



Permitting and Planning for Offshore Renewable Energy

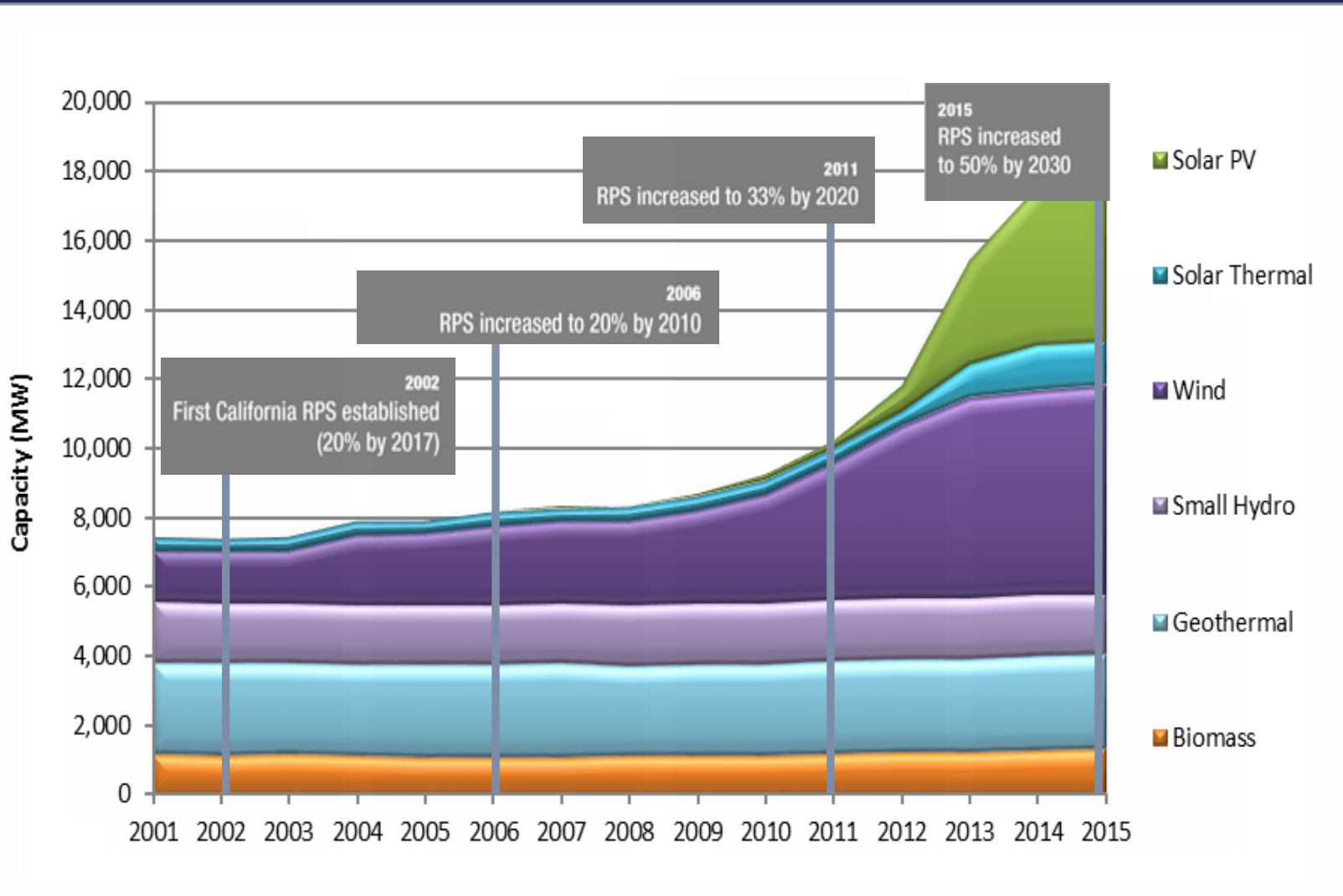
Karen Douglas, Commissioner
California Energy Commission

November 1, 2016





INSTALLED RENEWABLE CAPACITY (IN MW) BY RESOURCE TYPE



Source: California Energy Commission, 1304 Power Plant Data Reporting, Energy Assessments Division



