Finding of No Historic Properties Affected for the Issuance of a Commercial Lease within the Morro Bay Wind Energy Area on the Outer Continental Shelf Offshore California

July 25, 2022

FINDING

The Bureau of Ocean Energy Management (BOEM) has made a Finding of No Historic Properties Affected (Finding) for this undertaking, pursuant to 36 Code of Federal Regulations (CFR) § 800.4(d)(l). The Finding will be met through BOEM's inclusion of lease and grant stipulations requiring lessees/grantees to avoid any potential historic properties identified through their high-resolution geophysical surveys during the conduct of ground-disturbing activities associated with site characterization activities.

DOCUMENTATION IN SUPPORT OF THE FINDING

1 Description of the Undertaking

Summary

This document describes BOEM's compliance with Section 106 of the National Historic Preservation Act (NHPA) and documents the agency's Finding for the undertaking of issuing commercial leases within the Morro Bay Wind Energy Area (WEA). BOEM prepared this documentation in support of the Finding following the standards outlined at 36 CFR § 800.11 (d) and as fulfillment of Stipulation I of the Programmatic Agreement among BOEM, the California State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) (Appendix A). This Finding and supporting documentation are being provided to the California SHPO and the ACHP as signatories to this agreement, and to the Santa Ynez Band of Chumash Indians (SYBCI), a concurring party to this agreement and consulting party to this undertaking. This Finding and supporting documentation are also being provided to the Coastal Band of the Chumash Nation (CBCN), Northern Chumash Tribal Council (NCTC), and yak tit^yu tit^yu tak tałhini – Northern Chumash Tribe of San Luis Obispo County (YTT). Each of these Tribal groups initially expressed interest in consulting on this undertaking, however, attempts to meet and discuss the undertaking further CBCN and YTT were unsuccessful. Additionally, this Finding and supporting documentation are provided to the Xolon-Salinan Tribe, who expressed interest in the undertaking, but did not request consultation. BOEM will continue to provide notification of future opportunities to consult on Section 106 undertakings related to the Morro Bay WEA. This Finding and supporting documentation will be made available for public inspection by placement on BOEM's public website prior to BOEM approving the undertaking.

Federal Involvement

The Energy Policy Act of 2005, Pub. L. No. 109-58, added Section 8(p)(l)(C) to the Outer Continental Shelf (OCS) Lands Act, which grants the Secretary of the Interior the authority to issue leases, easements, or rights-of-way on the OCS for the purpose of renewable energy development, including wind energy development (*see* 43 U.S.C. § 1337(p)(l)(C)). The Secretary delegated this authority to the former Minerals Management Service, now BOEM. On April 22, 2009, BOEM promulgated final regulations implementing this authority at 30 CFR § 585.

Under the renewable energy regulations, the issuance of leases and subsequent approval of wind energy development on the OCS is a staged decision-making process. BOEM's wind energy program occurs in four distinct phases, as described below.

• *Planning and Analysis*. The first phase is to identify suitable areas to be considered for wind energy leasing through collaborative, consultative, and analytical processes; including input from the California Renewable Energy Task Force, public information meetings, and other stakeholders.

• *Lease Issuance*. The second phase, issuance of a commercial wind energy lease, gives the lessee the exclusive right to subsequently seek BOEM approval for the development of the leasehold. The lease does not grant the lessee the right to construct any facilities; rather, the lease grants the lessee the right to use the leased area to develop its plans, which must be approved by BOEM before the lessee can move on to the next stage of the process (see 30 CFR § 585.600 and § 585.601).

• *Approval of a Site Assessment Plan (SAP).* The third stage of the process is the submission of a SAP, which contains the lessee's detailed proposal for the construction of a meteorological tower, installation of meteorological buoys, or a combination of the two on the leasehold. The SAP allows the lessee to install and operate site assessment facilities for a specified term. The lessee's SAP must be approved by BOEM before it conducts these "site assessment" activities on the leasehold. BOEM may approve, approve with modification, or disapprove a lessee's SAP (see 30 CFR § 585.605-585.618).

• *Approval of a Construction and Operation Plan (COP)*. The fourth stage of the process is the submission of a COP, a detailed plan for the construction and operation of a wind energy project on the lease. A COP allows the lessee to construct and operate wind turbine generators and associated facilities for a specified term. BOEM approval of a COP is a precondition to the construction of any wind energy facility on the OCS. As with a SAP, BOEM may approve, approve with modification, or disapprove a lessee's COP (see 30 CFR § 585.620-585.638).

The regulations also require that a lessee provide the results of surveys with its SAP and COP for the areas affected by the activities proposed in each plan (*see* 30 CFR § 585.610(b) and § 585.626, respectively), including the results of a shallow hazards survey, geological survey, geotechnical investigation, and archaeological resource identification survey. BOEM refers to

these surveys as "site characterization" activities and provides guidelines for conducting these surveys and submitting their results as part of a SAP or COP. See <u>Guidelines for Providing</u> <u>Geological and Geophysical, Hazards, and Archaeological Information Pursuant to 30 CFR</u> <u>Part 585</u> (Appendix B), which advises lessees to survey the entirety of the area they propose to impact.

