



California Energy Commission

2008 Integrated Energy Policy Report Committee Hearing

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Committee Draft 2008 Integrated Energy Policy Report Update

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Agenda

- Background
- Process & schedule
- Summary of recommendations
- Public comment



Background

- SB 1389 requires integrated energy policy report every two years
- Update prepared in alternate years
- Provides overview of major energy trends and issues
- Foundation for California energy policies and decisions



Process

- Public process – 13 public workshops
- Topics identified in Scoping Order:
 - 33% renewables
 - Energy efficiency and demand forecast
 - Electricity procurement
 - Nuclear plants
 - Self-Generation Incentive Program
 - Joint CEC/CPUC opinion on GHG regulatory strategies
- Also included “report card” on past recommendations



Schedule

- Released Committee Draft 2008 IEPR Update September 25
- Written comments due October 16
- Final Committee Draft released November 3
- Adoption by full Commission November 19



Summary of Recommendations



Ch. 1: California's Renewable Future

- Major barriers to 33% renewables:
 - Transmission
 - Integration
 - Contract delays/cancellations
 - Cost/rate impacts
 - Environmental permitting



Recommendations

- The *2009 IEPR* should include a thorough evaluation of the issues required to transition to a higher renewables future, and how other key issues, such as once-through cooling, aging power plant retirements, and GHG reductions are affected.



Transmission Recommendations

- The state should identify and implement ways to remove barriers to joint publicly owned utility and investor-owned utility transmission projects.
 - Work with utilities in RETI to identify opportunities
 - Use *2009 IEPR* and *2009 Strategic Transmission Investment Plan* to identify ways to reduce obstacles
 - Ensure that land use and environmental issues are considered in RETI



Transmission Recommendations

- Assist local governments in developing general plan energy elements that recognize importance of state renewable and GHG reduction goals.



Integration Recommendations

- Implement key recommendations from CERTS work:
 - Expand focus of future studies to delivering renewable energy to grid.
 - Support early planning and transmission capacity upgrades.
 - Move planning horizon out to 15-20 years.
 - Identify cost impacts for delivering remote resources to local load centers.
 - CAISO should provide guidance on necessary resource attributes for grid reliability.



Integration Recommendations

- Load serving entities' procurement plans should demonstrate how their renewable, non-renewable, demand response, and storage resource mix will address local capacity requirements to maintain system reliability.



Integration Recommendations

- State should focus R&D efforts on:
 - Most promising energy storage technologies.
 - Transmission improvements that increase and control bulk power flows, provide real time information to operators, and reduce local capacity requirements in load pockets.
 - Distribution level renewables and costs and benefits of PV at substations.
 - Emerging renewable heating and cooling technologies.



Integration Recommendations

- CPUC and Energy Commission should investigate sources of funding for transmission-related R&D to increase annual funding to \$60 million.
- Legislature should require POUs to expand transmission R&D activities.



Contracting Recommendations

- CPUC should evaluate renewable project proposals without direct participation of IOUs, assisted by non-market participants and the CEC.
- IOUs should provide aggregate information on renewable contract prices, locations, and schedules.



Contracting Recommendations

- CPUC should make public the aggregate amount of above-market funds allocated to RPS contracts.
- CEC and CPUC should develop pilot program for feed-in tariffs for renewable projects larger than 20 MW.



Price Impacts Recommendations

- CEC should evaluate effects of increased renewables on natural gas demand and price, look at impacts of regional market changes on California, and evaluate availability of natural gas based on different scenarios and increasing worldwide demand.
- CEC should continue to refine the Cost of Generation Model and update changing technology costs over time.



Price Impacts Recommendations

- CEC should work with CPUC to estimate potential price impacts of a 33 percent RPS target.



Environmental Recommendations

- CEC should continue to work within RETI to identify CREZs where development will be least damaging to environment.
- CEC should continue participation in Solar PEIS with DOE and BLM, and continue to work with BLM on environmental impacts of permitting solar thermal facilities in California.
- CPUC should include land use and environmental considerations when selecting RPS contracts.