RENEWABLE ENERGY PERMITTING: 2008 TO 2015

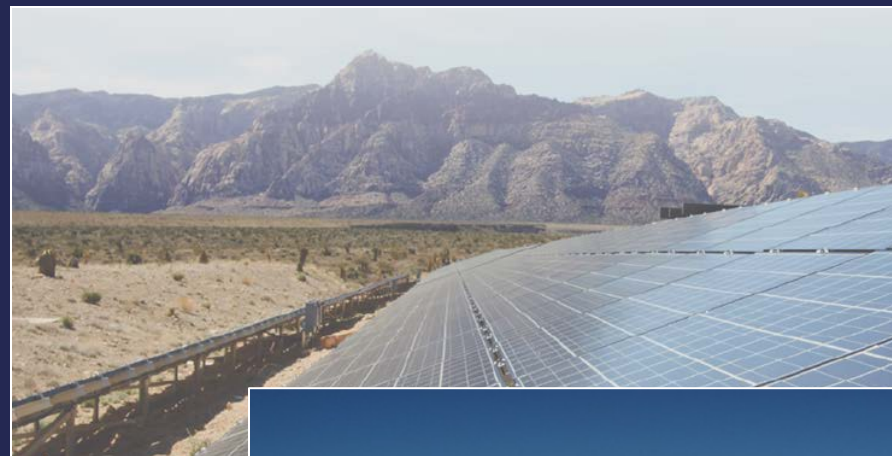
- Memorandum of Understanding: California and the Department of the Interior
 - Renewable Energy Action Team
 - Renewable Energy Policy Group
 - Best Management Practices and Guidance Manual: Desert Renewable Energy Projects
 - Desert Renewable Energy Conservation Plan



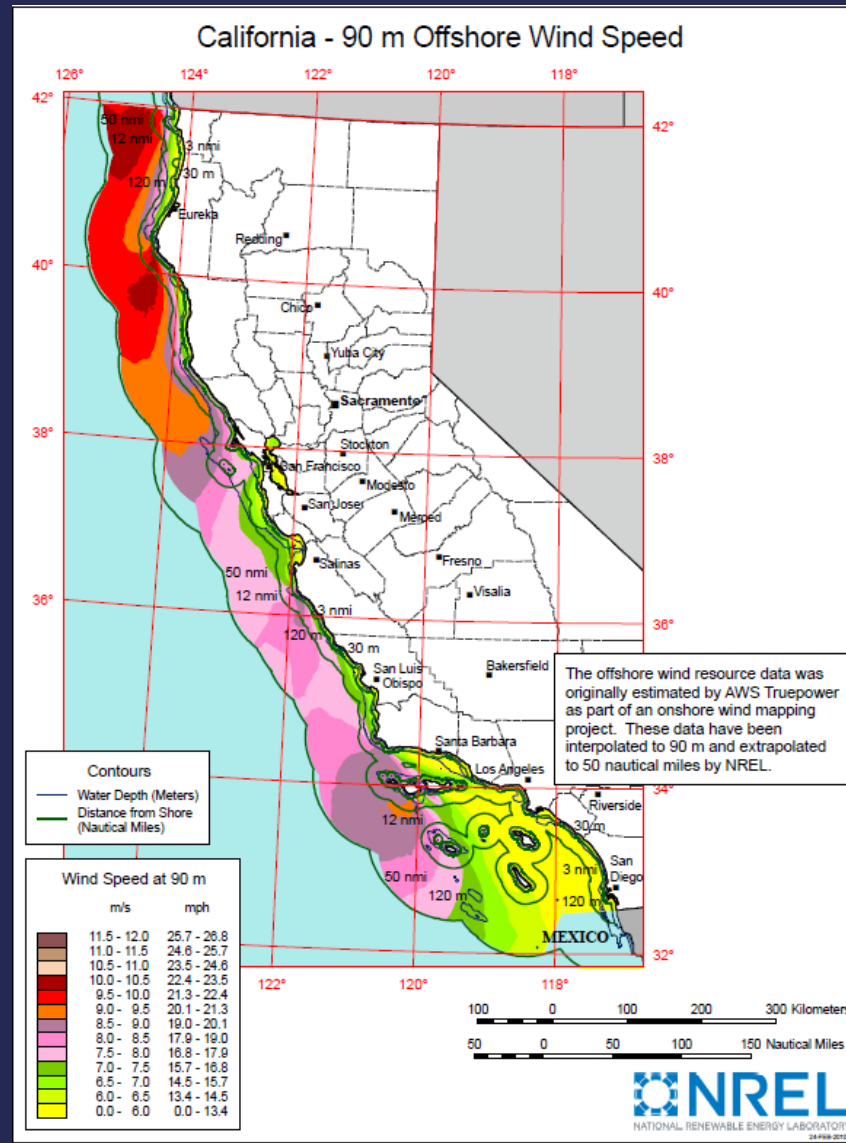


LANDSCAPE-SCALE PLANNING PROCESSES

- Desert Renewable Energy Conservation Plan
- San Joaquin Valley Least Conflict Solar
- Renewable Energy Transmission Initiative 2.0
- Offshore Renewable Energy Planning to Support the BOEM-California Task Force



