

Errata for the 2008 Integrated Energy Policy Report Update

November 20, 2008

Executive Summary, “California’s Renewable Future,” page 2, first paragraph:

Since 2002, California has had a mandate to increase the use of renewable generation to 20 percent of retail electricity sales by 2010. ~~The Governor and the state’s energy agencies have identified a further target of 33 percent renewable generation by 2020, which~~ On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08, which raises California’s renewable energy goals to 33 percent by 2020. This enhanced target will help California meet the aggressive greenhouse gas emission reduction target of 1990 levels by 2020.

Executive Summary, page 3, third paragraph:

The number and size of proposed large-scale renewable power plants makes environmental permitting an increasing concern. Many of these new facilities are proposed in ecologically sensitive areas that could require habitat mitigation and restoration, which must be factored into the costs of the projects. Environmental mitigation issues can also affect project development schedules and project success. To help address these issues, Governor Schwarzenegger’s Executive Order S-14-08 establishes the Renewable Energy Action Team to create a “one-stop” process for permitting renewable energy facilities. Also, the Energy Commission will continue participating in efforts with the Department of Energy and the Bureau of Land Management to evaluate environmental impacts associated with permitting solar thermal facilities in California. In addition, the California Public Utilities Commission should direct investor-owned utilities to consider the effect of the environmental permitting process on project schedules, milestones, and costs.

Chapter 1, page 11, second paragraph:

Renewable energy is an essential component of the state’s loading order for meeting growing energy needs: first, with energy efficiency and demand response; second, with renewable energy and distributed generation; and third, with clean fossil-fueled sources and infrastructure improvements. California ~~currently~~ has had a Renewables Portfolio Standard (RPS) since 2002 that requires electric utilities to increase the use of renewable generation to 20 percent of retail electricity sales by 2010. ~~The Governor and the state’s energy agencies have identified a further~~ On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08 that raises California’s renewable energy goals to 33 percent by 2020. This higher target of 33 percent renewable generation by 2020 ~~which~~ has been identified by the California Air Resources Board (ARB) ~~has identified~~ as a key strategy for meeting the state’s aggressive greenhouse gas (GHG) emission reduction target of 1990 levels by 2020. To help meet the Governor’s goal to reduce GHG emissions to 80 percent below 1990

levels by 2050, California may need to achieve even higher renewable targets depending on the electricity sector's ultimate share of GHG reductions.

Chapter 1, page 37, insert paragraph before final paragraph beginning "Much of the land . . ."

More recently, Governor Schwarzenegger signed Executive Order S-14-08 on November 17, 2008, which establishes a Renewable Energy Action Team (REAT) to create a "one-stop" process for permitting renewable energy facilities. Among other things, the Executive Order also calls for the REAT to undertake a variety of activities related to establishing long-term conservation plans, and to develop a best management practices manual to assist RPS project applicants in designing projects that minimize environmental impacts.

Chapter 2, page 40, insert after first paragraph:

The data in this table is drawn from the published 2007 demand forecast report (pages 25-29) in which there is a more detailed discussion of conservation accounting in the forecast for programs, standards, and price and market effects. Additionally, the methods used to account for efficiency in the forecast are documented in the Energy Commission's Demand Forecast Methods Report, last published as part of the 2005 IEPR cycle. The table reflects the attribution of energy efficiency currently characterized in the demand model. Relative results are likely to change as the Energy Commission continues to refine and improve its energy efficiency measurement and attribution during the 2009 IEPR process. This is part of the continuing effort to explain "all conservation reasonably expected to occur" over the Energy Commission's forecast period.

Chapter 4, page 76, first and second bullets:

- Both PG&E and SCE should report to the Energy Commission on the overall status and results of their seismic research efforts in future IEPR assessments, beginning with the most recent seismic vulnerability assessments for Diablo Canyon and SONGS in the 2009 IEPR. In particular, SCE should develop an active seismic hazards research program for SONGS similar to PG&E's Long Term Seismic Program to assess whether there are sufficient design margins at the nuclear plant to avoid major power disruptions. SCE's research should prioritize and include further investigations into the seismic setting at SONGS and should assess whether recent or current seismic, geologic, or ground motion research in the vicinity of SONGS has implications for the long-term seismic vulnerability of the plant.
- The Energy Commission recommends that both, ~~in cooperation with other appropriate state agencies and in coordination with PG&E and SCE,~~ should evaluate the degree to which using use three-dimensional geophysical seismic reflection mapping and other advanced techniques ~~should be pursued, if warranted by a cost-~~

benefit analysis, to supplement ongoing seismic research programs; **the Energy Commission should evaluate**, ~~and~~ whether these studies should be required as part of the Diablo Canyon and SONGS license renewal feasibility studies for the CPUC.

Chapter 5, bottom of page 88:

Limiting incentives to fuel cells and wind technologies has severely restricted the development, **benefits**, and use of the Self-Generation Incentive Program. The Energy Commission believes that **ultra clean and low emission** distributed generation technologies using ~~ultra clean~~ **non-renewable** and renewable fuels should be reinstated, especially those technologies used in combined heat and power (CHP) applications. Furthermore, depending on the reading of the original objectives of the program, which call for “incentives for distributed generation to be paid for enhancing reliability” and “differential incentives for renewable or super clean distributed generation resources,” then even generation technologies that do not run on a renewable fuel may enhance reliability and add significant value to the program participant, the ratepayer, and society as a whole.

Chapter 5, page 89:

Non-Renewable Alternative and Renewable Fuels

- Currently, renewable fuels are eligible for the Self-Generation Incentive Program only if used with a fuel cell system. The CPUC should consider re-instituting formerly eligible engine and turbine technologies that operate on **non-renewable fuels**, landfill gas, digester gas from dairy waste or wastewater treatment processes, or biodiesel.