



February 10, 2022

Jean Thurston-Keller
Regional Supervisor, Office of the Environment
Bureau of Ocean Energy Management
760 Paseo Camarillo, Suite 102
Camarillo, CA 93010

Re: BOEM-2021-0085 – Request for Comments on Outer Continental Shelf offshore Humboldt, California Wind Energy Area, Draft Environmental Assessment

Dear Ms. Thurston-Keller:

Thank you for the opportunity to comment on the draft Environmental Assessment (EA): Commercial Wind Lease and Grant Issuance and Site Assessment Activities on the Pacific Outer Continental Shelf, Humboldt Wind Energy Area, California. We appreciate the ongoing coordination between the Bureau of Ocean Energy Management (BOEM) and state of California. Each of our agencies plays an important role in California's policy framework, including implementing our climate and clean energy goals and protecting and conserving coastal and ocean resources in California, which are themselves experiencing increasing impacts from climate change.

The state agencies submitting this letter will be individually and collectively working to assess the potential role of offshore wind in California's electricity system and the broader infrastructure implications of this potential energy resource. At the same time, we are committed—through a variety of review, coordination, and authorization functions—to ensuring that the activities covered in the EA and throughout the offshore

wind authorization process are carried out in a manner that protects ocean health and advances the state's blue economy.

As this process moves forward, we would like to reiterate our commitment to working in partnership with BOEM to bring forward the best available science regarding environmental considerations and existing uses of the ocean, much of which has been informed by spatial information on the California Offshore Wind Energy Gateway¹ and by other studies funded by federal and state agencies. Additionally, we are committed to proactively engaging with the public and stakeholders, including California Native American Tribes, to help fill critical data gaps.

Offshore wind represents an opportunity for California to generate carbon-free energy; diversify the state's renewable energy portfolio; and provide local, regional, and statewide economic benefits. California also deeply values the conservation and enhancement of its coastal and ocean resources and the recreational, economic, and scenic uses they provide. The state agencies described below are vested in the successful oversight of these processes, and we are jointly submitting these comments for BOEM's review. We also submitted a joint comment letter on the scope of the Humboldt EA in September 2021, and we appreciate the draft EA addressing some of those scoping comments.²

As more fully discussed below, we also encourage BOEM to prioritize conducting additional critical environmental studies and analyses, independently and in coordination with state agencies, to more fully inform state and BOEM decision making around the proposed leasing and site assessment activities and construction and operations plans.

Agency Roles and Responsibilities

California Energy Commission

The California Energy Commission (CEC) is the state's primary energy policy and planning agency and plays a critical role in creating the energy system of the future by crafting and implementing policies and programs to create a low-carbon economy. Since its establishment in 1974, the CEC has advanced the state's climate and energy goals while ensuring that the state's energy systems remain reliable, safe, and affordable. The CEC's portfolio is broad and includes promoting energy efficiency, incentivizing energy innovation, advancing cleaner transportation, licensing thermal powerplants with generating capacity of 50 megawatts or more, developing strategies to address energy emergencies, and implementing the state's Renewables Portfolio Standard.

¹ The California Offshore Wind Energy Gateway can be accessed here: <https://caoffshorewind.databasin.org/>

² The joint comment letter submitted to BOEM in September 2021 by the same state agencies on this letter can be accessed here: https://www.boem.gov/sites/default/files/documents/regions/pacific-ocs-region/renewable-energy/2021_0913%20California%20Energy%20Commission%20Eli%20Harland.pdf

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates investor-owned utilities and other retail electric load-serving entities across California. It authorizes electric utility rates and procurement, establishes electric utility service and safety standards and ensures that load-serving entities have sufficient energy resources available to provide safe and reliable service at reasonable cost. The CPUC's integrated resource planning process for entities under its jurisdiction ensures the development of the generation, energy storage and transmission resources needed to achieve the state's goal of 100 percent zero-carbon electricity by 2045 in a cost-effective manner.

California Coastal Commission

The California Coastal Commission was established by voter initiative in 1972 (Proposition 20) and later made permanent by the Legislature through adoption of the California Coastal Act of 1976. In partnership with coastal cities and counties, the Coastal Commission plans and regulates the use of land and water in the coastal zone. Development activities, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal permit from either the Coastal Commission or the local government. Additionally, the California Coastal Commission reviews activities in federal waters that impact coastal resources as authorized under the Coastal Zone Management Act (CZMA).

