

**Comments of the Natural Resources Defense Council (NRDC) on MRW & Associate's Consultant Report Evaluating GHG Emissions from California's Electric System**

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## **I. Introduction**

The Natural Resources Defense Council (NRDC) appreciates the opportunity to offer these comments for the 2009 Integrated Energy Policy Report (IEPR). NRDC is a nonprofit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that Californians demand. We focus on representing our more than 124,000 California members' interest in receiving affordable energy services and reducing the environmental impact of California's energy consumption. We submit these comments in response to MRW & Associate's report "Framework for Evaluating Greenhouse Gas Implications of Natural Gas-Fired Power Plants in California" and the staff discussion questions posed for the June 23, 2009 Workshop on MRW's report. NRDC has not responded to each question, but instead provides focused comments on the report.

## **II. Discussion**

- 1. The report is a useful scoping document for developing a full scenario analysis for system-wide greenhouse gas emissions.*

As we have previously commented, NRDC believes that the California Energy Commission (CEC) should develop and analyze various scenarios for how the California electric system might evolve to meet California' ambitious climate, renewable energy and efficiency mandates. The CEC should develop this scenario analysis through a public process. A full scenario analysis that indicates various cost and emissions trajectories under different power plant and transmission build-outs will allow the CEC to analyze the impacts and attributes of specific procurement decisions and applications for new plant construction. .

The report discusses various roles that natural gas plants may fulfill (e.g., intermittent generation support, local capacity requirements, grid operations support, extreme load and system emergencies support, and general energy support). The CEC should develop a full scenario analysis that considers the costs and emissions associated with utilizing natural gas to play these various roles for the major demand centers in California. Moreover, any statewide scenarios analysis should inform local analysis and alternatives, when appropriate.

While new natural gas plants can provide emissions reductions when they replace power from older, dirtier plants, a new plant may not always be the most effective way to meet a particular need with the fewest possible total emissions. Below are a few suggested options that the CEC scenario analysis should also include:

- Transmission and distribution upgrades;
- Locally focused demand response;
- Analysis and forecasting of renewable energy intermittency to minimize need for fossil ramping, balancing and backup;
- Strategic placement of renewable and fossil resources to minimize need for additional plants;
- Thermal and electricity storage options;
- Alternative, zero emissions technologies that provide some or all of the functions discussed in the report.

*2. The Commission should examine all available information, in addition to the MRW report, before determining the best options to minimize greenhouse gas emissions.*

While we agree with the report that new natural gas plants could potentially reduce statewide greenhouse gases, we do not believe that the report by itself is justification for a wide-scale build-out of new natural gas power plants. While it is true that replacing all of California's fossil plants with new, highly efficient gas plants would bring about a reduction in emissions, the construction of a new plant is not always the lowest emission alternative, depending on the functions that plant will provide. Furthermore, because of the long-term investment horizon associated with any power plant, the Commission should consider the lifetime cost and emissions impacts of every

new plant. While a new plant may offer short-term emission reductions compared to the alternative, it also guarantees a vested interest in continued operation. Once new natural gas plant is constructed, it will be operational for many decades. The state will need to lower its emissions significantly over the coming decades, and new investments in fossil plants now should be made with caution, and only when they provide the lowest emission alternative.

3. *CEC and CPUC analysis of power plant siting decisions must continue to play an important role in California's efforts to reduce greenhouse gas emissions.*

As the Air Resources Board indicated in its Scoping Plan, a number of interrelated policies will be necessary to bring about emissions reductions from the electricity sector. Moreover, CEQA and AB 32 impose separate and distinct requirements. Therefore, even though the Scoping Plan lays out multiple emission reduction strategies for the electricity sector, including a cap and trade program, the CEC must conduct independent analysis of emissions implications of permitting decisions.

### **III. Conclusion**

Thank you for the opportunity to comment on this important matter. We look forward to working with the Commission to achieve the optimal energy future for California.