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-1J

NOTICE OF JOINT COMMITTEE WORKSHOP

Notice of Joint Integrated Energy Policy Report and Electricity and Natural Gas Committee Workshop on Natural Gas Activities

In support of the 2009 Integrated Energy Policy Report (2009 IEPR), the California Energy Commission (Energy Commission) will conduct a combined Integrated Energy Policy Report and Electricity and Natural Gas Committee workshop to discuss natural gas activities. 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 the California Public Utilities Commission may attend and participate in this workshop. The workshop will be held:

THURSDAY, MAY 14, 2009

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

DOCKET	
09-IEP-1J	
DATE	
RECD.	May 01 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

The purpose of this workshop is to provide the Committee with an update of issues related to natural gas pipeline and infrastructure, shale gas production, and liquefied natural gas (LNG). Energy Commission staff has developed a report for each of the three 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 input from other stakeholders.

Staff papers and an agenda will be posted online at [www.energy.ca.gov/2009_energypolicy/index.html] prior to the workshop.

The June 16 workshop will cover additional natural gas related topics and the key uncertainties associated with each topic.

Background

In accordance with Senate Bill 1389 (Public Resources Code §25300-25324), the Energy Commission is required to prepare a biennial assessment of natural gas markets including supply, demand, infrastructure, pricing, reliability, and efficiency as part of the *Integrated Energy Policy Report*. 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 address pipelines and infrastructure, shale gas production, and LNG issues that affect the state's natural gas demand, supply, and price either directly or indirectly.

Shale Gas Production

Over the last 20 years, technological innovations have gradually progressed to allow commercial production of shale-deposited natural gas. As a result, shale natural gas from these North American formations has now entered the supply portfolio. Although natural gas production from shale formations has existed for years, it is only recently that the market is paying closer attention to this natural gas.

However, many experts have raised questions on the reserve potential, cost to consumers, and the environmental impacts of this resource. Issues and questions for consideration include:

- Can future production of natural gas from shale formations meet expectations of the natural gas industry?
- Are the current shale reserve estimates reliable? How can they be improved?
- How does the current pricing environment affect drilling programs scheduled for natural gas shale formations?
- How might potential environmental impacts affect future drilling and production of natural gas from shale formations?
- Can shale gas continue to gain demand-side market share?
- Is shale gas a viable long-term source of natural gas for the United States?

Liquefied Natural Gas Issues

California energy policy has long recognized the importance of maintaining access to reliable supplies of natural gas, including LNG. However, U.S. LNG imports in 2008 were significantly lower than the amounts that market experts projected several years ago. The decline in LNG imports can be attributed to a range of market developments, both global and domestic.

The future of LNG is uncertain. On the domestic stage, U.S. and West Coast LNG terminal development appears to be slowing, and there is a growing sense that the United States may not need to rely on LNG to meet demand. The status of North American import facilities and the factors that affect the quantity and price of potential LNG imports are also important factors to consider. In addition, the link between LNG and domestic natural gas will be explored at the workshop. Of particular importance to California are the "gas quality" characteristics of LNG and its carbon footprint. Questions and issues that will influence the amount of LNG import include:

- What factors help to determine landed LNG prices in the United States, Europe and Asia?
- How much LNG could be available to U.S. importers given the large price differences between the United States, European, and Asian markets?
- What other non-economic factors could drive the development of LNG?
- What are the prospects that natural gas exporting countries could develop into an energy cartel similar to OPEC?

- What is the relative balance of liquefaction and regasification facilities and LNG tankers available to transport the gas?
- What additional LNG terminals may be constructed on the West Coast?
- Could natural gas from shale formations displace the importation of LNG into the United States and Canada?
- How do life-cycle carbon emissions LNG compare to that of coal-fired generation and how should they be addressed by regulators?

Natural Gas Pipelines and Infrastructure

Growing demand and increased natural gas supplies from the Rockies and from shale formations across North America indicate that new infrastructure may be needed over the next few years. Furthermore, an increased reliance on renewable energy may change natural gas storage requirements to serve California's consumers. However, LNG, shale, pipeline infrastructure, and storage availability may affect the price of natural gas that consumers will pay.

Numerous market players are proposing new storage, interstate pipeline capacity, and LNG facilities to serve California and other areas. Since California relies on approximately 87 percent of its natural gas needs from out-of-state, there are numerous issues and uncertainties that policymakers need to explore and address in greater detail in the next few years. Issues and questions for consideration include:

- Could natural gas demand growth in upstream markets further limit California's supply access via existing infrastructure?
- Will winter and summer natural gas peak demand in the United States continue to grow at current rates?
- How could daily natural gas demand change as renewable technologies are added to the electric resource mix?
- Can both an Oregon LNG terminal and a Rockies pipeline that add natural gas supply into PG&E at Malin be constructed?
- What additional natural gas storage might be constructed or expanded in California?
- How much and for how long could Rockies natural gas be siphoned east of the Rockies?
- Could natural gas from the Rockies and the U.S. Southwest that currently flows to the Eastern U.S. be replaced by shale gas and therefore allow those sources to be available to California?

- What role would LNG from Costa Azul or from a new facility proposed off the southern California coast play in California's future natural gas supply mix?
- What additional pipelines bringing gas from the Rockies can be constructed to bring gas to the West Coast?

Written Comments

Written comments on the workshop topics must be submitted by 5:00 p.m. on May 22, 2009. Please include the docket number 09-IEP-1J and indicate "Natural Gas Activities" 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 name in the file name. 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 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 pipelines and infrastructure, please contact Bill Wood, Energy Specialist at (916) 654-4882 or by email at [Bwood@energy.state.ca.us]; Leon Brathwaite, Engineering Geologist, on shale gas production at (916) 654-4771 or by email at [Lbrathwa@energy.state.ca.us]; Robert Kennedy, Energy Commission Specialist, on LNG issues at (916) 654-5061 or by e-mail at [Rkennedy@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 **924 701 717**.
- 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 Log on for Callers with an Extension Phone Number, etc.:

- Please go to [https://energy.webex.com] and enter the unique meeting number 924 701 717.
- When prompted, enter your information and the following meeting password **Meeting@9**.
- 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 on-screen 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: California Energy Commission's formal name is State Energy Resources Conservation and Development Commission.