On November 10, 2021, BOEM released an <u>Announcement of Area Identification (Area ID)</u> <u>Memorandum of a Wind Energy Area</u> (WEA) located within federal waters offshore San Luis Obispo County, California (Appendix C). The Area ID Memorandum documents the analysis and rationale in support of the recommended designation of a WEA offshore San Luis Obispo County, California, for environmental analysis and consideration for leasing. Area ID is a required regulatory step under the renewable energy competitive leasing process used to identify areas for environmental analysis and consideration for leasing (30 CFR § 585.211(b)). BOEM has determined that issuing commercial leases within the Morro Bay WEA offshore northern California constitutes an undertaking subject to Section 106 of the NHPA (54 U.S.C. 306108), and its implementing regulations (36 CFR § 800) and that the subsequent site characterization activities associated with commercial lease issuance (e.g., shallow hazards, geological, geotechnical, and archaeological resource surveys) constitute activities that have the potential to cause effects to historic properties.

BOEM implemented a Programmatic Agreement pursuant to 36 CFR § 800.14(b) to fulfill its obligations under Section 106 of the NHPA for renewable energy activities on the OCS offshore California. This agreement has been developed for two primary reasons; first, the bureau's decisions to issue leases and approve SAPs, COPs or other plans are complex and multiple; and second, BOEM will not have the results of archaeological surveys prior to the issuance of leases and as such will be conducting historic property identification and evaluation efforts in phases (36 CFR § 800.4(b)(2)). BOEM's California Programmatic Agreement was executed December 18, 2019, among the California SHPO and the ACHP (Appendix A).

This agreement provides for Section 106 consultation to continue through both the commercial leasing process and BOEM's decision-making process regarding the approval, approval with modification, or disapproval of lessees' SAP, COP, or other plan, and will also allow for a phased identification and evaluation of historic properties (36 CFR § 800.4(b)(2)). Furthermore, the agreement establishes the process to determine and document the area of potential effects (APE) for each undertaking; to identify historic properties located within each undertaking's APE that are listed in or eligible for listing in the National Register of Historic Places (National Register); to assess potential adverse effects; and to avoid, reduce, or resolve any such effects through the process set forth in the agreements.

Description of the Wind Energy Area

The Morro Bay WEA (Figure 1) measures approximately 240,898 acres (376 square miles). At its closest point to land, the Morro Bay WEA is located approximately 20 miles from shore, and 37 miles northwest of Morro Rock. Water depths across the WEA range from approximately 900 to 1,300 meters (m) (2953 to 4265 feet (ft)).

The Holocene marine geology of the Morro Bay WEA reflects the Cenozoic regional tectonic and depositional stages unique to the Santa Maria Basin. Local geologic features of interest within the WEA identified during recent United States Geological Survey (USGS) marine geological and geophysical research cruises include active faulting, submarine landslides, steep seafloor slopes, seafloor pockmarks, and rock outcrops. Of note is the Big Sur pockmark field (Paull et al., 2002), which is an area in the northern Morro Bay WEA consisting of more than 15,000 depressions in the soft sediments (Walton et al., 2021).



Figure 1. Map of Morro Bay Wind Energy Area.

The Undertaking

The undertaking considered in this Finding includes the issuance of up to three (3) commercial leases within the Morro Bay WEA and granting of rights of way (ROWs) and rights of use and easements (RUEs) in support of wind energy development and takes into account the execution of associated site characterization and site assessment activities on these leases or grants. A lessee must submit the results of site characterization surveys with their plans (e.g., 30 CFR § 585.610, § 585.626, and§ 585.645). Although BOEM does not issue permits or approvals for these site characterization activities, it will not consider approving a lessee's plan if the required survey information is not included.

Site characterization activities include both high-resolution geophysical (HRG) surveys, which do not involve seafloor-disturbing activities, and geotechnical investigations, which may include seafloor-disturbing activities. Retrieval of lost equipment may occur, as necessary. The purpose of HRG survey is to acquire shallow hazards data, identify potential archaeological resources, characterize seafloor conditions, and conduct bathymetric charting. BOEM anticipates that HRG surveys would be conducted using the following equipment: swath bathymetry system, magnetometer/gradiometer, side-scan sonar, and shallow and medium (seismic) sub-bottom profiler systems. This equipment does not come in contact with the seafloor and is typically towed from a moving survey vessel that does not require anchoring. BOEM does not consider HRG survey to be an activity that has the potential to cause effects on historic properties and this activity is not considered further in this Finding.

