

Appendix C: Navigating the Offshore Wind Energy Permitting Pathway



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UNIVERSITY OF CALIFORNIA
Santa Barbara

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Acronyms list:

ACOE	Army Corps of Engineers
BGEPA	Bald and Golden Eagle Protection Act
CCC	California Coastal Commission
CCMP	California Coastal Management Program
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
COPA	California Ocean Protection Act
DOT	Department of Transportation
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EFH	Essential Fish Habitat
ESHA	Environmentally Sensitive Habitat Areas
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
HPC	Habitat Conservation Plan
IHA	Incidental Harassment Authorization
ITA	Incidental Take Authorization
ITP	Incidental Take Permit
LCP	Local Coastal Programs
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act
MSA	Magnuson-Stevens Fishery Conservation Act
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NSR	New Source Review
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
OPR	California Governor's Office of Planning and Research
PFMC	Pacific Fishery Management Council
ROD	Record of Decision
SAP	Site Assessment Plan
SFA	Sustainable Fisheries Act
SLC	State Lands Commission
UNCLOS	United Nations Convention on the Law of the Sea
USCG	United States Coast Guard
FWS	United States Fish and Wildlife Service

1.0 Introduction

With the range of possible environmental, economic, and social impacts associated with development, lawmakers and regulatory bodies have designed numerous statutes, permits, and regulations in an effort to ensure that projects, such as an offshore wind farm, are reviewed in a consistent manner. Given the novelty and scope of offshore wind in the United States, the permitting process is particularly unproven and involves laws and agencies from across the jurisdictional spectrum. The goal of this chapter is to clearly outline the permitting process for a potential offshore wind project off the California Central Coast. We will discuss which levels of government have jurisdiction where, what laws are applicable, which agencies are responsible for developing regulations and issuing permits, and how to navigate the process.

2.0 Ocean Jurisdictions

2.1 The Baseline (0 nm)

According to international law, the starting point for ocean jurisdiction is called the baseline and is defined as the intersection between land and sea. In the United States, the baseline is further defined through official U.S. nautical charts.¹ Water bodies inland of the baseline, such as bays, estuaries, rivers, and lakes are considered “internal waters” subject to national sovereignty.¹

In California, the baseline is defined as the Mean High Water mark, while other states, such as Massachusetts, use the Mean Lowest Low Water mark.²

2.2 US State Boundaries (0 to 3 nm)

Historically, the range of a state’s cannons from shore defined the extent of its jurisdiction. The three nautical mile limit resulted from what is often referred to as the “cannon shot” rule.³ The Submerged Lands Act of 1953⁴ codified the cannon shot rule by assuring that coastal states have jurisdiction over the land beneath coastal waters between the baseline and three nautical miles from shore.

The federal government retains the power to regulate commerce, navigation, power generation, national defense, and international affairs throughout state waters. States are given the authority to manage, develop and lease resources throughout the water column and on the seafloor.¹

2.3 The Territorial Sea (0 to 12 nm)

As defined by the 1982 United Nations Convention on the Law of the Sea (UNCLOS), the Territorial Sea is an area from the baseline to 12 nm offshore. Each coastal nation, in this case the United States, may claim territorial sea and have sovereignty over the sea, airspace above it, and the seabed and subsoil beneath it. Foreign flagged ships enjoy the right of innocent passage while transiting the territorial sea. However, this right is subject to the laws and regulations adopted by the coastal State in conformity with the Law of the Sea Convention and other rules of international law relating to such passage.²

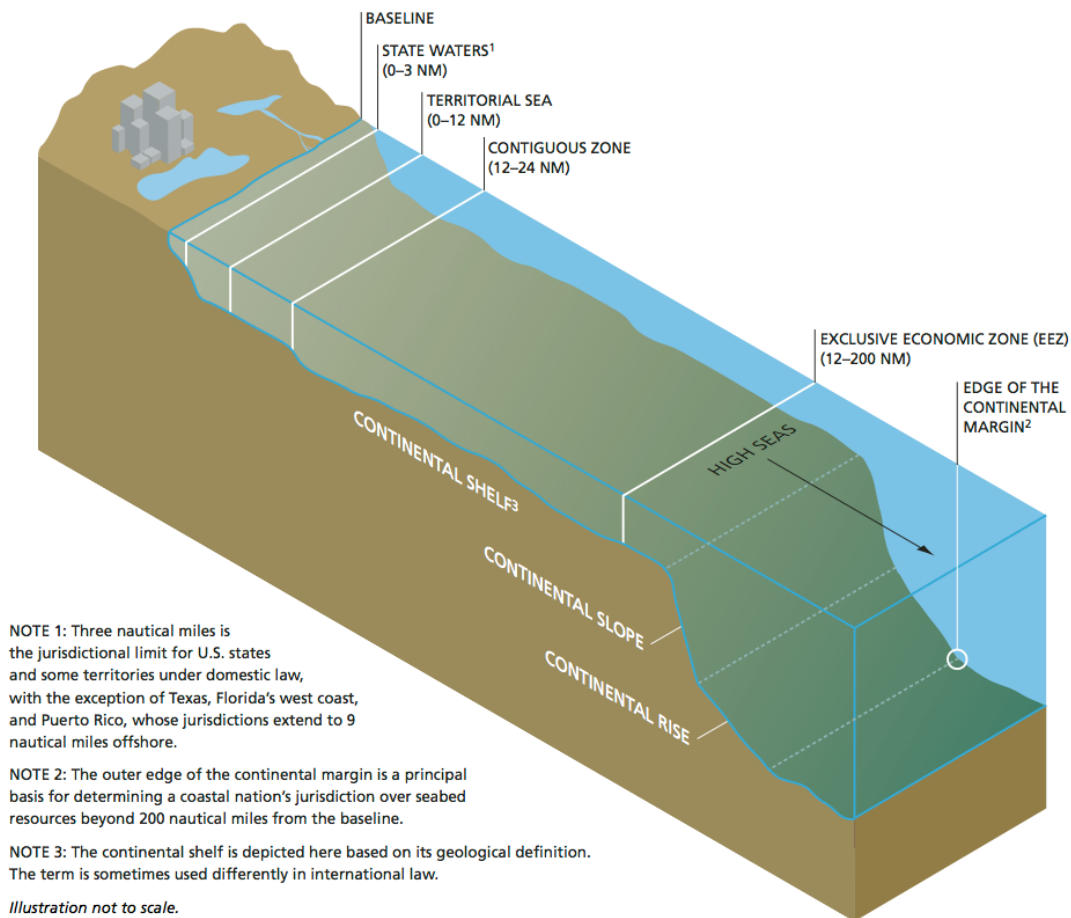
The United States has not ratified UNCLOS but exercises jurisdiction over the EEZ. For the purposes of offshore wind development off of the United States, the UNCLOS Territorial Sea has not been used to claim jurisdiction.⁵

