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California Offshore Renewable Energy (CORE)

Bureau of Ocean Energy Management (BOEM)
Renewable Energy Leasing Process

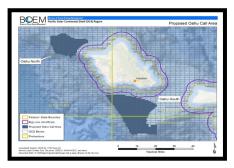
Jean Thurston

California Energy Commission Staff Workshop
March 3, 2017



Renewable Energy Leasing Process

Planning and Analysis

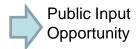


- Intergovernmental Task Force
 - Call for Information & Nominations (Call)
- Area Identification
- Environmental reviews

Leasing



- Publish leasing notices
 - PreliminaryFinal
- Issue lease(s)



Site Assessment



- Site Characterization
- Site Assessment Plan (SAP) developed by Lessee

Construction and Operations



- Construction and Operations Plan (COP) reviewed under NEPA
- Facility Design
 Report &
 Fabrication and
 Installation Report
- Decommissioning



Multi-Year Process



California Offshore Renewable Energy (CORE)

Science and Data Discussion

Scott Flint

California Energy Commission Staff Workshop March 3, 2017



Collaborative Data and Information Gathering Effort

- CA Energy Commission and BOEM working with Federal and State agencies and DOD
- Gather existing data sets:
 - Evaluate data and identify most useful datasets
 - Identify how to best use the data sets
 - Make datasets available on Data Basin



Data Categories

- Offshore Renewable Potential Wind
- Physical Data
 - identify technical limitations
- Ocean Natural Resources
 - habitats, species and sensitive biological areas
- Ocean Management
 - Designated conservation and management areas
- Ocean Uses
 - Fisheries, navigation, existing leases and development

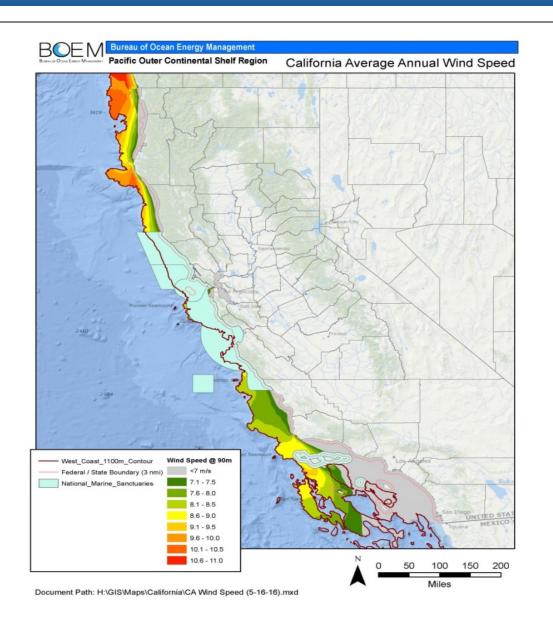


Approach and Progress

- Outreach to scientific and academic institutions
- Assemble and make relevant data sets available on Data Basin
- Convene a series of meetings to identify best uses of relevant data
- Use assembled data to inform identification of potential offshore wind generation areas



CALIFORNIA ENERGY COMMISSION





Typical Floating Offshore Wind Facility

How offshore floating wind farms work Huge floating wind turbines — each about 600 feet Electricity from the Power station tall - are grouped together and anchored to the turbines is transmitted ocean floor. to a floating substation. Not to scale The electricity then flows through **Turbines** Substation a buried cable to an onshore power Electrical cable plant. Mooring lines Sources: Trident Winds, Reuters. Bay Area News Group research

DOUG GRISWOLD/BAY AREA NEWS GROUP



State and Federal Jurisdiction

State jurisdiction extends to 3 nautical miles off the coast

 Federal jurisdiction is from 3 to 200 nautical miles offshore California (The Outer Continental Shelf – OCS)



Federal Agencies with Jurisdiction

- Bureau of Ocean Energy Management (BOEM)
- Federal Energy Regulatory Commission (FERC)
- National Marine Fisheries Service (NMFS)
- National Oceanic and Atmospheric Administration (NOAA) / National Marine Sanctuaries (NMS)
- U.S. Fish and Wildlife Service (USFWS)
- United States Department of Defense (DoD)
- Department of Homeland Security (DHS)/United States Coast Guard (USCG)



State Agencies with Jurisdiction

- California Coastal Commission (CCC)
- California Department of Fish and Wildlife (CDFW)
- California Independent System Operator (CAISO)
- California Ocean Protection Council (OPC)
- California Parks and Recreation
- California Public Utilities Commission (CPUC)
- California State Lands Commission (CSLC)



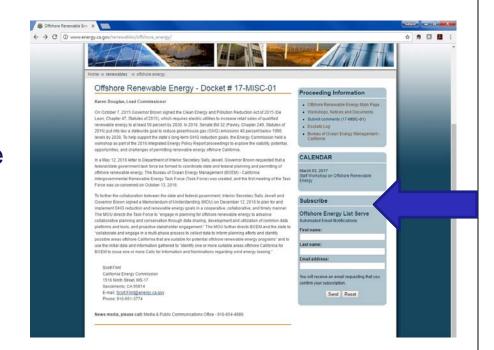
California Intergovernmental Renewable Energy Task Force

- Governor Brown requested the Department of Interior establish a Task Force on May 12, 2016
- Members of state, local, and tribal governments and Federal agencies participate
- Forum to discuss stakeholder issues, exchange data and information
- To engage "in further dialogue on the potential of offshore renewable energy and the planning, permitting, and coordination issues associated with this technology." (Commissioner Douglas)



Offshore Renewable Energy List Serve

- Sign up to receive workshop notices and materials, announcements, and other documents on this topic.
- Go to:
 http://www.energy.ca.gov/rene
 wables/offshore_energy/ and enter your info into the boxes indicated.
- Confirm your subscription by following instructions in the automated email to complete sign up process.





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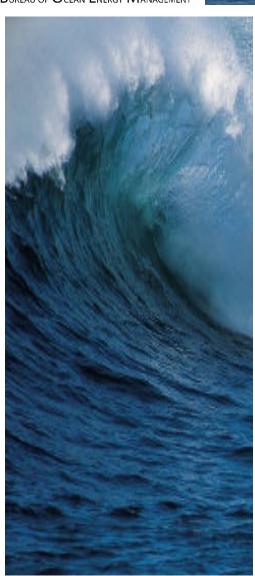
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California Activities
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