Geotechnical testing or sampling involves seafloor disturbing activities, and therefore has the potential to cause effects to historic properties. Geotechnical testing is conducted to assess the suitability of shallow foundation soils to support anchoring systems or transmission cable under any operational and environmental conditions that might be encountered (including extreme events), and to document soil characteristics necessary for the design and installation of all proposed structures and cables. Geotechnical investigation may include the use of equipment such as gravity cores, piston cores, vibracores, deep borings, and Cone Penetration Tests (CPT), among others. Some of these methods may require the use of anchored vessels or multi-point anchored barges.

BOEM also anticipates cases where geotechnical testing methods may be employed as part of the identification of historic properties. In some instances, direct sampling may be the only available method of testing the presence or absence of horizons of archaeological potential within features of interest identified during geophysical survey. As agreed to by the signatories under Stipulation III of the Programmatic Agreement, vibracores or other direct samples collected by or under the supervision of a Qualified Marine Archaeologist for the purposes—at least in part—of historic property identification or National Register eligibility testing and evaluation are exempt from Section 106 review.

The undertaking *does not*, however, include cable installation or connection to shore-based facilities, installation of site assessment equipment, or consideration of commercial-scale wind energy facilities. Should a lessee propose to deploy site assessment equipment within the Morro Bay WEA, they would submit a SAP to BOEM, which BOEM would consider under a separate

Section 106 review pursuant to Stipulations II and III of the Programmatic Agreement. Should a lessee propose to construct and operate a commercial-scale wind energy facility within the Morro Bay WEA, they would submit a COP to BOEM, which BOEM would consider under a separate Section 106 review.

Area of Potential Effects

As defined in the Section 106 regulations (36 CFR § 800.16(d)), the APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

As agreed to by the signatories under Stipulation I.A of the Programmatic Agreement, the APE for this undertaking is defined as the depth and breadth of the seabed that could potentially be affected by seafloor/ground-disturbing activities associated with site characterization activities. The APE for site characterization activities includes the discrete horizontal and vertical areas of the seafloor that may be affected through geotechnical sampling, which may include the collection of core samples, soil borings, or other bottom-disturbing techniques that could directly affect historic properties on or below the seafloor, if present. In addition, geotechnical sampling may also require the use of barges or anchored vessels that could also directly affect historic properties, if present.

Site characterization activities could occur within the extent of the Morro Bay WEA and along a corridor(s) that extends from the WEA to the onshore energy grid. It is anticipated the ROW/RUE route(s) would consist of a minimum 300-meter-wide corridor centered on any anticipated cable location(s). Because any ROW or RUE grants considered as part of this undertaking have not been issued, BOEM is uncertain of the exact location of these cable corridor surveys. However, BOEM can anticipate their geographic extent. Power generated from potential Morro Bay lease area(s) would need to be transmitted to shore directly from the lease area(s) by individual export cables to onshore cable landings. For the purposes of this undertaking, BOEM estimates that the APE associated with cable site characterization activities would occur within a discrete corridor(s) in the region between the Morro Bay WEA and shore.

Based on the distance from shore and the minor-in-scale and temporary manner in which site characterization studies will likely occur, BOEM has concluded that the equipment and vessels performing these activities will be indistinguishable from existing lighted vessel traffic. Therefore, BOEM has not defined as part of the APE onshore areas from which the site characterization activities would be visible. In addition, there is no indication that the issuance of a lease and subsequent site characterization studies will involve expansion of existing port infrastructure. Therefore, onshore staging activities are not considered as part of the APE for this specific undertaking.

Consultation with Appropriate Parties and the Public

Under stipulation I.C of the Programmatic Agreement for the undertaking of issuing a commercial lease, BOEM committed to identify consulting parties pursuant to 36 CFR §

800.3(f); consult on existing, non-proprietary information regarding the proposed undertaking and the geographic extent of the APE; and to solicit additional information on historic properties within the APE from the consulting parties and the public.

BOEM is currently preparing an Environmental Assessment (EA) to consider potential environmental consequences of site characterization activities (i.e., biological, archaeological, geological, and geophysical surveys and core samples) and site assessment activities (i.e., installation of meteorological buoys) associated with issuing wind energy leases in the WEA. The EA also considers project easements associated with each potential lease issued, and grants for subsea cable corridors.

The BOEM Pacific Region convened the first California Intergovernmental Renewable Energy Task Force (Task Force) meeting on October 13, 2016. The Task Force is a partnership of members of state, local, and federally recognized Tribal governments and federal agencies. Since 2016 the Task Force has met three additional times (2018, 2020, and 2021) and serves as a forum to discuss stakeholder issues and concerns; exchange data and information about resources, ocean uses and priorities; and facilitate early and continual dialogue and collaboration opportunities. In collaboration with the State of California, the <u>California Offshore Wind Energy</u> <u>Gateway</u> was established through Data Basin as a way of providing geospatial information related to wind energy information offshore California.

Since 2016, BOEM has worked in partnership with the State of California to outreach and involve Tribal governments (including federally recognized and non-recognized Tribes) and the public in wind energy planning offshore California. An outreach document summarizes these activities through 2020 in the <u>CA Offshore Wind Energy Planning Outreach Summary Report</u>; an <u>addendum</u> to this report was published in June 2021 to document the outreach from 2020.

