CALIFORNIA ENERGY COMMISSION 1516 Ninth Street Sacramento, California 95814 Main website: www.energy.ca.gov



In the matter of:

Preparation of the 2009 Integrated Energy Policy Report

Docket No. 09-IEP-10

NOTICE OF COMMITTEE WORKSHOP

# Committee Workshop on the Potential Need for Emission Reduction Credits in the South Coast Air Quality Management District

The Energy Commission's Integrated Energy Policy Report (IEPR) Committee will conduct a workshop to discuss the potential need for new and replacement generation in areas under the jurisdiction of the South Coast Air Quality Management District in order to meet state policy directives and local reliability needs. This need translates into a need for particulate matter 10 microns or less in size (PM-10) air emission credits, whose purchase or provision is currently constrained by both market conditions and litigation, thus precluding the development of new and replacement generation that produces such emissions. Commissioner Jeffrey D. Byron is the Presiding Member of the 2009 IEPR Committee, and Vice Chair James D. Boyd is the Associate Member. Other Commissioners may also attend and participate in this workshop. The workshop will be held:

#### THURSDAY, SEPTEMBER 24, 2009

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

DOCKET	
09-IEP-1O	
DATE	
RECD.	SEP 10 2009

### **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 and Background**

The area under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) includes two transmission-constrained areas that require substantial amounts of dispatchable, local electric generation capacity: the California Independent System Operator portion of the Los Angeles Basin and the control area of the Los Angeles Department of Water and Power. Limits on the ability to import power into these areas require that threshold amounts of capacity be located in these areas to meet reliability standards imposed by the North American Electric Reliability Corporation.

More than 8,000 MW of generation capacity in the Los Angeles Basin may be facing retirement during the coming decade. The existing generation fleet in the Los Angeles Basin includes more than 7,000 MW of capacity at ten facilities that are more than 30 years old and were identified as candidates for retirement in the 2005 and 2007 IEPRs. In June 2009, the State Water Resources Control Board issued a draft policy on the use of ocean water for power plant cooling, which effectively requires generation units using once-through cooling (OTC) to undertake substantial investment, which means refitting their cooling systems or repowering, or to retire. This affects more than 7,000 MW at six of the ten facilities. Investments in energy efficiency, demand response, renewable resources, and transmission upgrades within the Los Angeles Basin will contribute to meeting local capacity requirements or reduce them. This will allow a share of OTC plants to be retired, and replaced with resources outside the Los Angeles basin if necessary. But the remaining capacity will continue to be required within the basin. As refitting is likely to be technologically infeasible or uneconomic at many, if not most locations, this will require repowering or retirement and replacement with gas-fired generation, both of which will require air emission credits from SCAQMD.

The ability of generators to secure PM-10 emission reduction credits (ERCs) or offsets in SCAQMD is severely constrained by both market conditions and litigation that precludes SCAQMD from issuing offsets from its own accounts. SCAQMD reports that prices in the PM-10 market have increased to as much as \$140,000/lb/day, which would add \$100 million–\$200 million to the cost of power plant development if sufficient ERCs were available. Trading during 2008 indicates, however, that less than 1,000 pounds are available through the open market; replacing even half the capacity in the Los Angeles Basin that is aging or uses OTC with gas-fired resources would require perhaps five times as many ERCs as are apparently available. Litigation currently precludes SCAQMD from providing offsets under exemptions to its Rule 1304, which has allowed for such provision when power plants are repowered or replaced, and from its Priority Reserve, opened to new power plants in 2007.

Various pieces of legislation that would provide credits to new and existing power plants have been proposed to date. The legislation ultimately enacted may provide credits for new plants or only provide offsets to existing power plants for the purpose of repowering or replacement, or both. It is possible that legislation will not successfully address the potential longer-term need for repowering and replacement in the Los Angeles Basin.

