

CALIFORNIA ENERGY COMMISSION

1516 Ninth Street
Sacramento, California 95814

Main website: www.energy.ca.gov

DOCKET**09-IEP-1G**

DATE _____

RECD. April 08 2009



In the matter of:

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Docket No. 09-IEP-1G

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Preparation of the

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NOTICE OF JOINT COMMITTEE
WORKSHOP*2009 Integrated Energy Policy Report*

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(2009 IEPR)

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Notice of Joint Integrated Energy Policy Report and Renewables Committee Workshop on Biopower in California

In support of the *2009 Integrated Energy Policy Report (2009 IEPR)*, the California Energy Commission (Energy Commission) will conduct a combined IEPR and Renewables Committee workshop to discuss and receive comments on meeting the electricity-related biopower goals set in Governor Schwarzenegger's Executive Order S-06-06. Commissioner Jeffrey Byron is the Presiding Member and Vice Chair James Boyd is the Associate Member of the IEPR Committee. Commissioner Julia Levin is the Presiding Member and Chairman Karen Douglas is the Associate Member of the Renewables Committee. Commissioners and staff from the California Public Utilities Commission may also attend and participate. The workshop will be held:

TUESDAY, APRIL 21, 2009

9 a.m.

CALIFORNIA ENERGY COMMISSION

1516 Ninth Street

First Floor, Hearing Room A

Sacramento, California

(Wheelchair Accessible)

Remote Attendance

Web Conferencing - Presentations and audio from the meeting will be broadcast via our WebEx web conferencing system. For details on how to participate via WebEx, please see the "Participation through WebEx" section at the end of this notice.

Webcast - Audio from this meeting will be broadcast over the Internet through Windows Media. For details, please go to [\[www.energy.ca.gov/webcast/\]](http://www.energy.ca.gov/webcast/).

Purpose

The IEPR and Renewables Committees are seeking public input regarding the progress, challenges, and opportunities for meeting 20 percent of California's Renewable Portfolio Standard (RPS) using biomass and biogas.

This workshop will discuss the following issues:

- a. Status of meeting the Governor's Executive Order S-06-06.
- b. Recent activities of the Existing Renewable Facilities Program.
- c. Future development of biogas technologies for electricity generation. A discussion of barriers and opportunities in developing landfill gas and anaerobic digester facilities. Additionally, this workshop will include a discussion on injecting biogas into natural gas pipelines.
- d. Solid-fuel biomass feedstock issues. This includes presentations on alternative daily cover regulations, the availability of forest biomass feedstock in the Shasta region, and feedstock potential for agricultural biomass.
- e. Potential, challenges, and opportunities for co-firing biomass with coal.

The IEPR Committee and the Renewables Committee are particularly interested in public input regarding the discussion questions listed in Attachment A.

An agenda and a detailed outline of discussion topics will be provided on the Energy Commission's website prior to the workshop.

Background

California currently has a mandate to achieve 20 percent of retail electricity sales from renewable resources by 2010, and the Governor and the state's energy agencies have identified a further goal of 33 percent from renewable resources by 2020. In addition, Executive Order S-06-06 calls for the state to use energy from biomass and biogas for 20 percent of the established state goals for renewable generation for 2010 and 2020. The Executive Order also sets a target for the state to produce a minimum of 20 percent of its biofuels for transportation within California by 2010, 40 percent by 2020, and 75 percent by 2050.

Written Comments

Written comments on the workshop topics must be submitted by 5:00 p.m. on May 5, 2009. Please include the docket number 09-IEP-1G and indicate *2009 Integrated Energy Policy Report – Biopower in California* 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. 09-IEP-1G
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 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 Dockets Office.

Participants may also provide an original and ten copies at the beginning of the workshop. All written materials relating to this workshop will be filed with the Dockets Office 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 [PublicAdviser@energy.state.ca.us]. 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 [mediaoffice@energy.state.ca.us]. For technical questions on the subject matter, please call Jason Orta, Renewable Energy Office, at (916) 653-5851 or by email at [jorta@energy.state.ca.us]. For general questions regarding the IEPR proceeding, please contact Lynette Esternon-Green, IEPR project manager, by phone at (916) 653-2728 or by e-mail at [lesterno@energy.state.ca.us].

Participation through WebEx, the Energy Commission's on-line meeting service

Computer Log on with a Direct Phone Number:

- Please go to [<https://energy.webex.com>] and enter the unique meeting number **920 661 317**
- When prompted, enter your information and the following meeting password **meeting@9**
- After you log in, a prompt will appear on-screen for you to provide your phone number. In the Number box, type your area code and phone number and click OK to receive a call back on your phone for the audio of the meeting. International callers can use the "Country/Region" button to help make their connection.

Computer Logon for Callers with an Extension Phone Number, etc.:

- Please go to [<https://energy.webex.com>] and enter the unique meeting number **920 661 317**
- When prompted, enter your information and the following meeting password **meeting@9**
- After you login, a prompt will ask for your phone number. **CLICK CANCEL.**
- Instead call (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 log in. International callers can dial in using the "Show all global call-in numbers" link (also in the top left area).

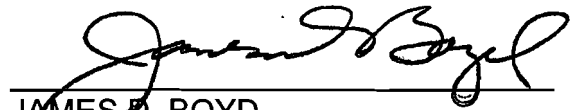
Telephone Only (No Computer Access):

Call (866) 469-3239 (toll-free in the U.S. and Canada) and when prompted enter the unique meeting number 920 661 317. International callers can select their number from [<https://energy.webex.com/energy/globalcallin.php>].

