CALIFORNIA ENERGY COMMISSION 1516 Ninth Street Sacramento, California 95814	DOCKET
Main website: www.energy.ca.gov	DATE <u>NOV 12 2010</u> RECD. NOV 12 2010
In the matter of,) Docket No. 11-IEP-1N
Preparation of the 2011 Integrated Energy Policy Report	 NOTICE OF STAFF WORKSHOP RE: Technologies to Support Renewable Energy Integration

Staff Workshop on Energy Storage and Automated Demand Response Technologies to Support Renewable Energy Integration

The California Energy Commission staff will conduct a workshop to share information and solicit comments on technologies to support renewable energy integration such as energy storage and automated demand response (Auto-DR) technologies as a part of the 2011 Integrated Energy Policy Report (2011 IEPR) relating to energy systems and renewables. This work is overseen by the Energy Commission's IEPR Committee, Chairman Karen Douglas, Presiding Member, and Commissioner Jeffrey D. Byron, Associate Member. While this is a staff workshop, Commissioners may attend and participate.

TUESDAY, NOVEMBER 16, 2010

Beginning at 9 a.m. CALIFORNIA ENERGY COMMISSION 1516 Ninth Street First Floor, Hearing Room A Sacramento, California (Wheelchair Accessible)

Remote Attendance and Availability of Documents

Internet Webcast - Presentations and audio from the meeting will be broadcast via our WebEx web meeting service. For details on how to participate via WebEx, please see the "Remote Attendance" section toward the end of this notice.

Documents and presentations for this meeting will be available online at:

http://www.energy.ca.gov/2011_energypolicy/documents/index.html.

Purpose

The purpose of this staff workshop is to highlight how energy storage and automated demand response technologies can support renewable energy integration in California. The workshop will provide an interactive overview of the challenges of developing and deploying these technologies to support renewable integration while managing the California grid with 33 percent renewable energy by 2020.

This workshop will:

- 1) highlight California's energy storage, demand response, and renewable generation and integration policy goals;
- 2) explain the electric power system and the issues in using renewable generation and its integration;
- 3) explain how energy storage and Auto-DR technologies can support renewable integration;
- 4) highlight the activities of research projects in energy storage, Demand Response, and renewable generation and integration;
- 5) explain how the current and future projects provide benefits to California
- 6) give attendees the opportunity to ask questions and provide comments and feedback in a collaborative cordial setting.

Overall, this staff workshop will provide the Energy Commission and the public an opportunity to explore and consider a range of perspectives on energy storage and Auto-DR technologies to support renewable integration in California.

Staff seeks comments, questions, and suggestions on the presentations and other discussion documents relating to energy storage and Auto-DR technologies posted at http://www.energy.ca.gov/2011_energypolicy/documents/index.html.

Background

Since the inception of the Energy Commission's Public Interest Energy Research (PIER) program in 1997, continuously changing electricity markets, regulations, technologies, and customer behavior have raised new challenges for power generation and transmission and distribution planners, owners, operators, policy makers, and regulators. To meet these challenges, the Energy Commission performs research and development to provide new technologies in electric storage, demand response, and transmission technologies to support integration of and accommodate growing renewable electric generators such as wind and solar and new kinds of customer loads, such as electric vehicles. Expanding and modernizing our electric grid into a renewable Smart Grid for the 21st century will depend on new technology innovations in energy storage and autodemand response technologies.

On September 29, 2010, Governor Schwarzenegger approved Assembly Bill 2514, which requires the California Public Utilities Commission (CPUC) to determine appropriate targets, if any, for each load-serving private entity to procure viable and cost-effective

energy storage systems. The bill requires the California Energy Commission to review and approve the public utilities' plans to determine appropriate targets and procure viable and cost-effective energy storage systems to meet the targets. Also, the bill recognizes that despite the many benefits of energy storage, there are significant barriers to obtaining those benefits.

Energy Storage and Auto-DR technologies are expected to play a larger role in generation resource management, integration of variable resources, and peak management applications in the near future. Now is the right time for the public and regulators to explore the possible value energy storage and Auto-DR technologies can have in helping address renewables integration and shifting to lower greenhouse-gasemitting resources.

Written Comments

Written comments on the meeting topics must be submitted by 5:00 p.m. on November 30, 2010. Please include the docket number 11-IEP-1N and indicate Technologies for Renewable Integration in the subject line or first paragraph of your comments. Please hand deliver or mail an **original copy** to:

> California Energy Commission Dockets Office, MS-4 Re: Docket No. 11-IEP-1N 1516 Ninth Street Sacramento, CA 95814-5512

The Energy Commission encourages comments by e-mail. Please include your name or organization's in the name of the file. Those submitting attached comments by electronic mail should provide them in either Microsoft Word format or as a Portable Document (PDF) to [docket@energy.state.ca.us]. **One paper copy** must also be sent to the Energy Commission's Docket Unit.

Participants may also provide an original and 10 copies at the beginning of the workshop. All written materials relating to this workshop will be filed with the Dockets Unit and become part of the public record in this proceeding.

Public Participation

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission activities. If you want information on how to participate in this forum, please contact the Public Adviser's Office at (916) 654-4489 or toll free at (800) 822-6228, by FAX at (916) 654-4493, or by e-mail at <u>PublicAdviser@energy.state.ca.us</u>. If you have a disability and require assistance to participate, please contact Lou Quiroz at (916) 654-5146 at least five days in advance.

Please direct all news media inquiries to the Media and Public Communications Office at (916) 654-4989, or by e-mail at [<u>mediaoffice@energy.state.ca.us</u>].

If you have questions on the technical subject matter of this meeting, please call Avtar Bining, Program Manager (Energy Storage) at (916) 327-1411, or by e-mail at [abining@energy.state.ca.us].

Remote Attendance

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

Computer Log-on with Telephone Audio:

- 1. Please go to <u>https://energy.webex.com</u> and enter the unique meeting number: **928 233 855**
- 2. When prompted, enter your name other information as directed and the meeting password: **meeting@9am**
- 3. After you log-in, a prompt will ask for your phone number. If you wish to have WebEx call you back, enter your phone number. This will put add your name on the WebEx log so that we know who is connected and have a record of your participating by WebEx.

If you do not wish to do that, click cancel, and go to step 4. Or, if your company uses an older switchboard-type of phone system where your line is an extension, click cancel and go to step 4.

4. If you didn't want WebEx to call you back, then call 1-866-469-3239 (toll-free in the U.S. and Canada). When prompted, enter the meeting number above and your unique Attendee ID number, which is listed in the top left area of your screen after you login via computer. International callers can dial in using the "Show all global call-in numbers" link (also in the top left area).

Telephone Only (No Computer Access):

1. Call 1-866-469-3239 (toll-free in the U.S. and Canada) and when prompted enter the unique meeting number above. International callers can select their number from https://energy.webex.com/energy/globalcallin.php

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

Date: November 12, 2010

Mail Lists: renewable, reti, electricity, energy policy, distgen, load management, transmission, research, energy storage, demand response