In the matter of:	)	RE: Repowering Wind Energy workshop
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Challenges and Effective R&D Paths for Repowering Wind Energy in California	)	
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Notice of Staff Workshop

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

California Energy Commission staff will hold a workshop to obtain feedback from wind energy stakeholders on the challenges and effective research and development (R&D) paths for repowering wind energy in California. Feedback or suggestions gathered from stakeholders during this workshop will be used to inform and refine the grant solicitation that will be released in support of the Electric Program Investment Charge (EPIC) Second Investment Plan Funding Initiative 4.4: Upgrade California's Aging Wind Turbines: Design, Cost, and Developing Improvements That Meet Local Needs.

The workshop will include a presentation and discussion that will highlight the current context of repowering and the barriers and limitations that it has faced in the recent years. Experts on wind energy from industry and utilities, including wind energy facility operators in California, are expected to participate in this workshop where expert representatives may be invited for a moderated panel discussion. The workshop will provide an opportunity for stakeholders to contribute their expertise on the technological advancements and R&D needs to make wind repowering profitable and economically attractive for generators.

The event will be held on:

January 28, 2016
9:00 a.m. - 12:00 p.m.
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
1st Floor, Imbrecht Hearing Room
Sacramento, California
Wheelchair Accessible

Remote Access Available by Computer or Phone via WebEx™
(Instructions below)

Background

In California, all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020 and 50 percent by 2030. Today, wind power generates 6.5 percent of the in-state energy generation and 19 percent of the total renewable energy. California is a pioneer in wind energy development; some of the state's wind turbines have been in operation since the early 1980s. Much of this development occurred in the best wind resource areas of the state, including Altamont, Solano, Tehachapi and San Gorgonio Pass. These important wind resource areas are still occupied by aging wind turbines, which tend to have much higher maintenance costs and more downtime than modern turbines that are able to capture wind energy more efficiently. For instance, Altamont has the potential of repowering 90 percent of its existing on-line capacity; Solano, Tehachapi and San Gorgonio have 7 percent, 22 percent and 54 percent respectively.[1] These numbers represent the percentages of on-line capacity that are attributed to wind turbines that are 20 years and older and therefore candidate for repowering. By replacing the aging fleet in these key resource areas with modern wind technology, California can maximize the use of its wind energy resource.

There are obvious benefits, barriers and limitations, but repowering decisions could hinge upon demonstrated production efficiency and investment cost. Repowering could be encouraged by technological development, as is being pursued now by the Department of Energy, pilot demonstration, or effective policy instruments that address both the technical performance and cost issues. The EPIC's Second Triennial Investment Plan includes Funding Initiative 4.4: Upgrade California's Aging Wind Turbines: Design, Cost, and Development Improvements That Meet Local Needs. Feedback or suggestions gathered from stakeholders during this workshop will be used to inform and refine the grant solicitation that will be released in support of Funding Initiative 4.4.

Public Comment

Oral comments. Staff will accept oral comments during the workshop. Comments may be limited to 2 minutes per speaker. Any comments may become part of the public record in this proceeding.

Written comments. The Energy Commission also accepts comments by email. Please include your name and any organization name. Comments should be in a downloadable, searchable format such as Microsoft® Word (.doc) or Adobe® Acrobat® (.pdf). Please include the name of the workshop and the date in the subject line. Please send written comments to silvia.palma-rojas@energy.ca.gov.

[1] Based on unpublished staff estimate in: Palma-Rojas, S. Upgrading the performance of wind power performance in California. California Energy Commission. 2015.

Public Adviser and Other Commission Contacts

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission proceedings. If you want information on how to participate in this forum, please contact the Public Adviser, Alana Mathews, at PublicAdviser@energy.ca.gov or (916) 654-4489, or toll free at (800) 822-6228.
If you have a disability and require assistance to participate, please contact Lou Quiroz at lquiroz@energy.ca.gov or (916) 654-5146 at least five days in advance.

Media inquiries should be sent to the Media and Public Communications Office at mediaoffice@energy.ca.gov or (916) 654-4989.

If you have questions on the subject matter of this meeting, please contact Silvia Palma-Rojas at silvia.palma-rojas@energy.ca.gov or (916) 327-1716.

Remote Attendance

You may participate in this meeting through WebEx, the Energy Commission's online meeting service. Presentations will appear on your computer screen, and you may listen to audio via your computer or telephone. Please be aware that the meeting may be recorded.

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The "Join Conference" menu will offer you a choice of audio connections:

1. To call into the meeting: Select "I will call in" and follow the on-screen directions.
2. International Attendees: Click on the "Global call-in number" link.
3. To have WebEx call you: Enter your phone number and click "Call Me."
4. To listen over the computer: If you have a broadband connection, and a headset or a computer microphone and speakers, you may use VoIP (Internet audio) by going to the Audio menu, clicking on "Use Computer Headset," then "Call Using Computer."

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If you have difficulty joining the meeting, please call the WebEx Technical Support number at 1-866-229-3239.

Availability of Documents

Documents and presentations for this meeting will be available online at: http://www.energy.ca.gov/research/notices/