CALIFORNIA ENERGY COMMISSION

1516 Ninth Street Sacramento, California 95814

Main website: www.energy.ca.gov



In the matter of,)	Docket No. 09-IEP-1J
Preparation of the 2009 Integrated Energy Policy Report)))	NOTICE OF JOINT COMMITTEE WORKSHOP

Joint Committee Workshop on Natural Gas Issues

In support of the 2009 Integrated Energy Policy Report (2009 IEPR), the California Energy Commission (Energy Commission) will conduct a joint IEPR Committee and Electricity and Natural Gas Committee workshop to discuss natural gas price volatility and potential impacts of carbon regulations on natural gas for power generation. Commissioner Jeffrey D. Byron is the Presiding Member and Vice Chair James D. Boyd is the Associate Member of the 2009 IEPR Committee and the Electricity and Natural Gas Committee. Other commissioners from the Energy Commission and California Public Utilities Commission may attend and participate in this workshop. The workshop will be held:

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

DOCKET 09-IEP-1J DATE June 16 2009 RECD. June 02 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

This workshop is being held to provide the committees with an update on issues related to natural gas pricing, and the potential effect of federal and state carbon regulations on natural gas used for power generation. Energy Commission staff has performed research on these topics and will briefly describe some of the issues and key

uncertainties associated with these areas of the natural gas industry during the workshop. Staff is soliciting additional comments and inputs from other stakeholders.

A staff paper and presentations for the workshop will be posted online at [www.energy.ca.gov/2009_energypolicy/index.html] prior to the workshop. The staff paper, titled *Natural Gas Price Volatility*, discusses recent occurrences and probable causes of natural gas price volatility and its impact on market participants and date-specific price forecasting efforts.

Background

Senate Bill 1389 (Public Resources Code §25300-25324) requires the Energy Commission to prepare a biennial assessment of natural gas markets including supply, demand, infrastructure, pricing, reliability, and efficiency as part of the IEPR. The legislation states in part:

"The Legislature further finds and declares that the state government requires at all times a complete and thorough understanding of the operation of energy markets including ... natural gas..." Section 25300(c)

It further indicates the need for:

"Identification of impending or potential problems or uncertainties in the electricity and natural gas markets, potential options and solutions, and recommendations." Section 25303(7)

This workshop will discuss factors that affect the price of natural gas as well as the potential impacts on natural gas markets from government regulation of carbon emissions. Issues include identifying the nature of price volatility, the impacts on consumer prices, the correlation of natural gas prices to oil prices, and the uncertainty of price forecasts. In addition, the workshop will address potential effects from carbon regulations on natural gas supply, demand, and prices for California consumers.

Price Volatility

Natural gas price volatility presents numerous problems and opportunities to different market players. On one hand, volatility offers opportunity for profit to those with market knowledge, a sound strategy, and the willingness to accept the uncertainty inherent in the commodity markets. On the other hand, price volatility also creates uncertainty and risk that market participants must successfully manage to limit potential negative consequences. Whether natural gas price volatility is viewed as opportunity or risk, it does have real impacts, positive or negative, on natural gas producers, marketers, consumers, investors, and policy makers. Just in the last two years, the price of natural

gas has fluctuated from \$6.00/MMBtu to \$13.31/MMBtu to less than \$4.00/MMBtu most recently.

Staff has looked at price volatility over the last 10 years and is raising the following questions for discussion:

- Has natural gas price volatility increased in scope and frequency?
- What are the key factors that contribute to natural gas price volatility?
- What factors contributed to the natural gas volatility that occurred during 2008?
- What impact does financial speculation have on natural gas prices and volatility?
- Will increased domestic natural gas production have a sustained impact on natural gas prices and volatility?
- How strong is the correlation between oil and natural gas prices?
- Do NYMEX forward contract trading prices materially affect short-term spot market prices? If so, how?
- What are the reasons for natural gas price forecast differences?
- Do natural gas market participants acknowledge uncertainty in natural gas price forecasts?
- Given the tremendous uncertainty associated with quantifying major input variables and the resulting price forecasts, is it feasible or useful to attempt to produce a single point forecast? If not, how should uncertainties be incorporated into a natural gas market assessment?

Potential Implications of Carbon Regulations on Natural Gas Market for Power Generation

Recent legislation could have significant impact on the level of greenhouse gas (GHG) emissions from power generation in California. Climate change legislation has been passed by the United States Congress and the California State Legislature. Policy makers, sensitive to the controversy provoked by the reported costs and other impacts of such measures, have requested extensive research and analysis in support of their legislative and regulatory deliberations. Staff reviewed major studies of two comprehensive, multi-sector, landmark bills: S. 2191, the Lieberman-Warner Climate Security Act of 2007, and Assembly Bill 32 (Nuñez, Statutes of 2006, Chapter 488), the Global Warming Solutions Act of 2006; compared and contrasted findings and analysis from these studies covering the electric power generation sector; and asks if there are emerging greenhouse gas issues that need to be addressed by new policies in California.

Studies for review reflect the varying perspectives of government, the environmental community, academic institutions, independent energy consultants, and the power generation and natural gas industries. A study by the Natural Resources Defense Council does not examine any specific legislation, but instead cites extensive research to develop an alternative business-as-usual economic and climate forecast to draw attention to the consequences of failure to implement comprehensive GHG emissions control policies. Climate change regulation changes and increases the complexity of relationships between natural gas and other energy activities (e.g. coal-to-gas generation switch), increases the nature and variety of candidate actions available, and thus magnifies the uncertainties that must be taken into account by any useful forecast, whether a conditional assessment to gain insights and understand potential vulnerabilities or an attempted prediction of the future.

The questions for discussion include:

- Will the federal laws and regulations emphasizing lower carbon emissions result in a switch from coal power generation to natural gas generation?
- Since California receives 87 percent of its natural gas needs from out-of-state, what will be the potential impact on natural gas supplies to California?
- Will an increase in natural gas demand for electricity generation in states that currently use coal have a significant impact on prices that California pays for natural gas?
- Will natural gas demand in California decrease due to the carbon emission concerns associated with natural gas use for electricity generation?

Written Comments

Written comments on the workshop, paper, and presentations must be submitted by 5:00 p.m. on July 8, 2009. Please include the docket number 09-IEP-1J and indicate "Natural Gas Price Volatility and Carbon Implications" in the subject line or first paragraph of your comments. Please hand deliver or mail an original to:

California Energy Commission Dockets Office, MS-4 Re: Docket No. 09-IEP-1J 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]. If you have questions on price volatility, please contact Randy Roesser, Electric Generation System Specialist, at (916) 654-5124 or by email at [Rroesser@energy.state.ca.us]; if you have questions on carbon implications, please contact Peter Puglia, Energy Commission Specialist, at (916) 654-4746 or by email at [Ppuglia@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].

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
 928 882 952.
- When prompted, enter your information and the following meeting password cec@1234. Please note that 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
 928 882 952.
- When prompted, enter your information and the following meeting password cec@1234. Please note that 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 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. Please be aware that the meeting's WebEx audio and onscreen activity may be recorded.

JEFFREY D. BYRON

Commissioner and Presiding Member Integrated Energy Policy Report Committee Electricity and Natural Gas Committee JAMES D. BOYD

Vice Chair and Associate Member Integrated Energy Policy Report Committee Electricity and Natural Gas Committee

Mail Lists: energy policy, natural gas

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