December 15, 2017 The Honorable Karen Douglas, Commissioner California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512

RE: Environmental Considerations and Goals for California Offshore Wind

Dear Commissioner Douglas,

As the California Energy Commission (CEC) works toward identifying offshore wind call areas in advance of the next California Renewable Energy Task Force meeting, we wish to share and reiterate our environmental priorities with respect to prospective wind development in outer continental shelf (OCS) waters offshore California. Our organizations share the state's interest in exploring the opportunities for responsibly-sited offshore wind development to help meet California's clean energy targets.

As the CEC evaluates whether commercial-scale offshore wind development is a good fit for California's renewable energy future, we request that the state remain committed to prioritizing ecological considerations and protecting the ecosystem services California's marine environment provides. We believe that elevating ecological considerations with a focus on cumulative impacts and anticipating future conditions and uses when identifying areas for prospective development has the dual benefits of 1) protecting California's unparalleled marine environment, and 2) ensuring that the West Coast offshore wind industry, if it is to develop, does so efficiently and smoothly. As you work with the Bureau of Ocean Energy Management (BOEM) to identify prospective call areas, we urge you to seize this unique opportunity to set a rigorous environmental bar for leasing and site selection, and in so doing, lead the nation in responsibly-sited floating wind technology. We urge you to include public input in siting decisions related to offshore wind development, and we hope that these recommendations will be influential in your discussions with BOEM and other state and federal agencies.

I. <u>UTILIZE A STAKEHOLDER-DRIVEN PROCESS THAT USES ECOLOGICAL</u> <u>RESOURCE DATA TO DETERMINE LEAST CONFLICT AREAS</u>.

Our organizations request that CEC and BOEM fully integrate biological and ecological constraints into prospective call areas and subsequent Wind Energy Areas (WEAs). The smooth and successful siting and construction of the 30 MW offshore wind facility off the coast of Block Island serves as an example of how a comprehensive planning process that includes environmental protection from the very beginning can ensure the permitting process is efficient and ultimately successful—meaning government and industry resources aren't wasted and natural resources are protected.

The California Current upwelling system is one of the top five most biodiverse and rich marine ecosystems in the world. It provides unparalleled productivity that supports fisheries, tourism, and livelihoods. Our organizations have worked with state and federal agencies to secure precedent-setting protections for state waters, and California has the largest network of National

Marine Sanctuaries in the United States. The importance of California's marine ecosystems cannot be quantified—the California coast is world-renowned for its breathtaking beauty and rich biodiversity. Nonetheless, it is worth noting that oceans are a powerful economic driver for the state. The tourism and recreation sector is the largest sector of the state's ocean economy, provides 75% of ocean economy jobs, and contributes \$17.6 billion toward the state's GDP. Protecting California's marine environment is ecologically, socially, and economically beneficial.

As you consider potential call areas, we strongly recommend you avoid Biologically Important Areas (BIAs) for cetaceans, National Marine Sanctuaries and Marine Protected Areas, ecologically sensitive areas such as migratory corridors, and other ecologically important habitat. It is important to recognize that not all ecologically important marine areas are protected, and public input will be vital to ensure such places are highlighted during siting decisions. For example, scientists have noted that Santa Lucia Bank is an area of high fin, humpback, and blue whale concentration, and birds are known to feed at Santa Lucia Bank each fall during their annual migration from Hawaii. Though the area is not yet protected, it is part of the nominated Chumash National Marine Sanctuary because of its ecological richness.

Given the importance of protecting California's natural capital, which drives the state's ocean economy, we would like to work with you to ensure siting decisions reflect an unwavering commitment to protecting the marine environment. A deliberative, stakeholder-driven planning process that prioritizes environmental protection, developer interest, and other ocean uses is an opportunity to demonstrate environmental leadership that will benefit this burgeoning industry while protecting California's rich natural resources.

II. DEVOTE ADDITIONAL TIME AND RESOURCES TO FURTHER ANALYZE THE CALIFORNIA OFFSHORE WIND DATA BASIN GATEWAY.

We fully support the Data Basin Gateway effort and appreciate CEC and BOEM's work to make it an inclusive, collaborative, and transparent federal, state, and stakeholder collaboration. We acknowledge Scott Flint and the Conservation Biology Institute's rigorous efforts, and believe more time and resources are needed to fully analyze and process the data currently in the Gateway. The Gateway now contains over 600 data sets that are intended to guide siting decisions by providing the ecological lens through which decisions should be made. While this data collection effort has been very successful, there remain critical data gaps and spatial considerations. In particular, spatial considerations for marine mammals must be integrated into the Data Basin Gateway as well as overall analysis of the suitability of Central Coast OCS waters for offshore wind development. As discussed more fully below, we lack important information regarding marine mammal and bird abundance, distribution and migration. Data gaps must be documented fully and taken into consideration when making decisions regarding area identification. In addition, we are concerned there are insufficient resources and staff time to fully harmonize and synthesize the enormous volume of studies the site contains.

