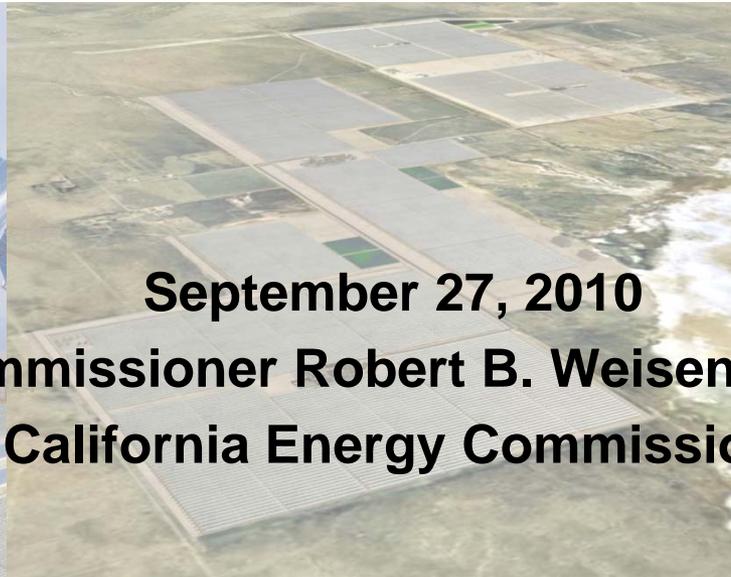
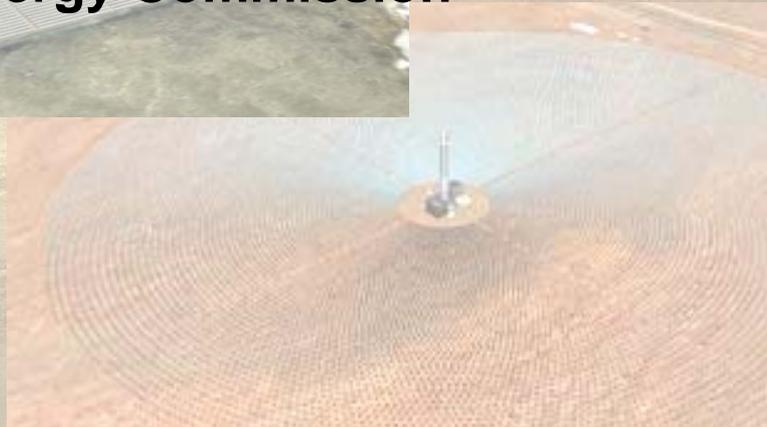


American Reinvestment & Recovery Act (ARRA) Solar Projects Progress Since Passage of SB x8 34



September 27, 2010
Commissioner Robert B. Weisenmiller
California Energy Commission



ARRA Opportunity and Timelines

Grant in Lieu of Investment Tax Credit (ITC)

- Cash grant provided by US Treasury to cover up to 30% of upfront project costs for eligible renewable energy projects
- Deadlines:
 - State & federal permitting processes must be complete by year end 2010
 - Projects must “start construction” by year end 2010, and come on line per specified dates.
 - “Safe harbor” provisions may permit expenditure of 5% of certain project costs by year end as an alternative to physical construction start.
 - Solar thermal projects need to be in service no later than year end 2016



ARRA Opportunity and Timelines

Department of Energy (DOE) Loan Guarantee

- DOE will repay construction cost of loan if borrower defaults on bank loan
- Available to renewable generators OR facilities that manufacture related renewable energy components
- Deadline:
 - Project construction must start by September 30, 2011
 - Projects that cannot meet Treasury Grant deadlines may still qualify for loan guarantee



CEC Siting/Permitting Process

- **Data Adequacy**
 - Minimum requirements to accept application
- **Staff Discovery and Analysis**
 - Data Requests
 - Issues Identification & Resolution
 - Public Workshops
 - Staff Assessments (SA) – CEQA impact evaluations
- **Committee Evidentiary Hearing and Decision**
 - Evidentiary hearings based on SA and other information
 - Committee produces Presiding Member's Proposed Decision (PMPD)
 - PMPD goes before full Commission for decision and if approved, a certification

Note: Most ARRA solar thermal projects have been proposed on BLM lands, requiring a federal National Environmental Policy Act (NEPA) environmental analysis also.

