

AGENDA

Challenges and Effective R&D Paths for Promoting Repowering Wind Energy



Thursday, January 28, 2016
9:00 a.m. – 12:00 p.m.

CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
1st Floor, Charles Imbrecht Hearing Room
Sacramento, California

Join the California Energy Commission for a discussion on Challenges and Effective R&D Paths for Repowering Wind Energy in California.

9:00 – 9:10 Welcome and Introductory Presentation

Energy Commission Wind Energy R&D and An Overview on Repowering Potential in California

Rizaldo Aldas and Silvia Palma-Rojas, California Energy Commission

Session 1: Challenges and Priority R&D Paths to Promote Cost-Effective Wind Repowering

9:10 – 10:50 Presentation and Panel Discussion:

Moderator: Nancy Rader, California Wind Energy Association, CalWEA

Panelists: Alex Byrne, DNV LG

Barry Gilman, Southern California Edison

Farshid Arman, Siemens Technology to Business Center

John Pappas, Pacific Gas & Electricity Company (PG&E)

Maureen Hand, National Renewable Energy Laboratory (NREL)

Thomas Smith, OGIN

Questions for Panel

From your perspective, what are primary barriers as well as opportunities for repowering California's existing wind capacity that are coming from 20-30 year old turbines?

What do you see as the role of R&D for addressing those barriers and what R&D initiatives should be prioritized to repower wind energy in California?

Session 2: Original Equipment Manufacturer's Perspective on Wind Repowering

10:50 – 11:50 Panel Discussion:

Moderator: Silvia Palma-Rojas, California Energy Commission

Panelist: Brent Reardon, Siemens Wind Power Americas

Henry Shiu, University of California, Davis (UC Davis)

Oliver Kijas, Senvion USA Corp.

Thomas Smith, OGIN

Questions for Panel:

1. *Do we have sufficient technology needed for repowering? From your perspective, are there technological barriers or further innovations needed to better take advantage of opportunities from repowering older wind facilities?*
2. *How can we better deploy new and innovative wind technology to help repower and maximize use of California's wind resources? What is limiting the deployment of these technologies?*
3. *Are the O&M costs and capital costs the primary drivers for repowering decisions? If so, what research and development is needed to address the cost issues?*
4. *How is the end-of-life aspect of the current fleet of older wind turbine being addressed? In 20-30 years, we will have the need of repowering the "new" old fleet. Is the end-of-life perspective included in the design of the current or newer wind technology? Please provide an insight on what might be expected in the end-of-life phase of the new turbines.*

11:50-12:00 Q&A and public comment session

To join this meeting via WebEx please use the following information:

Go to <https://energy.webex.com>

Access code: 927 592 629

Meeting Password: meeting@9

Call-in-toll-free number: 1-866-469-3239

To provide written comments:

Please email Silvia Palma-Rojas at silvia.palma-rojas@energy.ca.gov using the subject heading:

"Challenges and Effective R&D Paths for Promoting Repowering Wind Energy"

The deadline for comments is Friday, February 12, 2016 at 5 p.m. PST