

ERRATA

2009 INTEGRATED ENERGY POLICY REPORT

December 16, 2009

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Page 10, first partial paragraph:

whether to pursue license renewal for Diablo Canyon. Letters on June 25, 2009, from the president of the California Public Utilities Commission to Pacific Gas and Electric and Southern California Edison reiterated the requirement for each utility to complete the *AB 1632 Report's* recommended studies, including the seismic/tsunami hazard and vulnerability studies, and report on the findings and the implications of the studies for the long-term seismic vulnerability and reliability of the plants. These studies are necessary to allow the California Public Utilities Commission to properly undertake its obligations to ensure plant and grid reliability in the event that either Diablo Canyon or San Onofre has a prolonged or permanent outage and for the California Public Utilities Commission to reach a decision on whether the utilities should pursue license renewal. However, the utilities' reports to date indicate they are not on schedule to complete these activities in time for California Public Utilities Commission consideration. In addition, ~~both utilities have~~ Pacific Gas and Electric has indicated objections to providing some of the studies and/or requirements indicated by the *AB 1632 Report* and the California Public Utilities Commission General Rate Case Decision.

Pages 11-12, first paragraph under "Addressing Procurement in the Hybrid Market":

At the October 14, 2009, Integrated Energy Policy Report Committee Hearing on the draft *IEPR*, the IEPR Committee solicited comments from parties on how the state should address the current hybrid electric procurement market and improve the investor-owned utility procurement process for electric generation. These issues are critical to state energy policy but did not receive sufficient analysis throughout the 2009 IEPR process. The Independent Energy Producers Association submitted comments expressing support for an examination of the hybrid market structure to determine if it is functioning properly and achieving its original goal of providing a level playing field for utility-owned and independent power generation. In addition, the Western Power Trading Forum submitted comments expressing concerns that utility domination of infrastructure investment is potentially detrimental to competitive wholesale and retail markets and therefore potentially detrimental to technological innovation. The Forum asserts that the existing hybrid market structure requires ratepayers to bear the financial and operational risks associated with new investment and ignores the market's capabilities to actively manage and hedge those risks, and it believes that improving competition at the wholesale and retail levels would create downward pressure on prices.

Page 13, second bullet under “Recommendations”:

The Energy Commission will continue to monitor the potential environmental impacts associated with shale gas extraction, including carbon footprint, volume of water use and risk of groundwater contamination, air pollution, and potential chemical leakage. Specifically, the Energy Commission staff will coordinate and exchange information with energy agencies in states with shale gas development, such as New York, Texas, and other midcontinent states, and will report new findings in the *Integrated Energy Policy Report* and other Energy Commission forums.

Page 52, under “Energy Efficiency and the Demand Forecast,” add new paragraph before the paragraph beginning “Figure 8...”:

While progress has been made to delineate energy efficiency program impacts as presented in the Energy Commission’s adopted demand forecast, numerous uncertainties remain. The energy efficiency attributions noted below are preliminary, based on the best available information and analysis to date, and will require further analysis to more clearly and completely understand the interactions among codes and standards, naturally occurring savings, and utility programs.

Page 106, last paragraph:

In particular, legal clarity is needed on ownership of subsurface “pore space” where CO₂ is stored, the ability to independently transfer pore space rights and the dominance of such rights relative to surface and mineral rights, procedures by which access rights to multiple adjoining pore space “parcels” may be secured for CO₂ storage zones spanning multiple estates, and potential long-term liabilities for stored CO₂. More than 30 states are currently wrestling with these issues, with several states having passed laws that suggest approaches for consideration by the California Legislature.

Page 112, first full paragraph:

A similar issue arises with SCE. The utility plans to submit an application to the CPUC in late 2010 ~~for funding~~ to pursue an NRC license renewal application and to address issues from the *AB 1632 Report* and the CPUC. However, SCE anticipates using this application to also request funding to complete AB 1632-recommended studies. Furthermore, SCE anticipates filing its CPUC application in the third quarter of 2010, but does not anticipate completing many of its studies until the end of 2010. As a result, SCE acknowledges that the application will likely not include results from all of the AB 1632 studies. However, SCE believes it will be able to provide sufficient information for the CPUC to reach an informed decision, with some studies included in its application and others provided as they are completed.