The Gateway does an excellent job spatially conveying existing data sets and aligning with the BOEM-NOAA Marine Cadastre and the West Coast Ocean Data Portal. **There is an outstanding need for BOEM to be able to analyze multiple layers simultaneously and**

provide fine scale detail in certain areas of interest. At present, the low resolution of and gaps inherent in some of the data preclude such careful analysis. Maps that overlay Biologically Important Areas (BIAs), krill hot spots, species-specific seasonality and sensitivity data, boundaries of protected areas, bathymetry, and areas of interest for wind development should be a key outcome of the Data Basin effort. Decision-support tools should also be developed that assist the user in navigating, overlaying, and interpreting these multiple data layers. The resulting maps and tools should guide CEC and BOEM in identifying areas of high environmental importance and/or sensitivity, as well as areas of "least conflict" that minimize the risks of offshore wind development to the marine environment.

III. INCLUDE A STRUCTURE AND PLAN TO INCORPORATE FUTURE SCIENTIFIC STUDIES INTO PROJECT SITING.

BOEM is currently undertaking two studies on seabird and marine mammal abundances in the Central Coast that have the potential to fill some critically-important data gaps. Information generated from the *Seabird and Marine Mammal Surveys Near Potential Renewable Energy Sites Offshore Central* study and the *Southern California* and *Pacific Marine Assessment Partnership for Protected Species* (PACMAPPS) study should influence siting decisions. The PACMAPPS study has the potential to last for three years, which would dramatically bolster statistical integrity of the data. Having at least three years of monthly ship and aerial predevelopment baseline data on the presence and abundance of key species, including marine mammals and seabirds, is an especially important component of setting a high environmental bar.

With regard to filling key marine mammal data gaps, there are at least 30 different species of marine mammals that live in California coastal waters, though detailed analysis exists for only a small number of those occurring in the offshore wind areas of interest. For many of the species with known distributions, the data are not fine enough to make localized decisions. Near- and long-term research is needed on killer whales, beaked whales, fin whales, and minke whales, and there is a need to delineate BIAs for those species. If not already in process, sufficient resources and time should be allocated to carry out this analysis on a fine enough scale to inform marine planning decisions. An analysis of climate induced shifts and how those may impact marine mammal distribution will be complex, yet is crucial to consider as part of the planning process.

While we understand the keen interest in initiating the multi-year offshore wind leasing process, it is imperative to have a well-informed understanding of avian and marine mammal distributions throughout the Central Coast prior to making leasing decisions in order to improve the reliability of decisions made to identify areas as potentially "low risk." Having three years of robust baseline data has great potential to abet the offshore wind industry's advancement, whereas an inadequate baseline could lead to profound delays in the future. We recommend deferring final identification of call areas until the data and analyses identifying "least conflict" areas can be included. This approach could allow for an expedited process in permitting offshore wind projects in the future.

Considering the importance and high public value of California's marine resources and the nascent status of the technology, particularly at large scale, we recommend that CEC, BOEM,

and other relevant agencies also analyze and model the potential synergistic and cumulative impacts of initial projects. This modeling should consider present and future ocean conditions.

IV. FOCUS ON AN APPROPRIATE SIZE FOR INITIAL OFFSHORE WIND DEVELOPMENT.

Given that there are and will be data gaps and that the potential impacts of large-scale floating wind technology on marine resources are unknown, we recommend that initial developments are relatively small and scale up incrementally, following the implementation of a rigorous monitoring protocol that evaluates impacts during each stage of development. Because impacts of offshore wind on wildlife likely increase with the scale of a project, it is advisable to test smaller-scale developments before permitting and constructing large developments. The opportunity to scale up a project should be contingent on the careful evaluation of the results of the monitoring program. Starting small worked to build consensus among stakeholders and ultimate success at Block Island—we believe this approach will benefit the floating offshore wind industry on the West Coast.

In sum, our organizations believe that if offshore wind in California is to be developed, it should be done in a science-based, environmentally-sound manner that reflects the vital importance of California's marine environment. As CEC and BOEM consider prospective lease areas, we urge the agencies to follow a holistic, science-based process that establishes a robust environmental baseline and enables the agencies to evaluate the appropriateness of any prospective lease area. Ensuring that siting and leasing decisions are guided by comprehensive baseline research that gives full consideration of potential impacts to sensitive marine areas and species, and reflects recommendations from a robust public process beginning with siting decisions, will be essential for the development of offshore wind energy in California.

Thank you for considering these comments.

Sincerely,

Garry George Renewable Energy Director National Audubon Society

Anne Nelson Collaborative Ocean Planning

Kim Delfino California Program Director Defenders of Wildlife Sandy Aylesworth, Ocean Advocate Francine Kershaw, Project Scientist Natural Resources Defense Council

Sarah Freidman Senior Campaign Representative Sierra Club

Kristen Hislop Marine Conservation Program Director Environmental Defense Center