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the state (Fish & Game Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). CDFW is also responsible for marine biodiversity protection under the Marine Life Protection Act in coastal marine waters of California and ensuring that fisheries are sustainably managed under the Marine Life Management Act. CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. CDFW exercises regulatory authority under the California Endangered Species Act (CESA) when projects and related activities may result in the "take," as defined by state law, of species protected under CESA (Fish & Game Code, § 2050 et seq.). Lastly, CDFW is authorized to issue permits for the take or possession of wildlife for scientific, educational, and propagation purposes, and currently implements this authority by issuing Scientific Collecting Permits (Fish & Game Code, §§ 1002, 1002.5, 1003; California Code of Regulations, Title 14, § 650).

California State Lands Commission

The California State Lands Commission (CSLC) manages the state's sovereign tidelands and submerged lands, in addition to the beds of California's navigable lakes and waterways, for the benefit of all people of the state for statewide Public Trust purposes. The CSLC's jurisdiction extends along the state's entire coastline and offshore islands from the ordinary high water mark, as measured by the mean high tide line (except for areas of fill or artificial accretion, or where the boundary has been fixed by agreement or court decision) to the state-federal boundary, 3 nautical miles offshore. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6005, 6009, subd. (c), 6009.1, 6301, 6306, 6501.1.) The CSLC, on behalf of the state, has authority to issue leases or permits for the use and development of sovereign land and resources. The CSLC also has regulatory authority for the prevention of oil spills at marine oil terminals and offshore platforms and for preventing the introduction of marine invasive species into California waters.

When considering lease authorizations and other discretionary actions, the CSLC balances proposed or current uses with competing Public Trust uses, which include but may not be limited to commerce, navigation and safety, fisheries, recreation, public access, and conservation, to determine whether a lease issuance is in the best interests of the state. In determining the best interests of the state, the CSLC has broad authority to impose terms or conditions on applicants/lessees in any leases it may issue.

Governor's Office of Planning and Research

The Office of Planning and Research (OPR) serves as "staff for long-range planning and research, and constitute the comprehensive state planning agency" (Gov. Code § 65040). OPR serves "as a liaison to coordinate effective inclusion of the United States Department of Defense in the development and implementation of state energy and environmental policy" (Gov. Code § 65040.7(c)(2)). OPR runs the State Clearinghouse which coordinates state agency review and comment on California Environmental Quality Act and National Environmental Protection Act documents (California Code of Regulations, Title 14, §§ 15000-15387 and Presidential Executive Order 12372).

Ocean Protection Council

The California Ocean Protection Council (OPC) is a Cabinet-level state policy body within the California Natural Resources Agency that advances the Governor's priorities for coastal and ocean policy and works broadly to protect healthy coastal and ocean ecosystems for current and future generations. OPC was established by the California Ocean Protection Act, and its actions are guided by the Strategic Plan to Protect California's Ocean and Coast (2020-2025). One of the stated blue economy objectives

in the strategic plan is to work towards development of commercial scale offshore wind in California that minimizes impacts on marine biodiversity, habitat, currents and upwelling, fishing, cultural resources, navigation, aesthetics and visual resources, and military operations. OPC prioritizes collaboration between state and federal agencies and other partners to maximize consistency in decision-making and safeguard California's coast and ocean.

Additional Analysis of Leasing Environmental Impacts

We appreciate that BOEM has addressed many of the concerns highlighted in the joint comment letter on the scope of the Humboldt EA submitted in September 2021. These comments focused on analyses the state believes are needed to fully understand the impacts of the studies and activities that may be conducted by potential lessees, and while many concerns were addressed, we believe additional information will be necessary before, and as, leasing activities are undertaken. For this reason, we continue to recommend that BOEM revise and broaden the scope of the EA, as suggested below, to more fully address the comments in our September 2021 letter and to help facilitate informed decision-making by the state agencies with jurisdiction over various aspects of the project.

Project Description: The EA would be more informative if it clearly identifies and describes the methodologies for any proposed sampling or surveying, particularly for extractive sampling from biological surveys and geophysical surveys for seafloor characterization that rely on acoustic-generating survey equipment. Certain survey activities might result in incidental take of species listed under CESA, or both CESA and the Endangered Species Act (ESA), depending on the survey gear used. The EA does not include enough information on what methods will be used for biological or geophysical surveys to determine potential take, so we recommend that BOEM add that information to the explanation of survey methods in the EA.