Page 115, first partial paragraph:

proposed policy calls for coastal power plants to cut water intake by 95 percent to reduce the harmful impacts on marine life. To meet these requirements, the nuclear plants would need to be retrofitted for closed-cycle wet, dry cooling towers, or other cooling means. Previous studies have found that for California's nuclear plants, these options would be very expensive and possibly infeasible from an engineering perspective. The Energy Commission expects to review and comment on the studies required in the draft OTC policy regarding compliance implications and compliance alternatives for the two nuclear facilities. ~~Therefore, the proposed policy would allow the nuclear plants to be exempted if the utilities demonstrated that the costs of compliance "are wholly disproportionate to the environmental benefits to be gained." The nuclear plants could also be exempted if the utilities demonstrated that full compliance would result in a conflict with the NRC's safety requirements. In both circumstances, the SWRCB could impose less stringent compliance requirements on the plants.~~

Page 130, first full paragraph:

Interstate pipelines and California production currently have the capacity to supply California consumers up to ~~9,785~~ 10,230 MMcf/d. However, because of upstream demand and utility multiple receiving points, the state can only rely on receiving ~~7,870~~ 8,315 MMcf/d of supply from pipelines and native production.

Page 130, add language after first full paragraph and before Figure 15:

If demand exceeds reliable supply, utilities and noncore customers will still be able to meet demand up to the pipeline delivery capacity but prices would increase dramatically. To meet their needs, California utilities and noncore customers would then have to purchase natural gas that otherwise would have been delivered to customers outside of California. To attract the supply, they would have to pay elevated prices that would drive California prices above current market levels and cost the state's consumers an unknown amount.

Page 134, under "Natural Gas and the Environment," first paragraph:

The shift to a greater reliance on horizontal, rather than vertical, wells in shale formations elevates the issue of potential environmental impacts. While regulatory agencies and environmental groups highlighted these issues in the past, in the last 10 years the increased activities in shale formations brought greater focus on the potential environmental impacts, which can occur in any of five areas: surface preparation, drilling and completion, production and cleanup, transmission and distribution, and consumption. As a result, the increased development and production of natural gas in shale formations has raised ~~three~~ four primary environmental concerns: surface disturbance, GHG emissions, other air contamination, and potential leakage of chemicals into the groundwater.

Page 225, second full bullet:

To provide confidence that publicly owned utilities are achieving their energy efficiency targets with bona fide program savings, publicly owned utilities should increase the transparency of information on energy efficiency activities, expenditures, savings estimations, and cost-effectiveness calculations. In addition, they should provide to the Energy Commission staff the data used to create their annual status reports. The Energy Commission will work toward developing protocols for the publicly owned utilities to provide information that explains to explain 1) year-to-year differences in budget and savings accomplishments and 2) methodologies and assumptions for estimating and verifying annual savings, as well as for determining feasible AB 2021 potential and targets. Energy Commission staff will develop a draft outline of specific data requirements for comment by publicly owned utilities and other parties by late January 2010.

Page 225, add bullet before "Demand Response":

Energy Commission staff will establish a working group that incorporates appropriate parties to discuss successful energy efficiency portfolio and resource planning approaches and to provide a collaborative forum that identifies not only existing barriers, but also solutions for overcoming the most significant barriers that publicly owned utilities face when attempting to capture all cost-effective energy efficiency.

Page 236, under "Coordinated Electricity System Planning," add new bullet after first bullet:

The Energy Commission will continue its ongoing efforts to improve the quality and transparency of its demand forecasts, which are now used at the CPUC and California ISO for electricity system planning. The Energy Commission's Demand Analysis Office is engaged in an intensive review and evaluation of current modeling methods. This process places high priority on assessing whether current modeling tools are effectively matched to the purposes they are intended to serve. Once the existing model review stage to identify process improvements has been completed, active steps to incorporate model modifications or model replacements will be initiated in the 2011 IEPR cycle after these changes are fully tested and reviewed.