## **Issues for Discussion**

The following topics will be discussed at the workshop:

- 1. What is the current and near-term supply-demand balance in both Southern California and the transmission-constrained areas within SCAQMD jurisdiction? Are reserves sufficient to ensure reliability? What are the implications of air emission credit issues for power plants currently under development?
- 2. While the current impasse of air credits focuses on PM-10, there are plans to create a separate and distinct particulate matter less than 2.5 microns in size (PM-2.5) standard, which would likely be the focus of emission compliance issues for power plants. How will California Air Resources Board (CARB) and the district address changes in their permitting processes if a separate PM-2.5 standard is put in place? When should such a change be considered likely to occur? Are there other criteria pollutants that are significant to power plant licensing that the energy agencies should be aware of over the next 10 years or so?
- 3. What are current conditions in the PM-10 credit market and the status and impact of litigation that has restricted the availability of PM-10 offsets from SCAQMD accounts? What are the likely timelines for action by the air district given the passage or rejection of proposed legislation?
- 4. What are the potential PM-10 ERC needs in the California ISO portion of the Los Angeles Basin during the next five to ten years? How much in-basin gas-fired capacity is likely to be needed to meet local reliability needs? How often is it likely to be dispatched and what are the implications of its operating profile for ERC needs?
- 5. What are the potential PM-10 ERC needs of the Los Angeles Department of Water and Power?
- 6. How are PM-10 ERC requirements for individual power plants determined by SCAQMD? How do District rules and policies impact the determination of a plant's PM-10 liability and comport with the lbs/mmscf limit that typically becomes part of the Permit to Operate? How does the relationship between ERC requirements and maximum operation in summer months in SCAQMD compare to that in other air districts?
- 7. One potential solution to the current impasse involves establishing a fixed amount of emissions for new power plants from which credit-satisfying permit requirements could be provided to supplement those from market sources. If this mechanism were put in place, how should scarce credits be allocated among competing projects?
- 8. PM-10 ERC needs for given amounts of generation capacity can be reduced by limiting the maximum monthly fuel throughput along with output of resources needed

primarily for reserves. In the course of applying for air permits, what considerations enter into developer/utility proposals for limits on hourly and monthly and annual emissions? For monthly and annual emissions, can these limits be reduced without disadvantaging projects in competing for utility contracts or reducing contributions to resource adequacy requirements? If so, what, if any mechanism would be needed to handle *force majeure* events that threatened reliability?

9. Other issues raised by participants.

## Written Comments

Written comments on the workshop topics must be submitted by 5:00 p.m. on October 6, 2009. Please include the docket number 09-IEP-1O and indicate "Emission Reduction Credits in the SCAQMD" 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-10 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 Docket Office.

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 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 questions on the technical subject matter of this workshop, please contact David Vidaver, Electricity Generation Systems Specialist, at (916) 654-4656 or by e-mail at [dvidaver@energy.state.ca.us]. For general questions regarding the IEPR proceeding please contact Lynette Esternon Green, IEPR Project Manager, at (916) 653-2728 or by e-mail at [lesterno@energy.state.ca.us].

The service list for the 2009 IEPR is handled electronically. Notices and documents for this proceeding are posted to the Energy Commission website at [www.energy.ca.gov/2009\_energypolicy/index.html]. When new information is posted, an e-mail will be sent to those on the energy policy e-mail list server. We encourage those who are interested in receiving these notices to sign up for the list server through the website [www.energy.ca.gov/listservers/index.html].

### 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 927 751 911
- When prompted, enter your information and the following meeting password SCAQMD@92409 (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] and enter the unique meeting number 927 751 911
- When prompted, enter your information and the following meeting password SCAQMD@92409 (Please note, password is case sensitive.)
- After you log in, a prompt will ask for your phone number. CLICK CANCEL.
- 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 **927 751 911**. 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. Please be aware that the meeting's WebEx audio and onscreen activity may be recorded.

Original signed by: JEFFREY D. BYRON Commissioner and Presiding Member Integrated Energy Policy Report Committee Original signed by: JAMES D. BOYD Vice Chair and Associate Member Integrated Energy Policy Report Committee

Mail Lists: Electricity and Natural Gas, Energy policy, blythe, canyon, highgrove, palmdale, sentinel, sunvalley, vernon, watson, victorville, riverside\_expansion, walnutcreek

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