2.4 The Contiguous Zone (12 to 24 nm)

In accordance with UNCLOS, the Contiguous Zone is the area contiguous to a coastal nation's Territorial Sea, 12 nautical miles to 24 nautical miles. In its contiguous zone, a coastal nation may take actions to prevent the infringement of its customs, fiscal, immigration or sanitary laws, and regulations within its territory or territorial sea. The nation may also punish contravention of those laws and regulations committed within its territory or territorial sea. To control traffic of archaeological and historical objects found at sea, a coastal State may presume that their removal from the seabed of the contiguous zone without consent is unlawful.

The current boundaries of the Contiguous Zone were established by President Clinton in 1999 as part of the Presidential Proclamation No, 7219⁶ and are consistent with Article 33 of the Law of the Sea Convention.²

A proposal to develop offshore wind within this zone would not involve an infringement of a state's customs, fiscal, immigration, or sanitary laws and regulations. Therefore, development in a contiguous zone would not likely give additional federal jurisdiction to a project.



Several jurisdictional zones exist off the coast of the United States for purposes of international and domestic law. Within these zones, the United States asserts varying degrees of authority over offshore activities, including living and nonliving resource management, shipping and maritime transportation, and national security. A nation's jurisdictional authority is greatest near the coast.

Figure 1: Lines of Jurisdiction in U.S. Waters. From Victorov, S.V. Primer on Ocean Jurisdictions: Drawing Lines in the Water.¹