Impacts to ESA- and CESA-listed species: The EA describes impacts to ESA-listed marine species that occur within and around the Humboldt Wind Energy Area (WEA), but it lacks the state status of ESA-listed species also listed under CESA, apart from the marbled murrelet. Species that are both ESA- and CESA-listed include coho salmon, steelhead, and leatherback sea turtle. We recommend adding the CESA listing status of these species to the appropriate tables in the EA, as well as those that are also considered species of special concern (lamprey, chinook salmon, green sturgeon, and cutthroat trout). Longfin smelt, although only listed under CESA, is a prominent species in the Humboldt region and should also be included in the assessment of impacts from site assessment and characterization activities.

Impacts of Underwater Sound: The EA addresses potential impacts from sound on several important megafauna species (e.g., marine mammals), which were identified

during the scoping period. However, after further review of the EA, we have identified issues that could arise from site surveys, which include potential impacts to larval, young of the year fish, and/or adult fishes. We recommend that the EA discuss how survey operations in the WEA may cause barotrauma impacts when deploying instruments producing decibels and/or frequencies great enough to disrupt air bladder function. These types of impacts have the potential to cause trophic level disruptions to the food web which could reverberate throughout the region and beyond the project area. We further recommend that the EA discuss potential mitigation measures proposed to reduce these impacts or describe why these impacts are unlikely to occur.

Commercial and Recreational Fishing: While the EA includes information about the Humboldt region's most prolific fishery, Dungeness crab, as well as the different fishing methods and gear types used in waters offshore Humboldt, it does not include a complete list of all the fisheries operating in the region. The inclusion of a more comprehensive list of fisheries in the region, similar to the one in the Humboldt Area ID Memo,³ will aid the state and BOEM in conducting fisheries-specific studies needed for future impact analyses.

The EA addresses potential space-use conflicts between fishing boats and survey vessels but does not address the seasonality (such as opening and closing dates) of fisheries in this region when determining the timing and location of upcoming surveys/studies that may be conducted. As survey vessels will likely preclude certain fishing activities from taking place in their vicinity, it is important that these impacts be carefully measured to minimize disruption to commercial and charter fishing activities. Conflicts between survey vessel activities and fishing operations have occurred in waters offshore of Humboldt and along the U.S. East Coast. The EA would benefit from considering the potential for such conflicts by including any future lease conditions to avoid such conflicts/interactions. Additionally, the lease conditions should include the reporting point of contact at the responsible agency along with a reporting protocol for fishermen and developers, and any other reasonable accountability measures to support the co-existing uses.

The EA does not address potential impacts to charter fishing vessels and recreational fisheries and instead, appears to treat these fisheries like those that primarily occur in shallower waters close to shore. However, as warm water moves closer to shore in the late summer, recreational fishing for highly migratory species, primarily albacore tuna, can take place at depths over 500 meters and potentially inside the WEA. This means that the recreational albacore fishery may be negatively impacted from the activities proposed in the EA, potentially affecting charter boat owners and operators, sportfishing

³ https://www.boem.gov/sites/default/files/documents/regions/pacific-ocs-region/renewable-energy/3799_CA%20Area%20ID%20Humboldt%20County%20Memo%20Final.pdf

landings, live bait providers, and fuel docks. We recommend that BOEM incorporate potential impacts to charter and recreational fisheries in the fisheries section of the EA.

Displacement of fishing effort during site assessment and characterization activities—both within and around the WEA—may result in indirect impacts, including on marine resources and air quality. We recommend that the EA describe potential impacts from displaced fishing effort on marine mammals and sea turtles, as changes to fishing vessel routes during the 5-year site assessment period may alter the likelihood of entanglement. For instance, it's unclear if trawling would move closer to shore in unrestricted areas (e.g., non-Rockfish Conservation Areas) and with greater overlap with the Dungeness crab fishery during this time, which intensely operates due east of the WEA. This could lead to compaction by the Dungeness fleet into tighter fishing grounds, which could increase the probability of whale interactions due an increase in density of trap lines in the water column. For this reason, the timing of studies and surveys conducted by lessees should consider the seasonality of fisheries in the region in conjunction with that of marine mammal and sea turtle migrations. Additionally, we recommend that the EA consider potential impacts from displaced fishing effort on air quality. In the absence of vessel transit routes through the WEA, fishing vessels will need to be rerouted to avoid data collection equipment. Alteration of fishing vessel routes over a five-year period may significantly increase vessel mileage, therefore potentially increasing pollutant emissions, especially when combined with emissions from survey vessels.

