

APPENDIX B

Current and Reasonably Foreseeable Actions

1. Introduction

This appendix discusses ongoing and reasonably foreseeable planned actions that could occur in the same location and/or timeframe as the Proposed Action. The Proposed Action is issuance of commercial wind energy leases within the Humboldt Wind Energy Area (WEA) that the Bureau of Ocean Energy Management (BOEM) has designated on the Outer Continental Shelf (OCS) in northern California. This area is defined as an offshore area extending generally 34 kilometers (km, 21 miles (mi)) offshore the city of Eureka and totaling approximately 132,368 acres (206 square miles (mi²)). Water depths across the WEA range from approximately 500 to 1,100 meters ((m) (1,640–3,609 feet (ft))). Planned actions could include areas between the WEA and onshore for cable corridors and substation facilities. Those areas would later be granted to a lease holder as rights-of-way (ROWs) and/or rights-of-use and easements (RUEs) in support of wind energy development.

BOEM considered ongoing and reasonably foreseeable planned actions that would occur in California and southern Oregon, as well as activities that would take place in state waters (Figure 1-1 of the environmental assessment (EA)). However, the geographic boundaries for activities that could interact with marine mammals, sea turtles, fish/fishing, and birds is beyond this area due to the extensive migration patterns of many species. This section addresses ongoing and planned actions that overlap with this regional area and may occur between the start of Proposed Action activities in 2023 and the completion of decommissioning of meteorological buoys in 2028, depending on when the leases are issued.

1.1 Ongoing and Reasonably Foreseeable Planned Actions

Ongoing and reasonably foreseeable planned actions over the same geography and/or timescale include six types of actions: 1) other renewable energy development activities; 2) military use; 3) marine transportation; 4) fisheries use and management; 5) scientific surveys and buoys; and 6) undersea transmission lines and telecommunications cables.

1.1.1 Other Renewable Energy Development Activities

These activities would include site characterization surveys and site assessment activities similar to the Proposed Action.

The closest renewable energy offshore project is an OCS lease offshore Newport, Oregon called PacWave South. This wave testing facility is offshore central Oregon north of the Proposed Action area. Installation of five power cables from the lease area to onshore and the deployment of monitoring buoys is expected to begin in the summer of 2022.

BOEM is concurrently writing an Environmental Assessment for the Morro Bay Wind Energy Area offshore central California, which is to the south of the Proposed Action area. If a Finding of No Significant Impact is issued and leases are offered in 2022, site assessment and characterization activities would be occurring concurrently with the Proposed Action.

BOEM and the State of Oregon actively requested data and public comment in 2021 regarding offshore wind planning within federal waters offshore Oregon. In 2022, it is possible that BOEM and the State of Oregon will issue a Call for Information and Nomination on a portion of the Oregon OCS. Planning and siting of areas in southern Oregon would likely consider activities in the Humboldt WEA.

1.1.2 Military Use

On September 23, 2021, the Navy released its Record of Decision to continue training and testing activities at sea and in associated airspace within the Northwest Training and Testing Study Area. This area extends offshore Washington and through Oregon and overlaps the Proposed Action area. The Environmental Impact Statement analyzed sound and impacts to marine mammals. The Proposed Action area is not in Special Use Airspace or other specifically designated use areas.

1.1.3 Marine Transportation

Over the timeframe assessed in the EA, BOEM assumes that shipping and marine transportation activities would increase above present levels. However, due to the 2016 expansion of the Panama Canal, shifts and possibly decreases may also occur in freight transport from Asia to large United States (U.S.) ports along the west coast (Park et al. 2020). The expanded Panama Canal allows larger vessels from Asia to travel directly to the ports along the Atlantic Ocean and bypassing the prior route of U.S. West Coast Ports en route to eastern cities of the U.S.

The U.S. Coast Guard is conducting a Port Access Route Study (PARS) to evaluate safe access routes for the movement of vessel traffic proceeding to or from ports or places along the western seaboard of the U.S. and to determine whether a Shipping Safety Fairway and/or routing measures should be established, adjusted, or modified. The PARS will evaluate the continued applicability of, and the need for modifications to, current vessel routing measures. Data gathered during this Pacific Coast PARS may result in the establishment of one or more new vessel routing measures, modification of existing routing measures, or disestablishment of existing routing measures off the Pacific Coast between Washington and California and overlaps with the Proposed Action area. This process will take several years. The U.S. Coast Guard collected public comment through January 25, 2022.

