshaping the playing field and rewriting the playbook for stakeholders throughout the power sector. What will our industry look like tomorrow and what are the steps we can take today to meet the challenges that lie ahead?

PROGRAM AGENDA

7:30am Check-In / Continental Breakfast

8:15am Welcome & Opening Announcements

8:30am **PANEL 1:**

Smart Technologies for the Electricity Consumer

(Moderator: Nancy Ryan, E3)

The Electrification Imperative

MARK NELSON

Director of Planning, Southern California Edison

Last year Edison published a white paper outlining a "Clean Power and Electrification Pathway" for California to realize its GHG reduction and air quality goals. Hear an overview of Edison's vision and layout of policy changes needed to make it reality

Smart Electrified Buildings

MERRIAN BORGESON

Senior Scientist, NRDC

How do buildings fit into the picture. What are the challenges and opportunities from building electrification? Do we need new technologies, new policies, or both?

Integrating EVs Into the Grid

ADAM LANGTON

Energy Services Manager, BMW North America

The other half of the Electrification Imperative is transportation, and California has very aggressive goals for electrifying goods and people movement. What do you see as the main barriers to attaining those goals, and assuming we succeed what are the implications for the grid?

The Three Revolutions in Transportation: Electric, Autonomous & Shared

AUSTIN BROWN, Ph.D

Executive Director, UC Davis Policy Institute

Electrification is proceeding in tandem with two other disruptive trends in transportation-automation and shared mobility. Do progress on automation and sharing necessarily drive electrification? How can these Three Revolutions advance or impede attainment of California's GHG and pollution abatement goals?

10:00am **KEYNOTE ADDRESS:**

The Promise & Perils of Electrification

CARLA PETERMAN

Commissioner
California Public Utilities Commission

10:30am Break

10:45am **PANEL 2:**

Promising New Energy Technologies

(Moderator: Rand Havens, Constellation Energy)

Grid Cybersecurity Projects

JEFF KLABEN

Chief Information Security Officer

SRI International

Improved Efficiency: Carbon Nanotubes

KURT SWOGER

Founder & CEO

Molecular Rebar Design, LLC

Promising New Technologies

BENJAMIN BEAVER

Regional Sales Manager

Siemens Energy

12:00pm Lunch / Networking

1:00pm **PANEL 3:**

Operational Challenges for the 21st Century Grid

(Moderator: Eric Eisenman, PG&E)

As utility-scale renewables, DERs, and electric vehicles are connected to the grid, there are new challenges in operating the grid. This panel will examine steps taken by industry stakeholders to maintain a resilient, reliable grid.

NEIL MILLAR

Executive Director Infrastructure

California ISO

CHARALAMPOS ANDREADES, Ph.D

Post Doctoral Scholar

U.C. Berkeley Nuclear Engineering

ALEX McDONOUGH

VP, Public Policy

Sunrun Inc.

DAWN WEISZ

Chief Executive Officer

Marin Clean Energy

2:45pm **CLOSING ADDRESS:**

The Grid of the Future

ROY KUGA, VP, Grid Integration & Innovation
Pacific Gas & Electric Co.

Mr. Kuga will discuss planning for the grid of the future, leveraging innovative technologies and approaches to enhance customer affordability and grid reliability.

3:30pm Closing Comments / Seminar Adjourns

**Next month
at PANC...**

JUNE 13 - City Club

CLIFF RECHTSCHAFFEN
Commissioner
California Public
Utilities Commission