

DOCKETED	
Docket Number:	17-MISC-01
Project Title:	California Offshore Renewable Energy
TN #:	247439
Document Title:	Oceana Comments - Assessing Sea Space for Offshore Wind Development
Description:	N/A
Filer:	System
Organization:	Oceana
Submitter Role:	Public
Submission Date:	11/14/2022 10:50:11 AM
Docketed Date:	11/14/2022

Comment Received From: Oceana
Submitted On: 11/14/2022
Docket Number: 17-MISC-01

Assessing Sea Space for Offshore Wind Development

please see the attached letter from Oceana.

Additional submitted attachment is included below.

November 14, 2022

Ms. Elizabeth Huber, Director
Science, Transmission and Environmental Protection Division
California Energy Commission
715 P Street
Sacramento, CA 95814

RE: Assessing Sea Space for Offshore Wind Development (Docket No. 17-MISC0-01)

Dear Ms. Huber:

Oceana appreciates the opportunity to comment on the California Energy Commission's approach to identifying "suitable sea space" for wind energy areas in federal waters off the California coast.¹ In identifying suitable sea space, we urge a careful and comprehensive planning approach that prioritizes protection of the marine ecosystem, based on the best scientific information available, and which is prepared in close collaboration with relevant state and federal agencies, Tribes, key stakeholders, and the broader public. Oceana is an international ocean conservation organization focused on protecting the world's oceans. Our staff attended the October 26, 2022, CEC sea space workshop and we understand the challenging task before you to identify ocean areas that could accommodate the CEC's offshore wind planning goals for 2-5 gigawatts (GW) of offshore wind energy by 2030 and 25 GW by 2045.

If not carefully planned and sited, the benefits of renewable energy production could be outweighed by the direct costs to marine life and sustainable fisheries. As stated in the CEC staff presentation, the production of 5 GW would require approximately 600 square miles of ocean area and 25 GW would require 3,000 square miles. If developed at this scale, and at roughly 12 megawatts each, this could mean 2,083 floating offshore wind turbines, thousands of anchors, plus thousands of miles of mooring lines and power cables suspended in the water column and along the seafloor. Such massive offshore wind farm installations set in the California Current Ecosystem risks significant adverse impacts to sensitive marine habitats, wildlife, and the displacement of current uses like commercial and recreational fisheries. A careful planning approach is essential along with a stepwise and adaptive management approach to development.

In the CEC sea space analysis, Oceana first requests that the CEC gather and map all relevant physical, biological, and human use spatial data.² Second, we request an analysis of those spatial

¹ Per the requirements of [Assembly Bill 525](#) to 'identify suitable sea space' as part of a strategic plan for offshore wind energy deployment off the California Coast in federal waters by no later than June 30, 2023.

² See the West Coast Ocean Data Portal for physical, biological and human use data. Available: <https://portal.westcoastoceans.org/>

data to identify the distribution of vulnerable marine species, ecologically important habitats, existing conservation areas, and fishing grounds. Third, identify optimal areas suitable for offshore wind energy that first protect and avoid these species and habitats and minimizes displacement of existing ocean uses. We request the CEC analysis map and, to the maximum extent possible, avoid:

1. important areas for breeding, foraging and migration for protected marine mammals, sea turtles and seabirds,
2. critical habitats of threatened and endangered species including Southern Resident killer whales, threatened and endangered humpback whales, leatherback sea turtles, and southern green sturgeon,
3. deep sea coral and sponge ecosystems,
4. Essential Fish Habitat conservation areas,
5. Habitat Areas of Particular Concern,
6. rocky substrates,
7. kelp forests,
8. National Marine Sanctuaries,
9. California Marine Protected Areas; and
10. important commercial and recreational fishing areas.

It is imperative that the CEC model how wind energy production meeting CEC goals may affect upwelling and associated local and regional physical and biological processes. The foundation of the California Current ecosystem is wind-driven upwelling that brings cold, nutrient-rich deep water to the surface. Upwelling fuels the California Current Ecosystem from phytoplankton and krill to the largest blue whales. Offshore wind farms are designed to extract wind energy from the atmosphere and convert it into electricity. Reduced wind speeds in the shadow of offshore wind farms may affect wind-driven upwelling and associated productivity of the surrounding ecosystem.³

Oceana appreciates that the CEC is undertaking this sea space analysis as required by Assembly Bill 525. Upon completion, we urge you to make your analysis and all underlying spatial data fully available and accessible to the public. A transparent process and analysis are essential in planning for offshore wind energy development.

Thank you for your time and hard work.

Sincerely,



Ben Enticknap
Pacific Campaign Manager and Senior Scientist

³ Raghukumar, K et al. 2022. Effect of floating offshore wind turbines on atmospheric circulation in California. *Frontiers in Energy Research*. <https://doi.org/10.3389/fenrg.2022.863995>