1.1.4 Fisheries Use and Management

The Proposed Action overlaps with the Pacific Fisheries Management Council's responsibilities, which manage federal fisheries. The Council manages fisheries for salmon, groundfish, coastal pelagic species (sardines, anchovies, and mackerel), and highly migratory species (tunas, sharks, and swordfish) from 3 to 200 miles off the coasts of Washington, Oregon, and California. The Council works with the International Pacific Halibut Commission to manage Pacific halibut fisheries. The Council's Fishery Ecosystem Plan helps incorporate ecosystem issues into the Council's fishery management plans. The fishery management plans of the Council were established, in part, to manage fisheries to avoid overfishing, which is accomplished through an array of management measures including annual catch quotas, minimum size limits, and closed areas. The Council develops management actions for federal fisheries off Washington, Oregon, and California, and is required to achieve optimum yield for public trust marine resources. Optimizing the yield of our nation's fisheries requires safeguarding these resources, their habitats, and the fishing communities that rely on their harvest.

The Humboldt WEA overlaps with designated Rocky Reef Habitat Areas of Particular Concern and with the Mad River Rough Patch Essential Fish Habitat Conservation Area for Pacific groundfish. Both of these spatially discrete areas are closed to bottom trawling and represent a high priority habitat for conservation, management, or research (NOAA Fisheries 2020). The Council created an Ad Hoc Marine Planning Committee (Committee) in the summer of 2021 to coordinate and increase participation of the Council to offshore wind energy and aquaculture activities along the U.S. West Coast. BOEM notes that the Committee recommends coast wide cumulative effects analysis of all wind energy proposed areas

(taking into consideration all areas closed to fishing) on all commercial and recreational fisheries, fishing communities, and impacts to domestic seafood production (including port-based fishery-specific facilities and related services). This request is not within BOEM's current scope for the EA for the Proposed Action. BOEM anticipates, and is planning for, future coordination with the Committee and Council on this (and other) recommendations.

See Section 4.3 for consultation descriptions with the National Marine Fisheries Service.

NOAA Fisheries uses stock assessments to monitor the condition of nearly 500 fish stocks. Fishery managers use the results of stock assessments to evaluate the status of fish stocks and set the amounts of fish that commercial and recreational fisheries can sustainably harvest from a stock in one year. Stock assessments of fish on the West Coast region involve both the Northwest and Southwest Fisheries Science Centers within the National Oceanic and Atmospheric Administration (NOAA). These Centers collect data to inform the stock assessments from at-sea surveys every year. In fiscal year 2021, the Centers completed 5 out of a planned 6 surveys.

1.1.5 Scientific Surveys and Buoys

Several agencies and non-governmental groups participate voluntarily in the Expanding Pacific Research and Exploration of Submerged Systems (EXPRESS) to fulfill their individual missions related to earthquake science, fisheries management, and informing conservation and energy development decisions offshore the West Coast of the U.S. The NOAA and U.S. Geological Survey led several survey efforts to collect bathymetry, high-resolution geophysical data, and sediment core samples between 2017 and 2021. This work resulted in the complete mapping of the Humboldt WEA, multiple remotely operated and autonomous underwater vehicle surveys, and collected 30-meter core sediment samples. Cruises are planned through 2023.

The Central and Northern California Ocean Observing System (CeNCOOS) a U.S. Government-accredited, regional source for high-quality data, integrated information and diverse expertise to inform wise and sustainable use of the ocean off Central and Northern California (cencoos.org). CeNCOOS maintains and publishes a long-term oceanographic dataset (e.g., sea water temperature, oxygen, depth) collected by a glider autonomously and repeatedly moving along a latitude that overlaps through the center of the Humboldt WEA extending nearshore to far offshore.

Buoys are currently deployed in and around the Proposed Action area. On October 3, 2020, the U.S. Department of Energy's Pacific Northwest National Laboratory deployed a meteorological buoy within the Humboldt WEA. The buoy Wind Sentinel (120) gathers meteorological and oceanographic data through October 2021, and the data are accessible. CeNCOOS lists two additional buoys offshore the area. A NOAA National Data Buoy Center maintains Buoy Number 46022 that is anchored 17 nautical miles west/southwest of Eureka offshore Eel River. The Coastal Data Information Program maintains Buoy (168) off the Humboldt Bay North Spit to collect wave height and direction.

1.1.6 Undersea Transmission Lines and Telecommunications Cables

Submarine cables include fiber-optic cables and trans-Pacific cables exist with landings along the southern Oregon and northern California coastlines. Two telecommunication cables currently run through the southern portion of the Humboldt WEA. No known construction or repair is currently planned.

2. References

National Oceanic and Atmospheric Administration (NOAA) Fisheries. 2020. Magnuson-Stevens Act Provisions; Fisheries Off West Coast States; Pacific Coast Groundfish Fishery; Pacific Fishery Management Plan; Amendment 28. Code of Federal Regulations, 50 CFR 660. Final Rule noticed in the Federal Register 84: 63966-63992.

Park, C., Richardson, H.W., and Park, J. 2020. Widening the Panama Canal and U.S. ports: Historical and economic impact analyses. *Maritime Policy Management* 47(3):419-433.
<https://doi.org/10.1080/03088839.2020.1721583>