

2008 Integrated Energy Policy Report Committee and Electricity and Natural Gas Committee Joint Workshop

AB 1632 Draft Committee Report An Assessment of California's Nuclear Power Plants

Barbara Byron October 20, 2008 **DOCKET**

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Webcast Information

Call-In Number: 1-888-566-5914

Passcode: IEPR

Call Leader: Suzanne Korosec



Workshop Agenda

- Background: AB 1632
- Report Process
- AB 1632 Report Recommendations
- Public Comment



Background: AB 1632

AB 1632 (Blakeslee) requires:

- Assessments of the potential impacts of a major disruption of large baseload plants (Diablo Canyon and SONGS)
- These assessments must be adopted with the 2008 IEPR
- 3. Subsequent updates in future IEPRs, as new data on potential seismic hazards emerge



AB 1632 Assessments

- Plant vulnerability to a major disruption due to a major seismic event or plant aging
- Potential impacts of a disruption on reliability, public safety, and the economy
- Costs/impacts of nuclear waste accumulation
- Other major policy issues related to these plants



Report Process

- Study AB 1632 Committee Report draws upon a study by a multi-disciplinary team led by MRW & Associates
- Public process 3 public workshops and written comments by stakeholders on draft reports
- Independent assessment Detailed data requests sent to plant owners; Study Team did not meet with plant owners
- Seismic Vulnerability Advisory Team Provided periodic review of seismic assessment



Summary of Recommendations



Recommendations: Seismic Vulnerability

- SCE should develop an active seismic hazards research program for SONGS similar to PG&E's Long-Term Seismic Program.
- Energy Commission should evaluate the degree to which using three-dimensional seismic reflection mapping at both plant sites should be pursued, if found to be costeffective.



Recommendations: Seismic Vulnerability

- In future IEPRs, PG&E and SCE should provide:
 - Updates on their seismic research efforts including tsunami hazard assessment
 - Assessment of the degree to which non-safetyrelated plant components comply with current seismic standards
 - Assessment of the seismic vulnerability implications of evolving seismic standards since Diablo Canyon and SONGS were designed and built
 - Evaluation of the implications of the 2007 K-K earthquake in Japan for California plants



Recommendations: Plant Aging

- California should consider requiring an independent safety oversight committee for SONGS.
- Energy Commission should continue to closely monitor NRC actions and reviews of Diablo Canyon's and SONGS' performance.
- Energy Commission should monitor safety culture lapses at SONGS and require SCE to report on progress in developing and maintaining a strong safety culture.

Recommendations: Impacts of Major Disruption

- CAISO studies on aging power plants and once-through cooling should be completed as soon as possible to determine whether further studies on unplanned outages are needed.
- Energy Commission, CPUC, and CAISO should further evaluate uncertainties of extended outages at Diablo Canyon and SONGS and identify needed replacement resources.



Recommendation: Economic, Environmental and Policy Issues

As part of the license renewal feasibility studies for Diablo Canyon and SONGS, the CPUC should require PG&E and SCE to study the local economic impacts of shutting the plants down compared with alternate uses of the site.



Recommendation: Nuclear Waste Accumulation

- As part of the CPUC's decommissioning cost proceedings, utilities should provide estimates of:
 - waste disposal costs (LLW and SNF)
 - plans for storage, transport, and disposal
 - amounts of waste to be generated through a 20-year plant license extension and plant decommissioning.



Power Generation Options

A more detailed study of alternative power generation options is needed to quantify the reliability, economic, and environmental impacts of replacement power options. This study is being done under the replacement power assessments by the utilities, with CPUC guidance.



Recommendations: License Renewal

- The Energy Commission, with the CPUC, should develop a plan for reviewing the overall costs and benefits of nuclear plant license extensions, the scope of the evaluation, and criteria for the assessment.
- Review should include:
 - plant safety culture and maintenance
 - waste management plans,
 - seismic hazards
 - comparison with generation and transmission alternatives, and
 - contingency plans for long-term outages.



Schedule

- Draft Consultant Report released September 12
- Draft Committee Report released October 10
- Written comments on Committee Report due October 22
- Final Consultant Report to be released October 24
- Final Committee Report to be released October 30
- Final findings and recommendations of the Committee Report will be included in 2008 IEPR Update, with Commission adoption on November 19



Public Comments