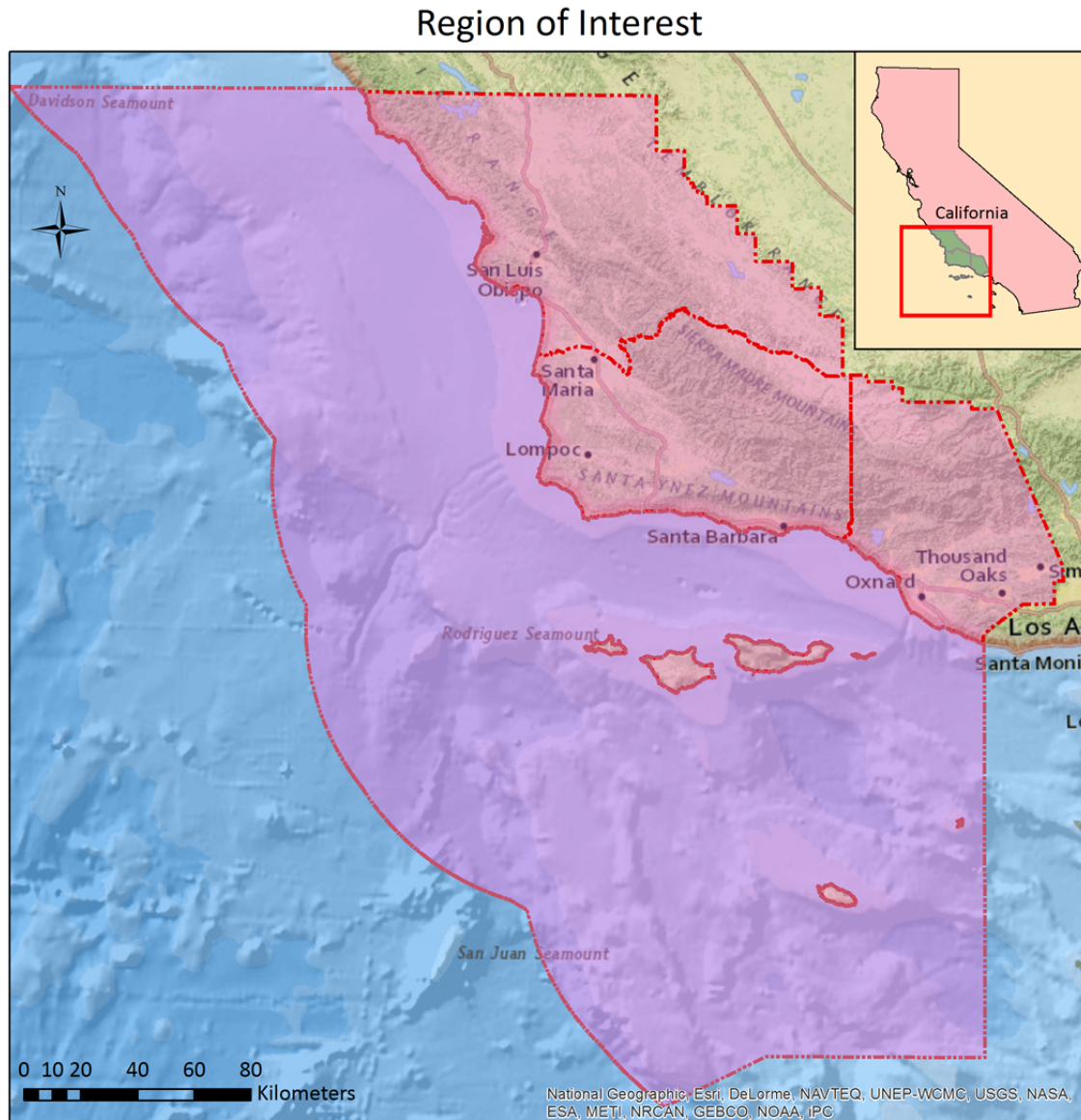


Figure 2: Project Region of Interest (ROI). Please note the western extent of the ROI is limited to our available data, but for the purposes of the permitting chapter, the entire EEZ to 200 miles was considered.

2.5 Exclusive Economic Zone (3 to 200 nm)

Established by UNCLOS in 1982, the Exclusive Economic Zone (EEZ) is defined as the area between a country's baseline and 200 nm off of the coast. Within this area, each country has:

- (a) "sovereign rights for the purpose of exploring, exploiting, conserving and managing natural resources, whether living or nonliving, of the seabed and subsoil and the superjacent waters and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;
- (b) jurisdiction as provided for in international law with regard to the establishment and use of artificial islands, installations, and structures, marine scientific research, and the protection and preservation of the marine environment, and
- (c) other rights and duties provided for under international law."²

As noted, the United States has not ratified UNCLOS but exercises jurisdiction over the EEZ. This is particularly applicable to the development of an offshore wind farm, for it is under this clause that the Federal government claims jurisdiction over projects within the EEZ.

3.0 Federal Permitting

Use of land under federal jurisdiction, including the outer continental shelf (OCS)ⁱ, requires permission in the form of a permit, lease, license or right-of-way, from the federal government. The Energy Policy Act of 2005 (EPAAct) was the first statute to explicitly govern offshore wind energy development.⁷ The act was passed in an effort to clearly delegate federal jurisdiction over offshore wind energy by amending the Outer Continental Shelf Lands Act,⁸ giving the Secretary of the Interior, in consultation with other federal agencies, the authority to grant leases, easements, or rights-of-way on the OCS.⁹ In April of 2009, the Department of the Interior (DOI) and the Federal Energy Regulatory Commission (FERC) signed a Memorandum of Understanding (MOU) confirming that the Secretary of the Interior has exclusive jurisdiction over “the production, transportation, or transmission of energy from non-hydrokinetic renewable energy projects on the OCS.” The Secretary of the Interior has since delegated these responsibilities to the Bureau of Ocean Energy Management (BOEM), an agency within the DOI.

3.1 Federal Governing Laws and Regulations

A minimum of 16 federal laws regulate the installation of a wind farm on the OCS. From sweeping environmental laws requiring federal agencies to follow a particular review process (such as NEPA), to narrowly targeted laws that provide prescriptive guidance for environmental performance (Bald and Golden Eagle Protection Act), federal regulation spans a wide range of activities and protections. In this section, we identify and describe the major federal regulations that will impact development of an offshore wind farm on the central California coast, and identify the federal agency or agencies responsible for enforcement.

3.1.1 Code of Federal Regulations

The Code of Federal Regulations (CFR) is “an annual codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government”.¹⁰ The CFR contains the complete text of all current Federal Regulations.

3.1.2 Federal Register

The Federal Register is published every Federal working day and is, “the official gazette of the United States Government. It provides legal notice of administrative rules and notices and Presidential documents in a comprehensive, uniform manner. The Federal Register contains Federal Agency Regulations, Proposed Rules and Public Notices, Executive Orders, Proclamations, and other Presidential Documents.”¹¹

ⁱ Consistent with Article 76 of UNCLOS and the 1958 Convention on the Continental Shelf, the U.S. continental shelf is comprised of the sea-bed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, including that portion beyond 200 nautical miles from the baseline. Formally defined at (43 USC §1301).

3.1.3 The National Environmental Protection Act (NEPA)

The National Environmental Policy Act (NEPA) of 1969 is the foundation of environmental policy making in the United States. Any project subject to federal jurisdiction (see Figure 2) must follow the NEPA process, unless explicitly exempted, including projects that require permits from federal agencies. NEPA was not designed to mandate prescriptive environmental actions, but strives to guarantee informed federal decision-making. To comply with the statute, federal agencies must evaluate potential environmental impacts of proposed actions, and consider reasonable alternatives before an action is authorized. NEPA also established the Council on Environmental Quality (CEQ) to advise agencies on the environmental impacts of their proposed projects.

3.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) is the primary law concerning bald and golden eagles. The Act prohibits anyone without a permit from “taking” eagles, inclusive of their parts, nests, or eggs.¹² The BGEPA defines “take” to include “pursue, shoot, shoot at, poison, wound, kill capture, trap, collect, molest or disturb” [16 USC 668 & 668c]. The original act was passed in 1940, and was subsequently amended to include the golden eagle in 1962.