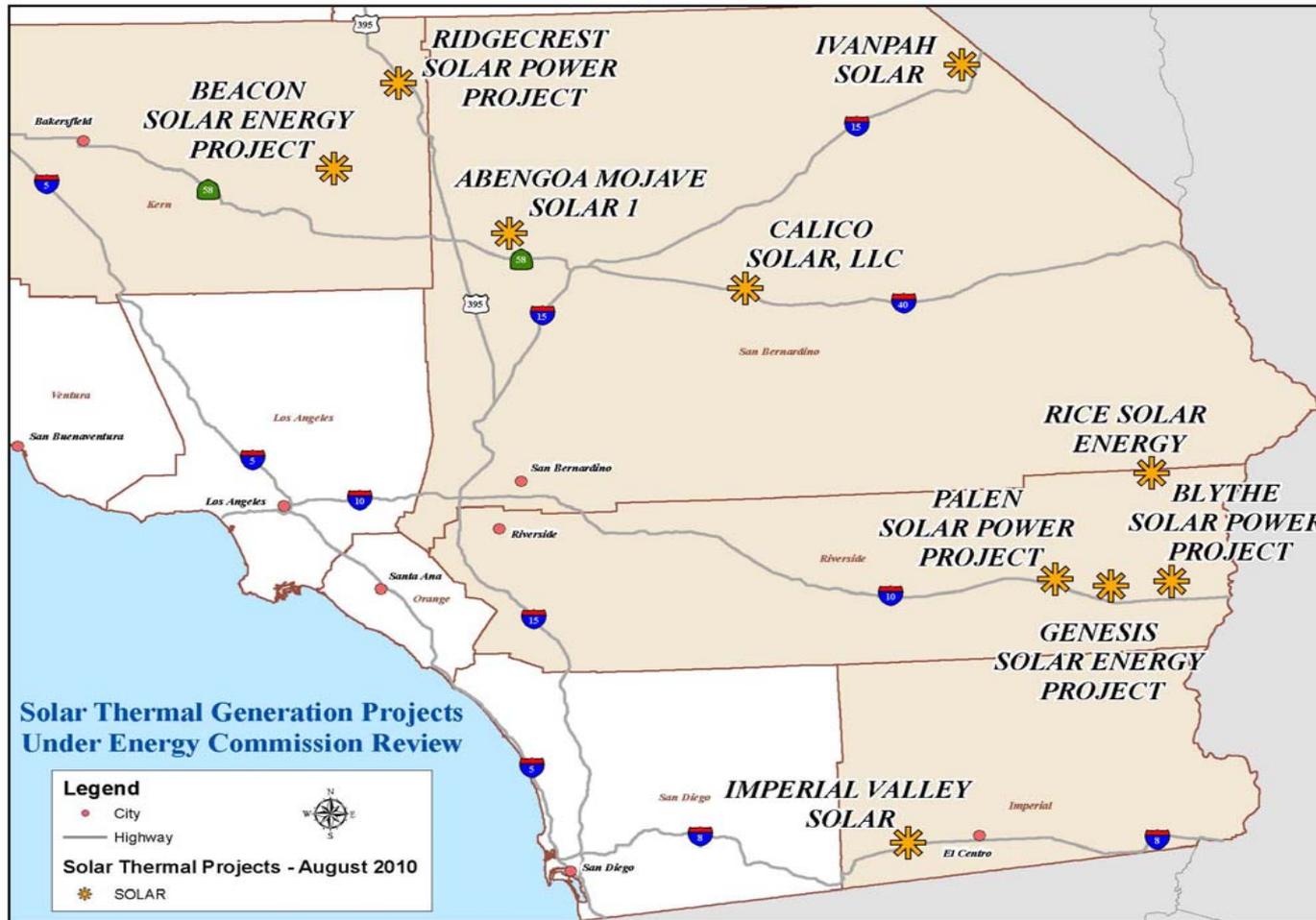


Ten Solar Thermal Projects Seeking ARRA funding Currently in the CEC Siting Process

- Ivanpah Solar Electric Generating System (370 MW) - **Approved**
- Beacon Solar Energy Project (250 MW) - **Approved**
- Imperial Valley Solar Project (formerly SES Solar Two) (709 MW)
- Calico Solar Project (formerly SES Solar One) (850 MW)
- Abengoa Mojave Solar (250 MW) - **Approved**
- Blythe Solar Power Project (1,000 MW) - **Approved**
- Palen Solar Power Project (484 MW)
- Genesis Solar Energy Project (250 MW)
- Rice Solar Energy Project (150 MW)
- Ridgecrest Solar Power Project (250 MW) – delayed



Solar Thermal Projects Seeking ARRA funding Currently in the CEC Siting Process



Comparative Footprint of Projects at CEC

	SOLAR	NATURAL GAS
Active Projects*	9	12
Avg. MW	511	500
Avg. Acres	3,800	30

The average solar project site is over **125 times larger** than the average natural gas project.

* In addition to 21 natural gas and solar projects, the Energy Commission is reviewing the Hydrogen Energy California project - a 390 MW petroleum coke/coal gasification project proposed on 473 acres in Kern County to demonstrate carbon sequestration technology.



Solar Thermal Project Permitting Challenges

Large project size exacerbates impacts

- Many in areas with minimal previous disturbance cause potential for significant impacts on biological resources
- Presence of sensitive cultural resources in desert
- Complex water/surface drainage engineering issues



Solar Thermal Project Permitting Challenges Collaboration

- Need for unprecedented coordination with US Bureau of Land Management (BLM) given large number of projects proposed on federal land
- Impacts to endangered species require close coordination between CEC, CA Department of Fish & Game (DFG), and U.S. Fish and Wildlife Service (USFWS)



Meeting the Challenge

- SBx8 34 – Siting and human resource issues
- Close coordination between State and federal agencies
- High level coordination/ trouble shooting
 - Renewable Energy Policy Group (agencies)
 - Renewable Energy Action Team (state/federal agency mgmt)
 - Desert Renewable Energy Conservation Plan (DRECP) (agencies & stakeholders)



External Critical Path Items

- CEC Resolution of Cultural Resources Dispute with BLM
- Legal Vulnerability
- Biological Resources
- Transmission



Crossing the Finish Line

- BLM issues Records of Decisions in a timely fashion that are consistent with CEC Proposed Decisions
- CEC and BLM post-decision phase: For approved projects, compliance with Conditions of Certification (CEC) and Right of Way Grant Conditions (BLM)
- CPUC approval of Final Power Purchase Agreements
- CPUC and SCE have a credible transmission arrangement
- SCE and CAISO achieve all the necessary FERC approvals
- DOE loan guarantees secured
- Project Financing Closed
- Project owners meet substantial construction requirements
- ARRA cash grants are paid



Any Questions or Comments?



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