On November 12, 2021, BOEM issued a Notice to Stakeholders and conducted public scoping to inform the development of an EA on the Morro Bay Wind Energy Area (WEA). During the 60-day public comment period, which closed on January 11, 2022, BOEM held two virtual public scoping meetings. Previously, BOEM issued a <u>Call for Information and Nominations</u> on October 19, 2018; and a <u>Call for Information and Nominations</u> for two extension areas to the previously identified Call Area was issued on July 29, 2021. Each of these notices, in part, solicited public comment and input regarding the identification of, and potential effects to, historic properties from leasing and sites assessment activities for the purpose of obtaining public input of the Section 106 review (36 CFR § 800.2(d)(3)).

BOEM initiated Section 106 consultation for the undertaking of issuing a commercial lease and the issuance of ROW/RUE grants within the Morro Bay WEA by sending a letter and email (including an electronic copy of the letter) on November 24, 2021. The list of potential Section 106 consulting parties for the undertaking was developed and included the California SHPO, ACHP, Santa Ynez Band of Chumash Indians (SYBCI; the only federally recognized Tribal Nation near the Morro Bay area), non-recognized Tribes identified by the California Native American Heritage Commission, other federal agencies, certified local governments, historic preservation societies, and local museums (Appendix D). The letter provided information and invited consultation for this undertaking under Section 106 of the NHPA. The letter also solicited

public comment and input regarding the identification of, and potential effects on, historic properties from leasing and site assessment activities for the purpose of obtaining public input for the Section 106 review (36 CFR § 800.2(d)(3)) and to determine interest in participating as a consulting party.

BOEM received requests to become a consulting party from CA SHPO, ACHP, SYBCI, CBCN, NCTC, and YTT. Attempts to meet and discuss the undertaking further with the CBCN and YTT were unsuccessful. The Xolon Salinan Tribe also expressed interest in the proposed undertaking, however, attempts to meet and discuss the undertaking further were also unsuccessful. BOEM remains open to meeting with these Tribal groups and will continue to provide notification of future opportunities to consult on Section 106 undertakings related to the Morro Bay WEA following the Stipulations in the <u>Programmatic Agreement</u>. A request for consultation was received from the Big Sur Historical Society (BSHS), however, after further discussion, BSHS stated they have no concerns with the current undertaking.

SYBCI is a member of the Task Force and a concurring party to the Programmatic Agreement. SYBCI provided written comments, engaged in government-to-government consultations, and participated in informational meetings with BOEM throughout the review process for the Morro Bay WEA. SYBCI notified BOEM of sacred sites in the Morro Bay area, identified certain areas as cultural landscapes of importance to the Tribe, and provided information on potential ecological issues that may be associated with offshore wind energy development. Through consultation with SYBCI, BOEM agreed to work with SYBCI and other interested Tribes to prepare documentation in support of a Traditional Cultural Property nomination to the National Register Historic Places of Morro Rock and the nearby area. This documentation effort shall be completed and submitted to CA SHPO for a determination of eligibility prior to the approval of any construction and operations plan within the Morro Bay WEA. Should a lessee propose to deploy site assessment structures or propose to construct and operate commercial-scale facilities within the Morro Bay WEA, they would submit a plan to BOEM, which BOEM would consider under a separate Section 106 review pursuant to Stipulations II and III of the Programmatic Agreement. BOEM continues to consult with SYBCI and will continue to do so throughout the leasing process, following the Stipulations in the Programmatic Agreement, and as a sovereign Tribal government.

NCTC requested that BOEM review the Chumash Heritage National Marine Sanctuary Nomination (NCTC 2015) for more information on their areas of interest and concern. The current boundaries for the proposed Sanctuary are adjacent to the Morro Bay WEA and do not overlap. Should a lessee propose to deploy site assessment structures or propose to construct and operate commercial-scale facilities within the Morro Bay WEA, they would submit a plan to BOEM, which BOEM would consider under a separate Section 106 review pursuant to Stipulations II and III of the Programmatic Agreement. BOEM will continue to invite consultation with NCTC throughout the leasing process, following the Stipulations in the <u>Programmatic Agreement</u>.

Through the public scoping process, BOEM also received comments expressing concern about visual impacts to historic properties from offshore wind energy development. With respect to the concerns raised regarding visual impacts from commercial development within the Morro Bay

WEA, the historic properties identified by the parties are not within the APE for the undertaking under consideration in this Finding. Should a lessee propose to deploy site assessment structures or propose to construct and operate commercial-scale facilities within the Morro Bay WEA, they would submit a plan to BOEM, which BOEM would consider under a separate Section 106 review pursuant to Stipulations II and III of the Programmatic Agreement.

No other comments related to historic properties within the APE were received on this Finding. Per 36 CFR § 800.4(d)(1)(i), "If the SHPO/THPO, or the Council if it has entered the section 106 process, does not object within 30 days of receipt of an adequately documented finding, the agency official's responsibilities under section 106 are fulfilled."