3.1.5 Clean Air Act

The Clean Air Act (CAA) became law in 1970 and was amended in 1990. The act was designed “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population” [42 CFR §7401 (b)(1)].

The EPA has been tasked with developing regulations and implementing the CAA. While utilizing wind to generate power alleviates some air pollution associated with fossil fuel based energy production, the CAA still maintains jurisdiction over portions of an offshore wind project.

3.1.5.1 General Conformity Rule

General Conformity Determination

The EPA promulgated the General Conformity Rule in 1993 in an effort to ensure that Federal actions conformed to applicable host State Implementation Plans (SIP), which contain specific air emission standards.¹³ In the case of the Cape Wind Energy Project, several activities, such as preconstruction survey operations, installation of the wind turbines and electrical service platforms, offshore cable installation, maintenance and repair, and de-commissioning would be subject to the SIP and would require an air emissions assessment.

If a project’s air emissions violate applicable SIP standards, BOEM can issue a lease that stipulates that the project developer purchase emission reduction credits or conduct a type of mitigation. The Cape Wind project was required to purchase Emission Reduction Credits to offset the projected emissions of installation activities before construction.¹⁴

What is a Federal Action?

NEPA defines Federal Actions as: “...projects, activities, or programs funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; those requiring a federal permit, license, or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a federal agency.”

Source:

http://www.nature.nps.gov/protectingrestoring/do12site/01_intro/013_actions.htm

Conformity to Onshore Standards

In accordance with Section 328(a) of the CAA, if a project located on the OCS is within 25 miles of the States' seaward border, EPA is required to extend onshore air pollution control requirements to the OCS sources. Pursuant to the CAA statute, EPA promulgated 40 C.F.R. Part 55, which established requirements to control air pollution from OCS sources. This regulation was created to maintain federal, state, and local ambient air quality standards, and to comply with the provisions of part C of title I of the CAA (the Prevention of Significant Deterioration of Air Quality requirements).¹⁵ Sources located on the OCS, out to 25 miles offshore, are required to comply with the same requirements as corresponding onshore sources. Therefore, the attainment status of the area onshore closest to the source will determine a wind project's requirements. As an example, the attainment status of Santa Barbara County is included in Table 1.

In the case of Cape Wind, emissions generated during the two year construction process were predicted to exceed major thresholds for an ozone nonattainment area, and as such the project was subject to New Source Review (NSR), an arduous process in itself.¹⁶ In addition, an Outer Continental Shelf Air Permit may be required to account for emissions from emergency generators, or any other source of air pollution associated with a proposed project.

The OCS statutory requirements under section 328 of the CAA are codified under 40 C.F.R. part 55. OCS regulations create procedures that require an applicant seeking to construct and operate an OCS source to identify federal, state, and local regulations from the corresponding onshore area. Regulations apply, as a matter of federal law, to the OCS source. OCS permit application then follows the procedural requirements for federal permitting outlined in 40 C.F.R. part 124, and the permitting agency (generally, EPA) issues a permit that meets all federal requirements.

Table 1: Santa Barbara County Attainment Status

Air Contaminant	Federal Attainment Status	State Attainment Status
Ozone	Attainment	Nonattainment
PM2.5	Attainment	Unclassified
PM10	Attainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Sulfates	NA	Attainment
Lead	NA	Attainment
Hydrogen Sulfide	NA	Attainment,
Visibility Reducing Particles	NA	Unclassified

3.1.6 Clean Water Act

The Clean Water Act of 1977 (CWA) is an extension of the Federal Water Pollution Control Act of 1948 and the Federal Water Pollution Control Amendments of 1972. The CWA was enacted to conserve and restore the quality of the nation’s waterways, and applies to offshore wind development under §401 and §404.

3.1.6.1 Section 401

Under Section 401 of the CWA, States are required to certify that discharges authorized by federal permits will not violate the state’s water quality standards. Section 401 of the CWA gives states considerable power in the permitting process and can be an effective tool for protecting water quality, as Federal agencies may not issue a permit or license for an activity until the state or tribe under whose jurisdiction the discharge would occur issues a Section 401 certification. State and local water quality control boards perform a review of a proposed project as described on page 53. There are no additional submittal requirements for this review beyond what is already required by Federal and State lead agencies.

3.1.6.2 Section 404

Under Section 404 of the CWA, a permit is required if the applicant intends to dispose of dredged or fill materials into U.S. Waters. Dredging and/or fill activities are likely to occur in conjunction with the installation of any buried transmission cables used to export power produced by an offshore wind farm back to land.

3.1.7 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) was established “to preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation’s coastal zone for this and succeeding generations.”¹⁷ The act encourages states to develop coastal zone management plans to coordinate the use of resources. State plans approved by the Secretary of Commerce are eligible to receive federal monetary and technical assistance.⁹ California’s version of a CZMP, The California Coastal Management Program, was approved by the federal government in 1977.¹⁸

3.1.8 Energy Policy Act of 2005

The Energy Policy Act of 2005 (EPAAct, 42 USC §13201) was signed into law in August of 2005 by George W. Bush and was the first significant revision to U.S. energy policy in over a decade. The Act works to influence the energy mix of the United States by providing tax incentives and loan guarantees to entities involved with the development of new energy technology.¹⁹

3.1.9 Endangered Species Act

The Endangered Species Act of 1973 (ESA) was established to protect and conserve endangered and threatened fish, wildlife, and plant species and their habitats. Section 7 of the Act specifically states that any action carried out or authorized by the Federal government cannot be likely to jeopardize the continued existence of a listed species, or destroy or adversely modify designated critical habitat.²⁰

