California Energy Commission

Joint IEPR/Siting Committee Workshop

Framework for Evaluating Greenhouse Gas Implications of Natural Gas-Fired Power Plants in California

June 23, 2009

AGENDA

9:00 Introduction

Suzanne Korosec, IEPR Lead

9:05 Opening Comments

Jeffrey Byron, Commissioner

James Boyd, Vice Chair

Karen Douglas, Chairman

9:15 Overview and Goals for Today's Workshop

Dale Edwards, Transmission Corridor Designation Unit

9:20 Presentations Related to MRW's Consultant Report: Framework for Evaluating Greenhouse Gas Implications of Natural Gas-Fired Power Plants in California

Mike Jaske, Senior Policy Analyst – Overview of Committee Decision/Report concluding the GHG OII

Steve McClary, MRW & Associates – Overview of draft Framework Report

David Hawkins, California Independent System Operator – Status of renewable integration studies, and perspective on MRW report

Nancy Ryan, California Public Utilities Commission – GHG relative to the procurement process

Kevin Kennedy, California Air Resources Board – Overview of how CARB views the electric generation system from the GHG perspective

10:45 Panel Discussion: (Moderator: Mike Jaske)

Background: Based on input received at the GHG OII workshops held in October and November 2008, and the MRW Framework Report, staff has prepared a set of 10 questions for an invited panel to discuss (see attached). The panel members are:

Will Rostov, staff attorney, Earthjustice (confirmed)

Noah Long, Natural Resources Defense Council (confirmed)

Matt Barmack, Calpine Corporation for Independent Energy Producers (confirmed)

Mark Minnick, Southern California Edison (invited)

Scott Galati and Antonio Alverez, Pacific Gas and Electric (confirmed)

Nancy Ryan, California Public Utilities Commission (confirmed)

David Hawkins, California Independent System Operator (confirmed)

Obadiah Bartholomy, Sacramento Municipal Utility District (confirmed)

Robert Anderson, San Diego Gas and Electric (confirmed)

12:30 – 1:30 – Lunch (If deemed necessary, the panel discussion may continue till 1:00, or it may be continued after lunch.)

1:30 – 3:00 – Public Comment and Response to Staff Proposed Questions

- Closing Remarks

Questions for the panel:

1. Chapter 7 of the GHG Framework Report identifies five roles new gas-fired power plants may fill given the state's current environmental and energy goals. Three of these are related to local reliability or operating characteristics needed by the electric system in increasing amounts as greater levels of reliance upon renewable generation takes place.
   a) Do the system operators agree that these are roles that gas-fired power plants will fill in the near and medium term?
   b) Are there other roles that are not described in Chapter 7 that should be added?
   c) Should standardized definitions of plant attributes be developed? What agency or source should be relied upon for determining standardized definitions? Chapter 7 provides definitions that are drawn for CAISO's tariff. Are these definitions sufficient?
   d) What is the relative importance of the five roles?

2. Are there characteristics of plants using fuels other than natural gas (e.g. biomass) that should be considered in terms of their impact on GHG emissions?

3. Do the Policy-Driven Futures identified in Chapter 6 of the GHG Framework Report adequately describe the likely range of resource development trajectories over the next 12 years, and if so do they correctly capture the GHG emission implications of those futures?

4. Are the identified Policy-Driven Futures an appropriate range of possible future alternatives?

5. The GHG Framework Report suggests extensive modeling would be necessary to understand precisely how the net GHG emissions of the electric system would change under various specified future conditions. However, the report authors expect that net GHG emissions will decline under the following futures:
   a) The addition of new gas-fired power plants to the extent necessary to permit the penetration of renewable generation to the 33 percent target.
   b) The addition of new gas-fired power plants improving the overall efficiency of the electric system.
   c) The addition of a new gas-fired power plant or modernization/repowering of existing capacity serving load growth or capacity needs more efficiently than the existing fleet.

   Is this a reasonable conclusion?

6. Assuming that the roles identified in Chapter 7 of the GHG Framework Report are valid, how are utilities and others responsible for long-term resource additions going to assure that generating resources with such qualities are developed?

7. How has the CPUC directed IOUs to evaluate the GHG emissions of power plant contracts in its LTPP decisions, or through other means, in constructing RFOs or in evaluating bids submitted into RFOs?

8. To what extent are expected GHG emissions taken into account in procurement or project development processes?
   a) From the project developer perspective?
   b) From the IOU perspective, following CPUC procurement guidance?
   c) From the POU perspective, satisfying its own GHG emission policies or applicable mandates from the State of California?
   d) From the electric service provider perspective?

9. The GHG Framework Report suggests that the role of a power plant applying for a license at the Energy Commission be considered in assessing its likely GHG emissions, but how the expected role(s) that might be played by a given power plant with a specified technology would be determined is unclear.
   a) What evidence should be presented in an individual power plant licensing case to confirm that a proposed power plant intends, or can be expected, to fulfill one or more roles?
   b) To what extent would long-term contract(s) with load serving entities help to establish that a power plant is intended to play one or more roles?
   c) Assuming typical long-term contracts between merchant power plants and investor-owned utilities extend 10 years, how would one or more roles be identified for the proposed power plant after an initial contract was completed?

10. From a GHG emissions perspective, the GHG Framework Report appears to reinforce the Energy Commission Siting Committee report (CEC-700-2009-004, March 2009) that power plants should be examined as elements of the overall electricity system and not as stand-alone facilities that can be examined separately.
    a) Does the CAISO interconnection process for major projects also analyze a specific facility in the context of its impact on the system?
    b) Do the procurement rules established by the CPUC for IOUs in determining “net short” positions forward in time examine specific project output in the context of a portfolio of projects satisfying total requirements?
    c) How do specific contracts submitted for approval by the CPUC satisfy overall IOU resource needs to serve end-user energy demand reliably?

Written Comments

If you desire to provide written comments to one or more of the above questions, they must be submitted by 5 p.m. on June 30, 2009. Please include the docket number 09-IEP-1P and 08-GHG OII-1 and indicate **Greenhouse Gas Emission Impacts of Power Plants** 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-1P** and **08-GHG OII-1**

1516 Ninth Street

Sacramento, CA 95814-5512

The Energy Commission encourages written comments by e-mail. Please include your name or organization in the name of the file. Those submitting comments by e-mail should provide them in either Microsoft Word format or as a Portable Document File (PDF) to [docket@energy.state.ca.us]. **One paper copy** must also be sent to the Energy Commission's Dockets Office at the above address.