Air Quality: We recognize and appreciate BOEM including descriptions of three different types of air pollutants (criteria pollutants, greenhouse gases, and hazardous air pollutants), the sources of those emissions, and environmental impacts of these emissions in this EA. However, numerical estimates are not included in the EA and we ask BOEM to discuss how this will be analyzed in the future. Additionally, there should be analysis of air quality impacts due to potential increases in vessel transit times caused by avoiding survey activities within the WEA, or by traveling to designated vessel traffic corridors.

Public Access and Recreation: We recognize the EA does identify several potential staging areas; however, it would be beneficial to include an assessment that details the potential impacts that a lessee's operations will have on public access and recreational use of the coast and harbor in and around those designated staging areas.

Cumulative Effects: The EA presents the scenario of three potential lease areas within the Humboldt WEA but does not analyze the cumulative effects from multiple lessees engaging in site assessment and characterization activities at the same time. We recommend that the EA address the impacts of conducting separate geophysical, biological, archaeological, and ocean use surveys in the same region. To minimize

these impacts, site assessment surveys and activities will need to be coordinated between different developers and around currently underway projects in the region, such as the RTI Infrastructure, Inc. undersea fiberoptic cable project. The RTI Infrastructure, Inc. project was approved in 2021 by the CSLC and Coastal Commission, and installation of the cables is expected to proceed in the summer and fall of 2022. Importantly, three of the four cable alignments run through the Humboldt WEA and warrant treatment as “pre-existing” infrastructure to be planned for accordingly to avoid: (1) conflicts with cable installation activities and (2) future interference with or damage to the cables from wind turbine anchoring or other wind infrastructure. Additionally, while no other WEAs are present in the region, this EA would be more robust if it discussed cumulative effects that may occur if more WEA’s are established in the region, such as in southern Oregon.

Additional Information for Siting-level Analysis/COP Phase

The following concerns may not be directly relevant to site assessment and characterization activities, but they underscore areas that may require more analysis for the state’s CZMA review and as lessees develop Site Assessment and Construction and Operations plans. We urge BOEM to keep the following in mind as BOEM and lessees move forward into future phases of the offshore wind authorization process.

Marine Resources: It is important that we have a more comprehensive understanding of benthic habitat in and around the Humboldt WEA. This is critical as it may necessitate the identification of specific development areas within the Humboldt WEA that avoid large benthic habitat features, such as reefs, rocky bottom, and areas of significant biogenic habitat. For example, the California Offshore Wind Energy Gateway includes data on the locations of deep-sea corals and sponges, many of which appear to be near or in the Humboldt WEA. Gaining a better understanding of potential impacts to these habitats as well as identification of measures to avoid and minimize impacts is important for developing informed siting decisions and alternatives.

In addition, it is critical to have a more detailed understanding of the use of the Humboldt WEA by marine mammals (e.g., migrating, feeding, and/or breeding in the area), sea turtles, fish species (including species not reflected in commercial fishing data), and migratory and native seabirds to better understand the potential impacts (e.g., entanglement, collision, noise) from siting of offshore wind development within the Humboldt WEA. The WEA is located on the continental shelf and along the shelf break, an area which is associated with foraging and migration of marine mammals and seabirds. Little is known about the potential for disruption of along-shore movement and behavior of these species and significant impacts are possible.