Ch. 2: Energy Efficiency and Demand Forecasting

- Challenges of measuring and attributing savings from energy efficiency programs
- How energy programs are currently incorporated into demand forecast
- How CEC staff will clarify efficiency assumptions during 2009 IEPR cycle
- Progress by utilities toward AB 2021 requirements



Efficiency Recommendations

- CEC should analyze relationship between end use impacts modeled in demand forecast with how impacts are characterized in efficiency program planning.
- All affected entities should participate in working group to pursue the Demand Forecast Energy Efficiency Quantification Project.
- Continue independent efforts to evaluate alternative forecasting methods, focusing on matching methods to purposes of forecast.



Efficiency Recommendations

- CEC should continue to work with POUs to understand how they estimate remaining economic potential and set targets.
- CEC staff should continue to assist POUs to achieve efficiency goals.



Ch. 3: Procurement and Resource Planning

- 2007 IEPR recommended that IOU analyses used in long-term procurement plans should:
 - Use common assumptions
 - Reflect ratepayer risks
 - Extend over 20-30 year analysis period
 - Incorporate environmental impacts and risks
 - Discount future fuel costs at social discount rate.



Procurement and Resource Planning

- Progress in CPUC LTPP proceeding to address 2007 IEPR recommendations.
- Reliability and resource adequacy issues associated with once-through cooling
- Relationship between procurement and power plant siting.



Procurement-Related Recommendations

- CEC staff should continue to collaborate in the CPUC's LTPP proceeding to develop 2010 plans that consider ratepayer risk and to develop assessments of GHG uncertainty in resource planning.
- The 2009 IEPR should assess longer-run uncertainties related to electricity demand and natural gas prices and supply.



Procurement-Related Recommendations

- Potentially include in 2009 IEPR issues like evaluating the development of gas-fired plants to meet near-term reliability needs and how to overcome utility constraints to reducing their portfolios' carbon footprints over the long-run.
- Do not use social discount rates to incorporate natural gas price risk in current CPUC rulemaking, but CPUC should reevaluate when refining bid evaluation in LTPP proceeding.



Procurement-Related Recommendations

- Need additional analysis on implications of replacing once-through cooling capacity.
- Determine specific additional analysis needed based on ultimate scope and findings of CAISO study on aging and once-through cooling plants.



Procurement-Related Recommendations

- CPUC should conduct fully transparent method of ranking projects in bid evaluation that considers project permitting.
- 2009 IEPR will conduct public process to identify criteria for incorporating project planning/permitting progress into bid evaluation.
- Siting related criteria should apply to all projects that participate.



Ch. 4: Nuclear Vulnerability Assessment

- AB 1632 requires assessment of vulnerability of nuclear plants to disruption due to seismic event or aging.
- Assessment being conducted on parallel track with 2008 IEPR Update.
- Preliminary findings presented in draft 2008 IEPR Update.
- Will release recommendations on October 10 for October 20 workshop.
- Final findings and recommendations will be included in adopted 2008 IEPR Update.



Ch. 5: SGIP Evaluation

- AB 2778 requires CEC, in consultation with CPUC and ARB, to evaluate SGIP and costs and benefits of expanding eligibility of program to renewable and fossil fuel DG.
- Chapter summarizes preliminary findings and recommendations from draft evaluation by TIAX LLC.
- Final report to be released in late October, results and recommendations will be included in final draft 2008 IEPR Update.



SGIP Recommendations

- Program eligibility should be based on overall efficiency and system performance, not fuel type.
- CPUC should consider reinstituting formerly eligible technologies that use renewable fuels.
- CPUC should consider providing incentives for energy storage technologies.



SGIP Recommendations

- CPUC should require IOUs to procure DG or CHP in areas that provide locational benefits to distribution system.
- CPUC and CEC should work with IOUs to identify locational benefits.
- CEC and CPUC should define additional studies to assess performance of DG in circuit areas providing locational benefits.



SGIP Recommendations

- Reiterate value of DG, particularly CHP.
- CPUC should:
 - Develop tariff structures to make DG and CHP cost and revenue neutral.
 - Eliminate non-bypassable charges for DG and CHP.
 - Work with CEC to estimate value of SGIP funded projects.



SGIP Recommendations

- CPUC should develop incentive structure for projects that meet specific targets for environmental, transmission and distribution, and economic benefits.



Ch. 6: Progress on Prior IEPR Recommendations

- 44 recommendations scored for progress as “substantial,” “on track,” or “improvement needed.”
- Requesting parties to identify any additional progress or other relevant information.



Public Comment