3.1.10 Federal Aviation Act

The Federal Aviation Act of 1958 created the Federal Aviation Agency, later to be renamed the Federal Aviation Administration (FAA), to be responsible for civil aviation safety. In 1967, the FAA became part of the Department of Transportation (DOT) pursuant to the Department of Transportation Act. The FAA is responsible for implementing the Federal Aviation Act and promulgated regulations to promote air safety and the efficient use of the navigable airspace. FAA regulations prohibit obstructions that would be detrimental to aircraft safety and require FAA to conduct an aeronautical study to determine if new construction will create hazards to air navigation. Per Title 14 CFR Part 77, objects over 200 feet above grade level in height must be reviewed by FAA. Failure to receive approval from the FAA may result in fines of up to \$1,000/day until a notice of No Obstruction is received. For reference, the Principal Power WindFloat system currently deployed off of Portugal supports turbines with hub heights of approximately 80-100 meters (260-330 feet).²¹

The Federal Aviation Act also contains protocols for the review of potential air navigation hazards by the U.S. Department of Defense (DoD). Title 32 C.F.R. Part 211 stipulates that the U.S. Department of Transportation/FAA coordinates its review efforts with the DoD. For additional information on initiating and completing the FAA and DoD review process please see Section 3.3.1.

3.1.11 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) was initially passed in 1934 and attempted to place wildlife conservation considerations on equal footing with economic development.²² Although the Act was primarily intended to address wildlife threats created by water resource projects, it also required that intra-agency coordination and impact assessments extend to all development-related federal actions, and is applicable to offshore wind developments located in federal waters. While agency coordination and impact assessment are also required by NEPA, the FWCA specifically designates the U.S. Secretary of the Interior (via the U.S. Fish and Wildlife Service) as responsible for the coordination of this information. Additionally, the FWCA, "... requires U.S. Department of Energy to consult with the Fish and Wildlife Service whenever it plans to conduct, license, or permit an activity involving the impoundment, diversion, deepening, control, or modification of a stream or body of water."²³

In the context of a privately developed offshore wind energy project located in federal waters, the primary impact of the FWCA is to require assessment, coordination, and mitigation of a

project's impacts between the U.S. Fish and Wildlife Service and all other involved federal, state, and local agencies. Note that many of these activities are also required and addressed by the requirements of NEPA (page 6) and CEQA (page 34).

3.1.12 Magnuson-Stevens Fishery Conservation Act / Sustainable Fisheries Act

In accordance with the Magnuson-Stevens Fishery Conservation Act (MSA), amended by the 1996 Sustainable Fisheries Act (SFA), regional fishery management councils, in this case the Pacific Fishery Management Council (PFMC), identify areas necessary for spawning, breeding, feeding, or growth to maturity of their managed species as Essential Fish Habitat (EFH).^{24,25} The PMFC manages the EEZ off the coast of Washington, Oregon and California, and manages about 119 species of marine life.²⁵ EFH can consist of the water column, the underlying sea floor, and water quality parameters such as salinity, temperature, and nutrient content.

3.1.13 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) was passed in 1972 in an effort to curb declines of population such as Cetaceans and Pinnipeds.²⁶ The MMPA makes it illegal to "take" or "harass" any marine mammal without prior authorization and also prohibits the act of importing marine mammals or marine mammal products into the United States.²⁷

3.1.14 Migratory Bird Treaty Act

The original Migratory Bird Treaty Act (MBTA) was passed in 1918 and provides the framework for implementing the United States' commitment to bilateral treaties or conventions with Canada, Mexico, Japan, and Russia. Each of the treaties protects selected species of birds, over 800 species in all, and provides specific hunting seasons for select game birds.²⁸ Specifically, the MBTA states that it is unlawful to "pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg or any such bird, unless authorized under a permit issued by the Secretary of the Interior."²⁸ A species qualifies for protection under the MBTA if there is convincing evidence that the species naturally occurs in the United States or its territories (note that nonnative species are not protected under the act).²⁹ According to our research, there are 387 species of birds on or within 1.5 km of the Channel Islands National Park consisting of 12 seabird (pelagic) species, 30 shorebirds, and 345 land bird species.³⁰

3.1.15 National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) of 1966 requires that any federal agency assess the impacts of its actions, or the actions that it authorizes, on historic resources and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to review them.³¹ These resources can include any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register.³² In relation to an offshore wind project, historic resources include: "historic shipwrecks, sunken aircraft, lighthouses, and prehistoric archaeological sites that have become inundated due to the 120-meter rise in global sea level since the height of the last ice age (ca. 19,000 years ago)."^{33,34} Routing transmission cables from an offshore wind farm to shore may interfere with sites at this depth. In addition to submerged artifacts, the NHPA addresses visual impacts to onshore historical resources during the review process. This creates a potential enforcement nexus for the ACHP if viewsheds associated with historic resources on the central coast are impacted by an offshore wind farm.