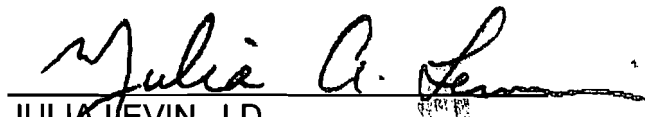
If you have difficulty joining the meeting, please call the WebEx Technical Support number at (866) 229-3239. Please be aware that the meeting's WebEx audio and on-screen activity may be recorded.



JEFFREY D. BYRON
Commissioner and Presiding Member
Integrated Energy Policy Report Committee



JAMES D. BOYD
Vice Chair and Associate Member
Integrated Energy Policy Report Committee



JULIA LEVIN, J.D.
Commissioner and Presiding Member
Renewables Committee



KAREN DOUGLAS, J.D.
Chairman and Associate Member
Renewables Committee

Mail Lists: Bioenergy, Renewable, Energypolicy

Note: California Energy Commission's formal name is State Energy Resources Conservation and Development Commission.

Attachment A- Questions for Public Comment

Existing and Potential Biopower Resources

1. Executive Order S-06-06 calls for 20 percent of RPS energy to come from biopower in the years 2010 and 2020. It also calls for 20, 40, and 75 percent of transportation fuels to be produced from in-state biomass in 2010, 2020 and 2050, respectively. Can these goals be met with in-state biomass feedstock? If not, what are some options for biomass crops or out-of-state biopower?

Biogas

2. Do nitrogen oxide (NOx) emission requirements pose a hurdle to development of new biogas generation? What low-NOx technologies are available and how much do they cost? What can be done to expand the availability and utilization of low-NOx technologies for generating electricity from biogas?
3. Is electricity generation from landfill gas a technology that still has potential to grow or have many of the best landfill sites been developed already?
4. There has been a downward trend in the amount of energy generated from biomass and biogas in the last 5 years. What could be the reason behind this? What can be done to reverse this trend?
5. Capturing methane from dairies and wastewater treatment facilities can help reduce greenhouse gas emissions in California. Assembly Bill 1969 (Yee, Chapter 731, Statutes of 2006) established a feed-in tariff set at the market price referent for public and wastewater treatment facilities; however, no facilities have signed up for this feed-in tariff. Is the feed-in tariff level set too low? Are there other barriers preventing development of new biogas facilities?
6. Has there been resistance to the injection of biogas into natural gas pipelines in California? Has injection of biogas into natural gas pipelines been successful in other states or countries? What changes (e.g., improvements in technology, technological breakthroughs, or expanded use to bring down manufacturing costs) are needed to expand the use of biogas in the natural gas transmission system?

Competition for solid-fuel biomass feedstocks

7. As Assembly Bill 118 (Núñez, Chapter 750, Statutes of 2007) and other alternative transportation goals and programs are implemented, the transportation sector may use an increased amount of biomass for production of transportation fuel. From an electricity production perspective, what can be done to mitigate the competition for fuel between the transportation and electricity sectors? Specifically, what can be done to provide a steady and affordable stream of solid biomass fuel for the

electricity generation? Should refuse-derived fuels (densified or pelletized) be given further consideration as a biomass feedstock? What technologies may be required to produce a "clean" fuel?

8. There are uses for biomass other than generating energy. These uses include: compost and landscape mulch, animal bedding for chickens, animal feed, and daily landfill cover. What impact will these activities have on the availability and cost of solid-fuel biomass feedstock for the electricity sector?

Co-firing biomass in coal power plants

9. What barriers are there to co-firing biomass in coal plants in the Western Electric Coordinating Council region?
10. What kinds of infrastructure upgrades are needed for co-firing?
11. What percentage of solid-fuel biomass can be technically and economically co-fired with coal?
12. Are there sufficient out-of-state coal plants located near solid-fuel biomass feedstock to contribute significantly to achieving 20 percent of the state's renewable energy goals with biomass and biogas?
13. What policies would need to be in place to make co-firing biomass an attractive option? If a cap-and-trade program for greenhouse gas emissions is established, would co-firing biomass in coal plants become an economically feasible approach to reducing greenhouse gas emissions? Under what conditions?

Other barriers to development of new solid-fuel biomass generation

14. What are the major barriers to creating a self-sustaining biomass industry in California? Which of these barriers can be addressed through better industry practices, changes in regulations, or other measures?
15. What regulatory requirements make it difficult for new biomass plants to become operational? What changes would you suggest to meet the intent of these regulations and allow new biomass plants to come on-line?
16. Assembly Bill 3048 (Committee on Utilities and Commerce, Statutes of 2008, Chapter 558) removed fuel restrictions for existing solid fuel biomass facilities participating in the Existing Renewable Facilities Program. Existing biomass facilities are now under the direct guidelines of the RPS statute requiring that technology used for the RPS "not cause or contribute to any violation of a California environmental quality standard or requirement." Because state harvesting requirements are not applicable on federal land, the removal of these restrictions may have made it easier for these facilities to purchase fuel harvested from federal forests. What effect, if any, has this change had on the availability and cost of solid fuel biomass? If collection

and transportation costs remain a barrier, what technologies, processes, or incentives could help improve the economics and make environmentally sound use of this material practical?

17. Staff has proposed various solutions to overcome many of the barriers to meeting a goal of 20 percent of the state's RPS with biomass generation. For solid-fuel biomass, these solutions include: 1) torrefication/pelletization of biomass fuel; 2) using burn piles from forest thinning projects; and 3) diverting green material, construction and building deconstruction lumber scrap from landfills; and 4) using refuse-derived fuel. Which of these solutions are likely to be available to help meet the 2010 and 2020 goals? Will these solutions be enough to meet the potential need? What other solutions should be considered?