II. Description of the Steps Taken to Identify Historic Properties

As documented in the Programmatic Agreement, BOEM has determined that the identification and evaluation of historic properties will be conducted through a phased approach, pursuant to 36 CFR § 800.4(b)(2), where the final identification of historic properties may occur after the issuance of a lease or grant, but before the approval of a plan, because lessees conduct site characterization surveys in preparation for plan submittal.

BOEM has reviewed existing and available information regarding historic properties that may be present within the APE, including any data concerning possible historic properties not yet identified. Sources of this information include consultation with the appropriate parties and the public, accessing information gathered through BOEM-funded studies and through the California Historical Resources Information System's Central Coast Information Center, and reviewing cultural resources information compiled for preparation of the environmental assessment.

Relevant BOEM studies include an updated desktop assessment of archaeological resource potential on the Pacific OCS (ICF 2013). The study modelled submerged paleo-landform and pre-European contact archaeological potential based on reconstruction of sea level rise, human settlement patterns, and site formation and preservation conditions. GIS-based shape files of these data sets are available for download from the California Offshore Wind Energy hub on the Data Basin website. The ICF report also compiled information on reported shipwrecks in the Pacific Shipwreck Database. BOEM's Pacific Shipwreck Database does not represent a complete listing of all potential shipwrecks located on the Pacific OCS, but rather it serves as a baseline source of existing and available information for the purposes of corroborating and supporting identification efforts. In many cases, the locational accuracy of database entries varies greatly.

To date, the Morro Bay WEA has not been subjected to a complete and comprehensive archaeological identification survey. Given the water depths of the WEA (900 to 1,300 m (2953 to 4265 ft)) and based on our current understanding of submerged pre-contact archaeological site modeling for the area offshore Morro Bay, the types of historic properties expected to be present within the WEA include only submerged historic period archaeological sites such as shipwrecks. The potential for inundated pre-contact archaeological sites would be expected shoreward of the 130 m (426 ft) bathymetric contour. The potential to encounter historic period shipwrecks shoreward of the WEA increases closer to the coast, even still only 6 shipwrecks have been

reported offshore the central California coast in the area between Lime Kiln State Park to the north and Point Buchon to the south (south end of Estero Bay).

Pre-contact Historic Properties

During the Late Pleistocene, at the Last Glacial Maximum (20,000 years before present [B.P.]), the glaciers that covered vast portions of the Earth's surface sequestered massive amounts of water as ice and lowered global sea level approximately 130 m (426 ft) (ICF 2013; Clark et al. 2014). Corresponding with lower global sea level during the Late Pleistocene, areas extending west from the present central California coastline that may have the potential to contain now submerged landform features extend less than three miles off the Big Sur coast, up to six miles just north and south of Point Piedras Blancas, and up to approximately 9 miles offshore Estero Bay. Pre-contact period sites would most likely be found in the vicinity of paleochannels or river terraces that offer the highest potential of site preservation; however, preservation conditions are variable and depend on local geomorphological conditions and the speed of sea level rise. At its closest point to the modern coastline, the Morro Bay WEA is located approximately 20 miles offshore in water depths starting at 900 m (2953 ft), thereby excluding the potential for submerged pre-contact sites to be found within the Morro Bay WEA.

Jones et al. (2007) identify the follow pre-contact periods for the central California coast: Paleo-Indian (pre-8,000 cal B.C.), Millingstone/Early Archaic (8,000 to 3,500 cal B.C.), Early (3,500 to 600 cal B.C.), Middle (600 BP to 1000 cal A.D.), Middle/Late Transition (1000 to 1250 cal. A.D.), and Late (1250 to 1769 cal A.D.). Numerous pre-contact archaeological sites have been documented along the central California coast, and a few nearby isolated artifact finds suggest human occupation in the area may date back at least 10,000 years (Jones et al. 2009).

The remainder of this section is adapted from the Morro Bay WEA Draft EA:

A number of Native American Tribes have deep ties to the Morro Bay area and central California coast, and have called this area home since time immemorial. Tribes' connections to the region include their traditional and ancestral homelands, customary uses of marine resources for food and cultural connections, and stewardship of resources and ecosystems within their ancestral homelands and waters (NCTC 2015; Cordero et al. 2016). Coastal landscapes and seascapes, including viewsheds, are integral and sacred elements of Tribal cultural connections to the region. Additionally, during the last glacial maximum the coastline of the region extended beyond the present-day coast to include now-submerged areas that were likely inhabited by ancestors of California Tribes before the last rise in sea levels.