3.1.16 Outer Continental Shelf Lands Act

The Outer Continental Shelf Lands Act of 1953 (OCSLA, 43 U.S.C. 1331 - 1356, P.L. 212, Ch. 345, August 7, 1953, 67 Stat. 462) defines the Outer Continental Shelf (OCS) as,

“all submerged lands lying seaward of State coastal waters (3 miles offshore) which are under U.S. jurisdiction. The statute authorized the Secretary of Interior to promulgate regulations to lease the OCS in an effort to prevent waste and conserve natural resources and to grant leases to the highest responsible qualified bidder as determined by competitive bidding procedures.”³⁵

The OCS extends seaward to the 200 nautical-mile limit of the EEZ (see page 4) and is subject to all federal laws. OCSLA includes numerous amendments, including those created in 1978 that,

“...provide(s) for the cancellation of leases or permits if continued activity is likely to cause serious harm to life, including fish and other aquatic life. It also stipulates that economic, social, and environmental values of the renewable and nonrenewable resources are to be considered in management of the OCS.”³⁵

As it pertains to the development of an offshore wind energy project, BOEM (see page 12) is the lead agency responsible for the administration of OCSLA. A project must comply with initial requirements for construction as well as operate under agreed parameters regarding incidental take of wildlife to avoid enforcement action up to and including the termination of a lease.

3.1.17 Ports and Waterways Safety Act of 1972

The Ports and Waterways Safety Act of 1972 (33 U.S.C. §§1221, amended by the Port and Tanker Safety Act of 1978 (PTSA) and the Oil Pollution Act of 1990)³⁶ “is designed to promote navigation, vessel safety, and protection of the marine environment,”³⁶ and authorizes the US Coast Guard (USCG) to regulate navigable waters of the US to execute this mission. The PTSA places the safety of US navigable waters as a national priority, and requires coordination between federal agencies and state and local stakeholders:

The Ports and Waterways Safety Act of 1972 and subsequent amendments require that structures installed within United States waters comply with U.S. navigational standards. Verification and enforcement of this requirement are conducted by the USCG as part of the PATON permit process described in Section 3.3.14.

3.1.18 Rivers and Harbors Act of 1899

The Rivers and Harbors Act of 1899 (33 U.S.C. 403) is the oldest federal environmental law in the United States. Section 10 of the Act prohibits the unauthorized obstruction or alteration of any navigable water of the United States (e.g., anchoring cables, aids to navigation) without a permit.³²

3.2 Federal Regulatory Bodies

Regulation and enforcement of the 16 federal laws that will impact the development of a wind farm on the central California coast are conducted by a minimum of nine federal bodies. Although BOEM acts as lead agency for the NEPA process, several other agencies assume lead responsibility for regulation and issuance of permits that are not included in NEPA. In this section we identify and describe the federal bodies that would participate in the permitting process for a wind energy development in the CalWind ROI.

3.2.1 Department of the Interior

The United States Department of the Interior (DOI) is the executive-level federal department responsible for the conservation and management of most federal lands and resources. The DOI currently manages 500 million acres of land (including National Parks) and over one billion acres offshore. The DOI was established in 1849 and at present contains ten federal bureaus and agencies, including:

- Bureau of Ocean Energy Management (BOEM)
- U.S. Fish and Wildlife Service (FWS)
- Bureau of Indian Affairs
- National Park Service
- U.S. Geological Survey

The DOI is organized under the authority of the Secretary of the Interior, a cabinet-level Presidential appointee. While the various bureaus, services, and agencies that constitute the DOI have statutory authority to promulgate and enforce regulations, the Secretary retains the right to waive existing rules or create new regulations as deemed appropriate. In the case of offshore wind development, the Secretary has the ability to overrule lawsuits pertaining to alleged environmental impacts of a project if the benefits of a project are seen to outweigh the negative impacts. This scenario was illustrated with the Secretary's intervention into the Cape Wind project off the coast of Massachusetts in 2010.³⁷

3.2.2 Bureau of Ocean Energy Management

The Bureau of Ocean Energy Management (BOEM) is a Bureau within the Interior Department and is the federal agency responsible for offshore Renewable Energy Programs and grants leases, easements, and rights-of-way for orderly, safe, and environmentally responsible renewable energy development activities.³⁸ The regulatory framework that guides the BOEM process is published in the Federal Register Title 30, which refers to Mineral Resources.ⁱⁱ In order for any person to construct, operate or maintain any facility that produces or transports electricity on any part of the OCS, a lease, easement, or right-of-way must be issued by BOEM pursuant to the OCS Lands Act (OCSLA), as discussed on page 11.

BOEM is the lead agency for the NEPA process for offshore energy development and is required to execute and enforce a number of regulations, including NEPA and OCSLA. Additionally, BOEM directs federal funds to conduct studies of the OCS environment and makes these studies available for public use. Such studies include data relating to marine mammals, birds, and fish species. Developers wishing to pursue an offshore wind development are urged to begin consultations with BOEM at the earliest possible stage to ascertain the permitting requirements for their project and to take advantage of all available data.

BOEM Task Force

A BOEM Task Force to coordinate requirements for wind energy development may be requested by the Governor of a state, and is a prerequisite for creating streamlined, uniform standards for the development of offshore wind projects. The California Governor has not requested such a

ⁱⁱ Within Title 30, Part 585 - Renewable Energy And Alternate Uses Of Existing Facilities On The Outer Continental Shelf [30 CFR 585].³⁹

task force, although the Governors of Oregon and Hawaii have and are proceeding with development of pilot offshore projects. For additional information please see page 56.

