

CALIFORNIA ENERGY COMMISSION1516 Ninth Street
Sacramento, California 95814Main website: www.energy.ca.gov

In the matter of:)	Docket No. 09-IEP-1E
)	NOTICE OF COMMITTEE
Preparation of the)	WORKSHOP RE: Comparative
2009 Integrated Energy Policy Report)	Costs of California Central Station
)	Electricity Generation Technologies
_____)	

Committee Workshop on the Comparative Costs of California Central Station Electricity Generation Technologies

The California Energy Commission's (Energy Commission) Integrated Energy Policy Report (IEPR) Committee will hold a workshop to receive public comments on the staff's preliminary levelized cost estimates for a number of electricity generation technologies. Commissioner Jeffrey D. Byron is the Presiding Member and Vice Chair James D. Boyd is the Associate Member of the 2009 IEPR Committee. Other Commissioners from the Energy Commission or the Public Utilities Commission (CPUC) may also attend and participate in this workshop. The workshop will be held:

WEDNESDAY, JULY 22, 2009
9 a.m.
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
First Floor, Hearing Room A
Sacramento, California
(Wheelchair Accessible)

DOCKET 09-IEP-1E
DATE _____
RECD. <u>July 09 2009</u>

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.

Purpose

This workshop will review the staff's preliminary levelized cost estimates for a number of different generation technologies, and discuss whether the calculations are representative of current and expected project developments. The Energy Commission staff will present a summary of assumptions used to characterize different generation technologies and resulting range of levelized cost calculations. The detailed study results can be found in the draft staff report, *Comparative Costs of California Central Station Electricity Generation Technologies*. The characterization of the different renewable generation technologies and supporting documentation are presented in a PIER interim project, *Renewable Energy Cost of Generation Update*. Both reports will be available at http://www.energy.ca.gov/2009_energypolicy/documents/index.html approximately one week prior to the workshop.

IEPR Committee requests that the state's major utilities, conventional and renewable generation developers, and other interested parties review the referenced documents and be prepared to provide comments at the workshop. The IEPR Committee is seeking to develop an accurate and relevant set of generation cost estimates that can be applied to electricity resource planning and technology evaluation studies.

Background

The goal of this project is to have a single set of the most current levelized cost estimates that would be used for policy development at the Energy Commission and other state agencies. These levelized costs are useful for evaluating the financial feasibility of a generation technology and comparing the attributes of different generation technologies. Since most studies involving new generation require an assessment of costs, accurate and readily available levelized cost of generation estimates are essential for any resource planning study.

There are numerous studies that provide levelized costs estimates for individual generation technologies, but it is difficult to compare the merit of these different estimates without understanding the underlying assumptions. Since plant operations and the financial characterizations can vary, these also produce significantly different levelized cost estimates. It is important to have a consistent set of assumptions to be able to compare the merits of each generation technology. The numerous variations with these input assumptions will result in range of levelized cost estimates for each technology. A single set of conditional assumptions, that results in single-point estimates, will not reflect actual market dynamics and the possible range of costs when evaluating resource development options. The Energy Commission staff has found that actual construction costs are typically higher than developer claims and will vary from case to case.

The levelized cost of generation analysis includes the following development phases:

1. Modify the Model that staff developed for the last *IEPR* to add new analytical features;
2. Incorporate cash-flow calculations for merchant plants for comparison to revenue-requirement accounting methodology that is appropriate for utility investments;
3. Capture change in capital cost and heat rates over the years;
4. Improve the representation of tax regulations;
5. Update engineering and financial cost information with current market indices;
6. Evaluate the major cost drivers to calculate current and future levelized cost estimates;
7. Address level of uncertainty associated with major cost drivers to calculate a range of levelized cost estimates (low, average and high); and
8. Expand the list of central station generation technologies to include community and building scale renewable options.

The levelized cost calculations include electricity generated from a variety of generation technologies, including conventional natural gas sources, renewables, and clean coal.

Written Comments

Written comments on the workshop topics can be submitted until 5:00 p.m. on August 10, 2009. Please include the docket number # 09-IEP-1E and indicate "Present and Future Central Station Renewable Plant Costs" 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-1E
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 Joel Klein at (916) 654-4822 or by email at **[jklein@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 [\[https://energy.webex.com\]](https://energy.webex.com) and enter the unique meeting number **922 422 674**.
- When prompted, enter your information and the following meeting password **COG@72209** (Please note, password is case sensitive.)
- 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 Log on for Callers with an Extension Phone Number, etc.:

- Please go to [\[https://energy.webex.com\]](https://energy.webex.com) and enter the unique meeting number **922 422 674**.
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- Instead 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 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 1-866-469-3239 (toll-free in the U.S. and Canada) and when prompted enter the unique meeting number **922 422 674**. International callers can select their number from [\[https://energy.webex.com/energy/globalcallin.php\]](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. 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

Mail Lists: Energy Policy, Distributed Generation, Electricity, Renewable, Research, RETI, Geothermal (853), Wind (862),

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