Coastal and offshore areas of the central California coast near the Morro Bay WEA are within or near the traditional cultural regions of several Tribes and cultural groups. These include Chumash-, Salinan-, and Esselen-affiliated Tribes. Chumash-affiliated Tribes identified on the California Native American Heritage Commission (NAHC) digital atlas are the Barbareño/Ventureño Band of Mission Indians, Chumash Council of Bakersfield, Coastal Band of the Chumash Nation, Northern Chumash Tribal Council, San Luis Obispo County Chumash Council, Santa Ynez Band of Chumash Indians, and yak tityu tityu yak tiłhini – Northern Chumash Tribe (NAHC 2021). Salinan-affiliated Tribes are the Salinan Tribe of Monterey, San Luis Obispo Counties and the Xolon-Salinan Tribe (NAHC 2021). Esselen-affiliated Tribes are the Esselen Tribe of Monterey County and the Ohlone/Costanoan-Esselen Nation (NAHC 2021). Cultural affiliations of Tribes listed by the California NAHC are self-reported by Tribes (NAHC 2021). Among the Tribes identified by the NAHC in the region, one Tribe, the Santa Ynez Band of Chumash Indians, is Federally recognized.

Chumash ancestral territory encompasses approximately 7,000 square miles on the central California coastline from what is today Malibu to Paso Robles, including the four northern Channel Islands, and inland to the western edge of the San Joaquin Valley (SYBCI 2021a; UXL 2008). The Chumash were traditionally, and continue to be, inextricably connected to the marine environment. They are recognized as one of the few ocean-going indigenous peoples on the California coast (NCTC 2015), travelling to sea, to the Channel Islands, and along the coast in traditional plank canoes called tomols. Coastal Chumash traditionally harvested an array of marine resources such as abalone and other shellfish, Olivella shells, fish, kelp and other seaweeds, and marine mammals (Kennett 2005). A number of Chumash individuals and organizations describe the importance of coastal areas of the central California region to Chumash culture and work to revive coastal- and ocean-based cultural traditions: "Chumash descendants are in the midst of a cultural revival that is a testament to their rich cultural heritage... The Chumash way of life is interwoven with the ocean and the many clans who still exist and thrive on the Central Coast. Today, Chumash people celebrate their ancestral ocean voyages in tomol canoes to honor their ancestors' crossings to the offshore islands and continue to honor ceremonial sites within their historic areas." (NCTC 2015; p. 9). Coastal and marinebased cultural activities include a renewal of tomol voyages from the mainland to Santa Cruz Island and associated ceremonies, among other activities (Cordero et al. 2016). The Chumash are a maritime culture, and the tomol crossings are significant to Chumash culture and the restoration of Chumash maritime heritage (Cordero 2021; Pagaling 2018; NCTC 2015). Representatives of Chumash Tribes have expressed to BOEM that many locations along the central coast region are considered sacred places (BOEM and CEC 2021). In particular, Morro Rock and the surrounding waters has been identified as a culturally significant place (BOEM and CEC 2021). The Channel Islands and surrounding waters and Point Conception are also identified as significant places for Chumash Tribes (NCTC 2015; Cordero et al. 2016). Tribes often choose to hold sacred or culturally important places confidential, and BOEM recognizes that many other coastal and offshore locations are important to Tribes. The mention of a few publicly identified locations here is not intended to imply these are the only important places.

The ancestral territory of Salinan-speaking groups covers the areas of the central California coast inland to the Temblor and Diablo ranges, including the Santa Lucia range and the areas encompassing the Salinas River (Xolon Salinan Tribe 2019; STMSLO 2020). The Salinan were a hunter-gatherer society who utilized abundant resources, such as acorns, pine nuts, and sage seeds, and a variety of land and marine animals (Chung 2018; Taylor ND). Among the first Native Americans in California to be impacted by Europeans, the establishment of Missions by the Spanish in the region greatly disrupted the lifeways and social structures of Salinan cultural groups (Taylor ND; Rivers and Jones 1993). Present-day Salinan-affiliated Tribes and individuals work to maintain cultural practices connected to the natural environment (STMSLO 2020; Xolon Salinan Tribe 2019). In addition to other culturally important places in the central

California region, Morro Rock, and the surrounding Morro Bay area, is identified as a sacred place by many Salinan (Herrera 2017; Shuman 2021; Taylor ND).

Farther north of the Morro Bay WEA, the cultural region of Esselen-affiliated Tribes covers areas of the Monterey Bay region, including the Monterey Peninsula, the northern Salinas Valley, the Santa Lucia Mountains and Carmel Valley, and the Big Sur coast (Laverty 2003; ETMC 2021; OCEN 2021). Many descendants of several villages and bands in the region have chosen to enroll in the state-recognized Tribes of the Ohlone/Costanoan-Esselen Nation or the Esselen Tribe of Monterey County.