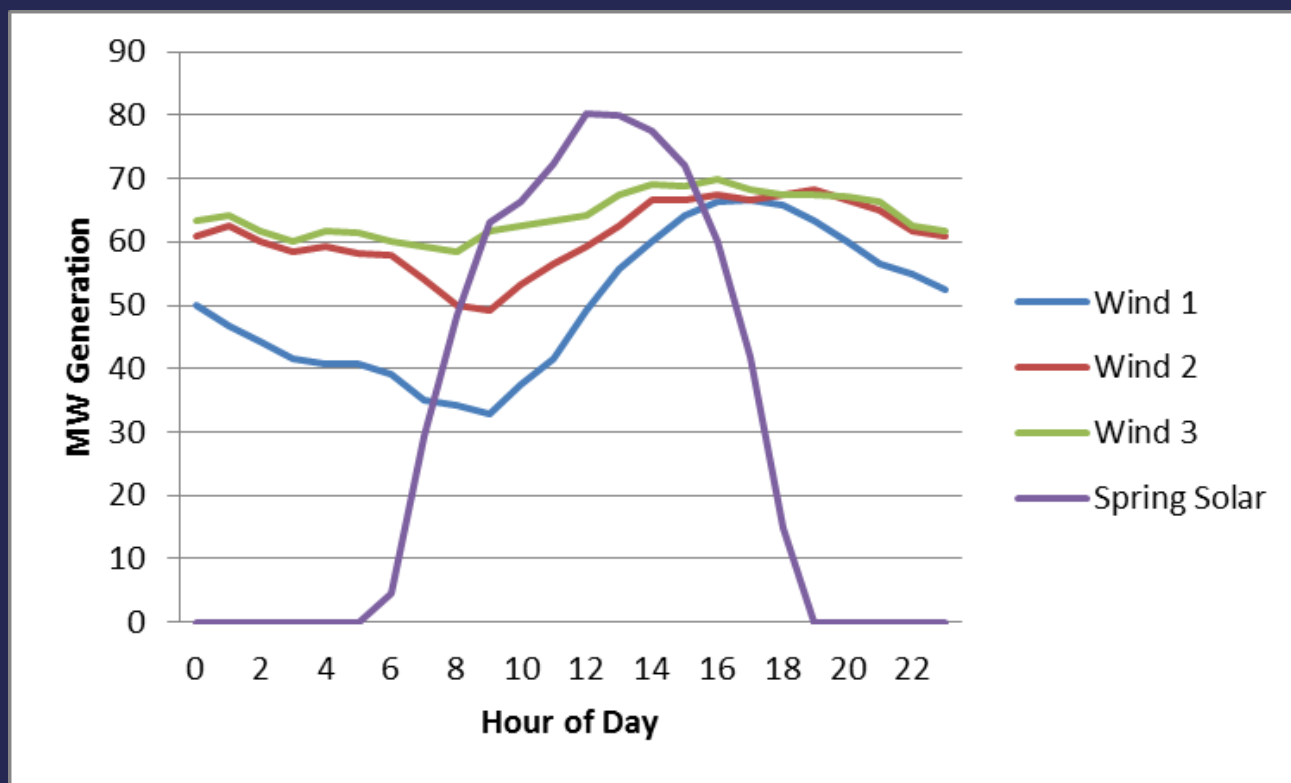
OFFSHORE WIND RESOURCE POTENTIAL IN CALIFORNIA





POTENTIAL BENEFITS OF OFFSHORE WIND IN CALIFORNIA

- High Capacity Factor
- Complimentary to solar generation profile
- Proximity to load centers
- Utilization of existing coastal transmission infrastructure



Source: Energy Assessments Division



POTENTIAL CHALLENGES FOR OFFSHORE WIND IN CALIFORNIA



- Cost
- Technology Risk
- Environmental Unknowns
- Stakeholder Concerns
- Permitting
- Overlapping Jurisdictions and Responsibilities

STATE AGENCIES PERMITTING ROLES



California
STATE LANDS
Commission



California Coastal
Commission



California Department of
Parks and Recreation



California Department of
Fish and Wildlife



California ISO



California Public
Utilities Commission



THANK-YOU!

Thank-you!

Karen Douglas, Commissioner
California Energy Commission

For more info go to:

<http://www.energy.ca.gov/>