State agencies are working with Conservation Biology Institute to develop a synthesis of best available data, including information developed in partnership with BOEM and

included on the California Offshore Wind Energy Gateway and used in the process for planning for offshore wind in federal waters off the California coast. As described in the EA, the Humboldt WEA is in a region where at least seven marine mammals (blue whale, fin whale, sei whale, humpback whale, sperm whale, southern resident killer whale, and Guadalupe fur seal) and a sea turtle (leatherback sea turtle) listed under the ESA and Marine Mammal Protection Act are likely to occur, as well as associated critical habitat. Of these species, it is believed that humpback whale and fin whale have the highest potential for interaction with offshore wind infrastructure due to their feeding behavior; however, further research on species sensitivity is needed. Additionally, the EA states that several avian species (including the short-tailed albatross, a pelagic seabird that is federally endangered and is a state species of special concern) are present in the Humboldt WEA and explains that further studies will continue to inform site-specific studies. We urge BOEM to include CESA-listed species, along with ESA-listed species, in future analyses of impacts on marine resources in the Humboldt region. We look forward to continuing our work with BOEM to synthesize and apply existing best available marine resource data to better understand potential impacts to species that will inform siting decisions and alternatives.

Oceanographic Considerations: The development of large-scale offshore wind energy projects has the potential to reduce the wind stress at the sea surface, which could have local and/or regional implications on California wind-driven upwelling, nutrient delivery, and ecosystem dynamics. Consequently, it is important to have an analysis of the potential changes in California coastal upwelling from offshore wind project development over a variety of environmental conditions, device characteristics, and wind farm configurations. The analysis would provide the physical basis for quantifying the effects of trophic level stressors on ecosystem function, including fisheries.

Infrastructure Upgrades and Indirect Impacts to Region: This EA mentions potential impacts of surveys and bottom sampling along possible cable routes during the site assessment phase of development but does not include analysis on impacts to the region due to port upgrades and transmission infrastructure improvements. These impacts are outside the scope of this EA, as they are irrelevant to the specific site assessment and characterization activities, however the state agencies here recognize that these impacts will need to be considered as the development of the potential lease areas within the Humboldt WEA gets underway and urge BOEM to keep this in mind moving forward towards any possible consideration of a Construction and Operations Plan.

Commercial and Recreational Fishing: Future fisheries analyses should assess impacts by fishery and gear type and should show trends over time. Doing so will ensure a more robust and useful analysis of impacts to fisheries. To accurately reflect potential impacts, BOEM should look beyond the last decade for information regarding fisheries in the area, as the recent 10-year period has been a time of tremendous change for

many West Coast fisheries and future years should be quite different from this time period. We encourage BOEM to continue using the list of fisheries included in the Humboldt Area ID Memo and ensure that any necessary updates or additions to the list resulting from the inclusion of data beyond the last decade are incorporated into fisheries analyses. We expect continued collaboration between BOEM and the state to ensure the use of the best available fishing data.

Scenic and Visual Resources: As a resource of public importance, scenic and visual qualities of coastal areas should be considered and protected in the development of offshore wind on the North Coast. We are aware that BOEM previously developed visual simulations of floating wind turbines at Sue-meg State Park just north of Eureka. We encourage BOEM to make use of these simulations during future impact analyses and to develop additional simulations from other key observation points on the North Coast, sharing them with the public and relevant state agencies.

Tribal and Cultural Resources: We recognize and appreciate the efforts that BOEM has made to engage with tribal communities on the North Coast. The Coastal Commission and other state agency staff are working through the consultation process with Tribes as well and look forward to continued collaboration with federal partners to ensure that state and federally recognized Tribes are able to constructively contribute to the offshore wind development process going forward and that potential impacts to tribal and cultural resources are identified and addressed in future assessments.

Conclusion

We thank BOEM for the opportunity to provide comments on the draft EA. The representative agencies on this letter are committed to working with our federal partners to ensure that the state is progressing towards its renewable energy goals while minimizing any potential adverse impacts on the environment and community. We will continue to work together to support and complement the efforts already made to ensure a successful outcome of future offshore wind energy development on the North Coast.

Sincerely,



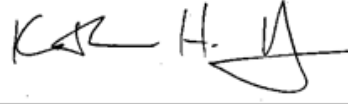
Karen Douglas
Commissioner
California Energy Commission



Mark Gold, D. Env.
Executive Director
Ocean Protection Council



Jennifer Lucchesi
Executive Officer
State Lands Commission



Kate Huckelbridge
Senior Deputy Director
California Coastal Commission



Commissioner
California Public Utilities Commission



Craig Shuman, D. Env.
Marine Regional Manager
Department of Fish and Wildlife



Scott Morgan
Chief Deputy Director
Governor's Office of Planning and
Research