Tribes in central California were displaced from much of their ancestral homelands with the arrival of several waves of European, Mexican, and American colonists and settlers. Native bands in the central California coastal region were among the first indigenous peoples in California to encounter Europeans when Spanish explorers arrived in the mid-1500s. Chumash, Salinan, and Esselen peoples were heavily impacted by the establishment of several Spanish missions in the region in the late 1700s and later the arrival of Mexican and American settlers and ranchers (Millikin and Johnson 2005; Chung 2018). The subsequent onslaught of disease, removals from homeplaces to missions, forced labor, and vigilante violence and genocide resulted in tremendous population declines and displacement from Tribal lands. Today, many of the Tribes in the central California coastal region do not have formal ownership or management of lands within their ancestral territories. However, the Santa Ynez Band of Chumash Indians has a historic Reservation of 99 acres since 1906 which was increased to 137 acres in the 1980s and most recently was increased by an additional 1,500 acres in 2019 (SYBCI 2021b). Other Tribes work with non-profit and government organizations to regain or protect areas of their homelands. The yak tityu tityu yak tiłhini - Northern Chumash Tribe includes regaining ancestral homelands as part of the mission of their non-profit organization (YTT Northern Chumash 2020). In 2020, the Esselen Tribe of Monterey County gained ownership of almost 1,200 acres of ancestral homeland through partnership with the State of California and a non-profit land conservancy (ETMC 2021). In addition to efforts to regain or conserve ancestral lands, the Northern Chumash Tribal Council has been leading an effort for several years to advance establishment of a Chumash Heritage National Marine Sanctuary through the National Oceanic and Atmospheric Administration's National Marine Sanctuaries program (NOAA 2021).

Many Tribes in the region include as their mission the preservation and revitalization of cultural heritage through traditional practices, language, customary gathering of natural resources, and other means (STMSLO 2020; Xolon Salinan Tribe 2019; ETMC 2021; SYBCI 2021a). Tribes work to protect sacred sites and artifacts through advocacy and formal regulatory processes (e.g., National Historic Preservation Act, Native American Graves Protection and Repatriation Act). Additionally, several Tribes indicate they identify as the original stewards and caretakers of their natural environment and recognize a cultural mandate to care for and maintain a relationship with traditional ecosystems (Cordero et al. 2016, NCTC 2015; ETMC 2021). Some Tribes recognize an interconnection and relationship between humans and the natural world, including marine species and ecosystems. For example, "Chumash worldview holds that all living and non-living beings are relatives. This includes plants, animals, water, land, fire, wind, etc. Humans are neither at the apex nor the center of this worldview, but are part of a large extended family," (Cordero et al. 2016:187).

Historic Period Historic Properties

The waters off the central California coast and near the Morro Bay WEA have witnessed historic-period vessel traffic since the mid-16th century. The first European vessel known to have sailed off the central California coast occurred as part of a Spanish expedition led by Juan Rodriguez Cabrillo and his successor Bartolome Ferrer from 1542-1543; it is this expedition that is reported to have ascribed the name Morro Rock to the large volcanic plug in Estero Bay (MBNEP 2016). While Cabrillo died along the way, Ferrer is believed to have travelled as far north as the California-Oregon border and returned to Mexico with a rudimentary map of the coast (ICF 2013). In 1565, the Spanish identified an east-bound sailing route from Asia to Mexico, which established what came to be known as the Manilla Galleon Trade Route and continued for about 250 years. While sailing this route in 1587, Pedro Unamuno entered Estero Bay and sent an expedition onshore to claim the area for the Kingdom of Spain (MBHS 2017). In 1602, Sebastian Vizcaino undertook a mapping expedition of the California coast, which succeeded in naming several prominent points and bays; while the British, under command of Captain James Cook, mapped the Pacific coast from California to the Bering Strait in 1778 (ICF 2013).

The Spanish Mission period (1769 to 1821) established a series of missions and presidios along the California coast and interior that extended from San Diego to Sonoma. Agriculture and ranching activities developed near these settlements, which led to the growth of the hide and tallow trade from the 1820s through the 1840s (Osborne 2009). While the mission system helped create what are now modern cities, as mentioned in the previous section, it also devastated local indigenous communities.

As Euro-American outposts and settlements were established in the Pacific Northwest in the late 18th century, maritime trade along the coast developed and became more regular through the 19th century. Extractive maritime activities that passed (and sometimes stopped) along the central California coast and near the Morro Bay WEA included, for example, fur trading, whaling, timber harvesting, and hide and tallow trading (ICF 2013). While the central California coast did not experience the same influx of Euro-American settlement as areas around San Francisco and Los Angeles did, the township of Morro was first established in 1870.

Less than three weeks after the Japanese assault on Pearl Harbor and the United States entry into World War II, the central California coast saw action on December 23, 1941, when the Japanese submarine I-21 sunk the Union Oil Company tanker *Montebello*, approximately 7 miles offshore Cambria (NOAA 2019).

According to the BOEM Pacific Shipwreck Database, there are 6 known and reported historic shipwreck losses near the Morro Bay WEA (Table 1). None of these vessel losses are reported within the Morro Bay WEA and with the exception of *Montebello*, the remaining vessels are reported to have been lost within 1.6 kilometers (1 mile) of shore.

