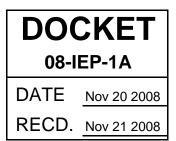


2008 Integrated Energy Policy Report Update

Suzanne Korosec

November 20, 2008





2008 IEPR Topics

- 1. Moving to a higher renewables future
- 2. Energy efficiency and the CEC's demand forecast (2007 IEPR)
- 3. Improving electricity procurement (2007 IEPR)
- 4. Nuclear plant vulnerability to seismic/aging issues (AB 1632)
- 5. Evaluation of CPUC's Self-Generation Incentive Program (AB 2778)
- 6. Progress report on past recommendations



Chapter 1: California's Renewable Future

- Major barriers to higher levels of renewables:
 - Transmission
 - Integration
 - Contract delays/cancellations
 - Cost/rate impacts
 - Environmental permitting



 CEC should identify ways to reduce obstacles to joint transmission projects between IOUs and POUs; state should increase transmission-related R&D funding



 2009 IEPR should identify amount and location of new fossil generation needed; CEC should work with CAISO to understand amount of ramping/regulation needed to support 33% renewables



 RPS procurement proposals should be reviewed, selected, and ranked by independent parties, not IOUs, if a utility plans to build or purchase its own generating facilities; CPUC should immediately implement feed-in tariff for facilities 20 MW and smaller



Chapter 1 Recommendations

 CEC should work with parties and CPUC to estimate potential cost impacts of 33% target



 CEC should continue working within RETI and with DOE and BLM on environmental issues; CPUC should direct IOUs to consider potential delays from land use and environmental issues when selecting RPS contracts



Chapter 2: Efficiency and Demand Forecast

- 2007 IEPR identified need for proper accounting of efficiency and other savings impacts in CEC demand forecast
- CEC undertaking major effort to update and improve methods in forecasting efficiency savings with assistance of CPUC/Itron
- Preliminary forecast to be released in February 2009 which will include improvements in forecasting methods
- Progress report toward efficiency goals



 CEC should analyze relationship between efficiency impacts in forecast and efficiency impacts assumed in program planning to address potential overlap



Chapter 2 Recommendations

 Continue efforts through CEC working group to improve demand forecast during the 2009 IEPR cycle



Chapter 2 Recommendations

 Continue independent efforts on evaluating alternative forecasting methods in the 2009 IEPR



 CEC should continue to work with POUs to understand how they estimate their remaining energy efficiency economic potential and set targets; to identify all funding sources available to meet energy efficiency goals; and to assist them in achieving their efficiency goals through workshops and collaborative efforts



Chapter 3: Electricity Procurement

- Progress toward 2007 IEPR recommendations to use common assumptions, reflect risk, use 20- to 30year analysis period, incorporate environmental impacts and risks, and discount future fuel costs at a social discount rate
- Improving the procurement process
- Aging and once-through cooling plants



 CEC should continue collaborating in CPUC's LTPP proceeding; 2009 IEPR should assess long-run uncertainties related to electricity demand and natural gas prices and supply; social discount rates should not be used but subject should be revisited



 Evaluate impacts of relying on OTC and aging plants; better understand interaction of OTC/aging plants and adding renewables; evaluate system stability and the need to upgrade transmission to allow renewables to replace OTC plants



- Procurement principles:
 - Fair, objective, and transparent; independent parties review, select, and rank bids
 - Considers environmental impacts, likelihood of getting permits, and prior bidder success
 - Open to all bidders including utilities
 - Avoids unnecessary costs that discourage market participants
 - Identifies how bid evaluation considers projects already permitted
 - Protects commercially competitive information



Chapter 4: Nuclear Assessment

- AB 1632 requires evaluation of vulnerability of nuclear plants to disruption due to seismic issues or aging
- Diablo Canyon and SONGS 12% of state's electricity supply - disruption could affect system reliability, public safety, and economy
- Also looked at waste storage and disposal, replacement power, relicensing issues
- Assessment done by MRW & Associates



 PG&E and SCE should report to CEC in future IEPRs on research efforts into seismic and tsunami hazards; how plants comply with current building codes and seismic design standards; progress in returning to open racking arrangements in spent fuel pools



 CEC should work with CPUC to develop plan for reviewing the costs and benefits of nuclear plant license extensions, scope of evaluation, and the criteria for assessment



Chapter 5: SGIP Evaluation

- AB 2778 requires CEC to evaluate costs and benefits of expanding Self-Generation Incentive Program to include renewable and fossil DG
- TIAX, LLC conducted evaluation using data provided by IOUs
- Looked at environmental, macroeconomic, and grid impacts



Chapter 5 Recommendations

 Eligibility for SGIP should be based on the overall efficiency and performance of systems, regardless of fuel type



 CPUC should consider reinstituting formerly eligible engine and turbine technologies that operate on nonrenewable and renewable fuels



Chapter 5 Recommendations

 CPUC should require IOUs to procure DG or CHP in areas that provide locational benefits to system



Chapter 5 - Errata

 Added language to clarify that "ultra clean and low emission" fossil DG should be eligible for the SGIP, as well as renewable DG



Chapter 6: Progress Report

- Evaluated 45 recommendations from 2005, 2006 and 2007 IEPRs
- Substantial progress in efficiency and transmission, some progress in procurement
- Generally on-track in demand response, natural gas, transportation, petroleum infrastructure, nuclear, and water/energy
- Need improvement in procurement, renewables, some land use and distribution system



Questions and Public Comment