3.2.3 United States Fish and Wildlife Service

The United States Fish and Wildlife Service (FWS) is a Bureau within the Interior Department and has been given the mission, “to work with others to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.”⁴⁰ Established in 1940, FWS manages vast amounts of onshore and offshore lands in addition to the U.S. National Park system. The Service’s onshore management includes over 550 National Wildlife Refuges and “thousands of small wetlands and other special management areas.”⁴⁰ The primary functions of the FWS are as follows:

- “Enforce federal wildlife laws (including the Endangered Species Act),
- Protect endangered species,
- Manage migratory birds,
- Restore nationally significant fisheries,
- Conserve and restore wildlife habitat such as wetlands,
- Help foreign governments with their international conservation efforts, and
- Distribute hundreds of millions of dollars, through (the) Wildlife Sport Fish and Restoration program, in excise taxes on fishing and hunting equipment to State fish and wildlife agencies.”⁴⁰

The wide-ranging mission of the FWS will result in significant Service involvement in the permitting process of an offshore wind farm. The FWS will play a central role in the NEPA review process, is responsible for issuing federal incidental take permits, and will determine compliance with the Endangered Species Act. Additionally, the FWS coordinates wildlife protection measures with other federal agencies. Further, as the FWS has been granted law enforcement powers, officers with the Service have legal authority to review projects for compliance and issue necessary enforcement actions.

The FWS shares lead agency responsibilities for the MMPA with NMFS. Under the MMPA, FWS is responsible for the protection of manatees, dugongs, sea otters, walruses, and polar bears.²⁷

In addition to lead agency responsibilities under the MMPA, the FWS is the lead agency concerning MBTA, however, other agencies are also often involved, including local state wildlife agencies. In 2009, the Minerals Management Service (now BOEM) entered into a Memorandum of Understanding (MOU) with FWS to “strengthen migratory bird conservation through enhanced collaboration between the MMS and the FWS.”⁴¹ Under this MOU, BOEM communicates with FWS in regards to projects that may impact migratory birds and/or threatened or endangered species. BOEM uses the NEPA process to identify proposed projects’ impacts to migratory birds or their habitats. MBTA does not specifically require the acquisition of any specific document or permit; however, FWS can utilize the act as a nexus for enforcement if considerable impacts to migratory birds are noted. Developers should consult with FWS early in the process to create species mitigation plans to address potential impacts before they occur.

3.2.4 Environmental Protection Agency

The Environmental Protection Agency (EPA) is an independent, executive-level federal agency created in 1970 by President Richard Nixon in response to the growing environmental movement of the time. In the broadest terms, the mission of EPA is to, “...protect human health

and the environment,”⁴² and the Agency conducts this mission using a variety of methodologies, including the development and enforcement of regulations, grant giving, scientific research, sponsoring partnerships with private-sector entities, educating, and publishing.⁴²

The EPA is currently divided into nine regions, with each region working to achieve its own goals and operating under its respective Strategic Plan. EPA Region 9 consists of Arizona, California, and Nevada, with headquarters located in San Francisco, California. EPA Region 9 would act as the EPA point of contact for wind energy developers considering a project in the CalWind ROI.

The EPA’s primary role in the permitting of an offshore wind energy development is to review the project for conformance with the Clean Air Act and the Clean Water Act. In so doing, EPA coordinates review efforts with state agencies responsible for the implementation of standards and enforcement actions as part of its responsibilities under the NEPA process.

3.2.5 National Marine Fisheries Service

The National Marine Fisheries Service (NMFS) is an agency within the National Oceanic and Atmospheric Administration (NOAA), which falls under the Department of Commerce and the authority of the Secretary of Commerce. The mission of NMFS is the, “Stewardship of living marine resources through science-based conservation and management and the promotion of healthy ecosystems.”⁴³ NMFS is responsible for “the management, conservation and protection of living marine resources within the United States Exclusive Economic Zone”⁴³ and attempts to balance, “multiple public needs and interests in the sustainable benefits and use of living marine resources, without compromising the long-term biological integrity of coastal and marine ecosystems.”⁴³ NMFS seeks to accomplish these goals through the drafting and enforcement of regulations, scientific research, and public outreach and education. NMFS enforces the Endangered Species Act and Marine Mammal Protection Act as they pertain to threatened or endangered marine life.⁴⁴ NMFS shares lead agency responsibilities for the MMPA with FWS. Under the MMPA, NMFS is responsible for the management of whales, dolphins, porpoise, seals, and sea lions.²⁷

3.2.6 Federal Aviation Administration

The modern Federal Aviation Administration (FAA) was created as an independent federal agency by the Federal Aviation Act of 1958, and was reorganized under the Department of Transportation in 1967.⁴⁵ The mission of the FAA is to “provide the safest, most efficient aerospace system in the world.”⁴⁶ One of the FAA’s responsibilities for air traffic safety is the requirement to regulate objects that may pose a hazard to air traffic. This responsibility provides the mandates that the agency review construction plans for an offshore wind farm. Project developers seeking FAA review use the process discussed in Section 3.3.1.

Federal law requires the FAA to consult with other impacted parties, including the Department of Defense (DoD). The authority of the FAA / DoD to regulate airspace safety results in potentially significant impacts to developers of offshore wind farms. Early consultation is recommended in order to identify and avoid conflicts with existing airspace uses.

3.2.7 Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC) is an independent, executive agency responsible for the regulation of interstate transmission of natural gas, oil, and electricity, as well as the regulation of natural gas and hydropower projects.⁴⁷ FERC holds wide-ranging

authority over interstate energy transmission, and is responsible for permitting issues associated with offshore hydrokinetic energy projects. Although FERC reviews the siting of some electricity generation projects, it is not involved with the permitting of an offshore wind energy project located on the OCS, and therefore is not directly relevant to project developers.

