

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

In the matter of,)	Docket No. 11-IEP-1K
)	
Preparation of the)	JOINT COMMITTEE WORKSHOP
<i>2011 Integrated Energy Policy Report</i>)	
<i>(2011 IEPR)</i>)	RE: Natural Gas

Joint Committee Workshop on Natural Gas Market Assessment Reference Case and Scenario Results

The California Energy Commission's Integrated Energy Policy Report (IEPR) and Electricity and Natural Gas (E&NG) Committees will conduct a workshop to discuss and take public comments on implications and insights from staff's *2011 IEPR* natural gas market assessment. The assessment includes an update of current natural gas trends on supply, demand, infrastructure, and pricing issues. In addition, the natural gas market assessment includes estimates of future prices, supplies, and demand under various assumptions.

Chairman Robert B. Weisenmiller is the Presiding Member of the IEPR and E&NG Committees, Commissioner Karen Douglas is the Associate Member of the IEPR Committee and Commissioner Carla Peterman is the Associate Member of the E&NG Committee. Other Commissioners may attend and participate in this workshop. The workshop will be held:

TUESDAY, SEPTEMBER 27, 2011
Beginning at 10:00 a.m.
 CALIFORNIA ENERGY COMMISSION
 1516 Ninth Street
 First Floor, Hearing Room A
 Sacramento, California
 (Wheelchair Accessible)

Remote Attendance and Availability of Documents

Internet Webcast - Presentations and audio from the meeting will be broadcast via our WebEx web meeting service. For details on how to participate via WebEx, please see the "[Remote Attendance](#)" section toward the end of this notice.

Documents and presentations for this meeting will be available online at:
http://www.energy.ca.gov/2011_energy_policy/

Purpose

The IEPR and E&NG Committees are seeking public comments from stakeholders on implications and insights from staff's 2011 natural gas market assessment. In addition, the Committees are also requesting input on staff's reference case and scenarios that portray possible future estimates of natural gas demand, supply, and prices.

To generate a reference case, four scenarios, and two sensitivities, staff used a modified version of a reference case developed by Dr. Kenneth Medlock III of the James A. Baker III Institute for Public Policy at Rice University. In addition, staff worked closely with Dr. Medlock to specify more detailed topology for the Western United States and Canada. Although the reference case does not represent a "most likely case," staff used it as a starting point and made changes to key drivers to produce individual scenarios that can be directly compared to the reference case to draw relevant insights.

Background and Context

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) mandates the Energy Commission to:

"At least every two years, the commission shall conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices." (Pub. Resources Code, § 25301(a).)

At the February 24, 2011, Joint Committee Workshop on Economic, Demographic, and Energy Price Inputs for Electricity, Natural Gas, and Transportation Fuel Demand Forecasts, staff discussed possible key drivers that influence the natural market. Staff also proposed purpose, scope, and structure of the alternative scenarios.

At the April 19, 2011, Staff Workshop on Natural Gas Market Assessment, Reference Case, Proposed Scenarios, and San Bruno Incident Safety and Reliability Implications, Dr. Medlock presented the Institute's reference case. Energy Commission staff also presented a proposal to modify the Institute's reference case by introducing more natural gas market details relevant to California. Staff also proposed to develop several scenarios around the reference case.

Staff will present the results of the reference case and scenarios at this workshop. The reference case illustrates a possible future based on natural gas supply, demand, price,

and infrastructure “business-as-usual” conditions. This means, the regulations and market conditions known today were integrated in developing the reference case.

Thereafter, staff developed a High Gas Price Scenario driven by environmental concerns. To develop this scenario, staff gradually removed 50 GW coal-fired generation from the United States generation pool by 2020; assumed a strong economic growth of 3.5 percent annually; delayed renewable portfolio standard (RPS) implementation for some states by 10 years; added \$0.40 cents to the operations and maintenance cost of developing shale formations; removed potential shale sources in Pennsylvania, New York, Colorado, and Wyoming from development; and introduced natural gas development constraints in Iraq, Iran, Russia, and Venezuela.

For a Low Gas Price Scenario, staff assumed that all states meet the RPS on time and environmental concerns were diminished over time, as technology developments mitigate regulatory requirements. In addition, staff capped economic growth at 2.5 percent; restricted exports of liquefied natural gas from North America; increased shale resources from Marcellus, Haynesville, and Western Canada; and allowed unrestricted participation of Iran, Iraq, and Venezuela in the world natural gas market.

For a California High Gas Demand Scenario, staff gradually removed the equivalent of California’s in-state nuclear power generation from California’s generation pool. In addition, staff slowed the trend toward RPS compliance in California to 1 percent per year in 2020 and gradually shifting up to 33 percent in 2029, doubled the amount of residential and commercial electric vehicle generation currently embedded in the Energy Commission’s electricity demand forecast, and added 200 million therms by 2020 and 400 million therms by 2030 to natural gas transportation demand.

Staff also developed a California Low Gas Demand Scenario. For this scenario, staff assumed that RPS will reach 33 percent of electric sales by 2020 and will continue to increase by 1 percent beyond 2020 until reaching 40 percent in 2027. Staff also added 6,000 MW of distributed generation by 2030 on top of the 3,000 MW from the California Solar Initiative, and assumed slow growth in California electric production.

Besides the four scenarios described above, staff developed two sensitivities centered on the reference case. In the first sensitivity case, staff assumed a moratorium on several shale gas producing regions of the country due to environmental concerns. In the other sensitivity, staff reduced the natural gas flows in the Baja and Redwood paths by 300 and 200 MMcf/d due to the reduction of pipeline pressures in PG&E’s backbone system.

Written Comments

Written comments on the meeting topics must be submitted by 5:00 p.m. on **October 11, 2011**. Please include the docket number 11-IEP-1K and indicate “2011 IEPR – Natural Gas Market Assessment Reference Case and Scenario Results” in the subject line or first paragraph of your comments. The IEPR Committee will consider any

comments and suggestions received at this workshop for inclusion in the final report. The final report is currently scheduled for December 2011.

All filings in the IEPR proceeding may now be done electronically. Please send your comments in either Microsoft Word format or as a Portable Document File (PDF) by electronic mail to **docket@energy.state.ca.us** and copy the technical lead staff at **rtavares@energy.state.ca.us** or send them on a Compact Disk to:

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 11-IEP-1K
1516 Ninth Street
Sacramento, CA 95814-5512

Please include your name or organization's in the name of the file. Signatures may be indicated on electronic copies by embedding a scanned signature graphic, "Original signed by" or similar words, or a scanned copy of the signature page may be appended to the electronic file.

A hardcopy original may also be submitted to the Dockets Office during the workshop comment window. 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 the technical subject matter of this meeting, please contact Ruben Tavares at (916) 654-5171 or by e-mail at rtavares@energy.state.ca.us. For general questions regarding the IEPR proceeding, please contact Lynette Green, IEPR project manager, at (916) 653-2728 or by e-mail at lesterno@energy.state.ca.us.

The service list for the 2011 *IEPR* is handled electronically. Notices and documents for this proceeding are posted to the Energy Commission website at www.energy.ca.gov/2011_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.

Remote Attendance

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3. INTERNATIONAL CALLERS: Click on the "Global call-in number" link in part (2) above
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Date: August 25, 2011

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