III. Required Elements in the Lease

Per Stipulation I.E of the Programmatic Agreement, where practicable, BOEM will require avoidance of potential historic properties through lease stipulations, resulting in BOEM

recording a Finding of No Historic Properties Affected, consistent with 36 CFR § 800.4(d)(1). Inclusion of the following elements in the lease will ensure the identification and avoidance of historic properties and is a requirement of this Finding.

Record	Vessel	Year Lost	Position Accuracy	Vessel Type	Comments
0001	Montebello	1941	1	Oil tanker	Near Cambria
4064	Unknown	Unknown	2	Unknown	Unknown
4988	Gambolier	1949	2	Unknown	Stranded east of China Harbor
5130	Maple Leaf	1947	2	Unknown	Destroyed by fire near Cambria
5239	Pussycat	1966	2	Unknown	Foundered
5398	Vinni Su	1959	2	Unknown	Foundered near Morro Bay

Table 1. Shipwreck losses near Morro Bay WEA.

The following elements, designed to avoid impacts to offshore historic properties from bottomdisturbing activities associated with site characterization surveys, would be included in a commercial lease issued for the Morro Bay WEA:

- The Lessee must provide the methods and results of an archaeological survey with its plans.
- The Lessee must ensure that the analysis of archaeological survey data collected in support of plan submittal and the preparation of archaeological reports in support of plan submittal are conducted by a Qualified Marine Archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738–44739) and has experience analyzing marine geophysical data.
- The lessee may only conduct geotechnical exploration activities, including geotechnical sampling or other direct sampling or investigation techniques, which are performed in support of plan (i.e., SAP and/or COP) submittal, in areas in which an archaeological analysis of the results of geophysical surveys has been completed for that area.
- The Qualified Marine Archaeologist's analysis of the geophysical data must include a determination of whether any potential archaeological resources are present in the area of geotechnical sampling, including consideration of both pre-contact and historic period archaeological resources.
- If present in the area, the lessee's geotechnical sampling activities must avoid any potential archaeological resources by a minimum of 164 ft (50 m). The avoidance distance must be calculated by the Qualified Marine Archaeologist from the maximum discernible extent of the archaeological resource.
- The Qualified Marine Archaeologist must certify in the lessee's archaeological reports included with a SAP or COP that geotechnical exploration activities did not affect potential historic properties identified as a result of the HRG surveys.
- In no case may the lessee's actions affect a potential archaeological resource without BOEM's prior approval.

In addition, BOEM would require that the lessee observe the unanticipated finds requirements at 30 CFR 585.802. The following elements would be included in a commercial lease issued within the Morro Bay WEA:

- If the lessee, while conducting site characterization activities in support of plan (i.e., SAP and/or COP) submittal, discovers a potential archaeological resource such as the presence of a shipwreck or pre-contact archaeological site within the project area, the lessee must:
 - Immediately halt seafloor-disturbing activities in the area of discovery, plus a reasonable buffer, as appropriate;
 - Notify the lessor within 24 hours of discovery;
 - Notify the lessor in writing by report within 72 hours of its discovery;
 - Keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until the lessor has made an evaluation and instructs the applicant on how to proceed; and
 - Conduct any additional investigations as directed by the lessor to determine if the resource is eligible for listing in the NRHP (30 CFR 585.802(b)). The lessor will direct the lessee to conduct such investigations if: (1) the site has been affected by the lessee's project activities; or (2) impacts on the site or on the area of potential effect cannot be avoided. If investigations indicate that the resource is potentially eligible for listing in the NRHP, the lessor will tell the lessee how to protect the resource or how to mitigate adverse effects on the site. If the lessor incurs costs in protecting the resource, under Section 110(g) of the NHPA, the lessor may charge the lessee reasonable costs for carrying out preservation responsibilities under the OCS Lands Act (30 CFR 585.802(c-d)).

IV. The Basis for the Determination of No Historic Properties Affected

This Finding is based on the review conducted by BOEM of existing and available information, consultation with interested and affected parties, and the conclusions drawn from this information. The proposed undertaking includes the issuance of commercial leases within the Morro Bay WEA and ROW/RUE grants in the region and takes into account the execution of associated site characterization activities.

The required identification and avoidance measures that will be included in commercial leases will ensure that the proposed undertaking will not affect historic properties. Therefore, no historic properties will be affected for the undertaking of issuing a commercial lease within the Morro Bay WEA, consistent with 36 CFR § 800.4(d).

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APPENDICES

- Appendix A: Programmatic Agreement Among the US Department of the Interior, Bureau of Ocean Energy Management, the State Historic Preservation Officer of California, and the Advisory Council on Historic Preservation Regarding Review of Outer Continental Shelf Renewable Energy Activities Offshore California Under Section 106 of the National Historic Preservation Act
- Appendix B: Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585
- Appendix C: Area Identification Memorandum of the Morro Bay Wind Energy Area located within federal waters offshore San Luis Obispo County, California
- Appendix D: Entities Solicited for Information and Concerns Regarding Historic Properties near the Proposed Undertaking