3.2.8 Army Corps of Engineers

The Army Corps of Engineers (ACOE) is a department of the DoD and is broadly responsible for delivering "...vital public and military engineering services; partnering in peace and war to strengthen our Nation's security, energizing the economy and reducing risks from disasters."⁴⁸ ACOE was formally created by the U.S. Congress in 1779 and was initially intended to provide fortifications and general engineering works for military purposes. The mission of the ACOE has expanded considerably since that time, and today it exists as the single branch of federal government that is single-handedly capable of planning, designing, and executing large-scale civil engineering projects. The ACOE is the lead agency for the Rivers and Harbors Acts of 1890 and 1899, which granted ACOE the "authority to regulate most kinds of obstructions to navigation...", which ACOE has used to regulate dumping, dredging, and discharge into navigable waterways. With the passage of the Federal Water Pollution Control Amendments of 1972, tasked ACOE with the review of projects under Sections 404 and 410 of that legislation. Looking forward, ACOE will be involved with the review of offshore wind farm proposals to ensure legislative compliance, and will work with other agencies, such as EPA and state water quality boards, to achieve that mission.

3.2.9 United States Coast Guard

The United States Coast Guard (USCG) was created in 1790 and today is the only military organization within the Department of Homeland Security (DHS).⁴⁹ The Ports and Waterways Safety Act of 1972 authorized the USCG to supervise vessel traffic, ensure safety, and protect the marine environment. According to the USCG, structures installed within the marine environment are required to comply with U.S. navigational standards. Due to the considerable size of an offshore wind turbine, proper markings must be installed to gain compliance. These markings are classified as Private Aids to Navigation (PATON) and require a permit from the USCG prior to placement in navigable waterways. Markings, lighting, or other aids to navigation required under a PATON permit are additional to those required by FAA or DoD. The process of applying for a PATON permit is discussed on page 30.

The USCG is divided into 17 Districts that span all U.S. states and territories. District 11 of the USCG includes the states of California, Nevada, Arizona, and Utah, and extends to the coastal and offshore waters of Mexico and Central America down to South America. District 11 headquarters are located in Alameda, California, on San Francisco Bay.⁵⁰

3.2.10 Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation (ACHP) was created in 1966 by the National Historic Preservation Act (NHPA) and has the mission to promote "...the preservation, enhancement, and sustainable use of our nation's diverse historic resources, and advises the President and the Congress on national historic preservation policy."⁵¹

Section 106 of the NHPA provides ACHP with statutory authority and responsibility to review federal actions for compliance with the NHPA. To this end, "the ACHP is the only entity with the legal responsibility to encourage federal agencies to factor historic preservation into federal

project requirements.”⁵¹ ACHP accomplishes this mission by participating in the NEPA process for federal actions (including the issuance of permits), such as in the review of offshore wind farm proposals.

3.3 Federal Approval and Permitting Process

To develop a wind energy project on the central California coast a minimum of 17 separate approvals must be secured from the federal government, in addition to state and local approvals described elsewhere in this text. The exact number of approvals that will be required for a specific project will vary based on the details of a particular project. Review and approval for 5 of the required permits occurs as part of the NEPA process. Five additional permits are required that are processed outside of NEPA and are the responsibility of the project developer to obtain. In this section we identify and describe the federal approvals that may be required, and provide timeframes for each, as available.

3.3.1 FAA Determination

Project proponents are required to submit the project to FAA for an Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) review prior to construction. The Notice of Proposed Construction or Alteration (FAA Form 7460-1) shall include a map showing the specific locations (latitude and longitude or GPS coordinates) of each turbine, associated elevations of the turbine base, and overall height above mean sea level. The applicant may also submit a preferred lighting and marking scheme, however, it is not required.⁵² While the FAA will not perform cursory feasibility reviews of projects,⁵³ developers may want to consult with FAA officials at the earliest stages of a project to avoid a “Determination of Hazard” finding later in the permitting process.

FAA Determination

After completion of the review process, which involves widespread public distribution and review, the FAA OE/AAA will make a determination on the proposed construction or alteration. Determinations are categorized to be applicable to most scenarios and are explicitly described in FAA Order JO 7400.2J.⁵⁴ In summary, the determinations are as follows:

1. “Does not Exceed” – This determination will be issued if the structure does not exceed obstruction standards.
2. “Exceeds But Okay” – This determination will be issued if the structure exceeds obstruction standards but does not result in a substantial adverse effect and is either a temporary, or existing structure.
3. “Notice of Presumed Hazard” – This determination will be issued if the structure exceeds obstruction standards and/or has an adverse effect upon navigable airspace.
4. “Determination of No Hazard” – This determination will be issued if the structure exceeds obstruction standards but does not result in a substantial adverse effect.
5. “Determination of Hazard” – This determination will be issued if the structure would have or has a substantial adverse effect.⁵⁴

DoD Siting Clearinghouse Reviews

Project submittal to the FAA results in DoD review, and no additional action is needed by a project developer if the proposed project is not on a military installation. If the proposed project is located on a military installation and therefore not under FAA jurisdiction, a developer must submit the project directly to the DoD Siting Clearinghouse for review. Federal Rule 32 C.F.R. Part 211 contains provisions for the process under which DoD reviews projects for mission

compatibility. Unlike the FAA, the DoD is capable of conducting informal reviews of projects when requested.⁵⁵

Due to the strong presence of DoD interests in the ROI, it is highly advisable that project developers request an informal DoD review of any proposed project as early in the planning process as possible. DoD objections to a project in the ROI could have significant negative consequences, many of which could be determined via early consultation.

Process Time

The Notice of Proposed Construction or Alteration should be submitted 8-12 months to the FAA prior to the planned construction date to allow for the completion of required aeronautical studies.⁵²

3.3.2 OCS Lease

Competitive Lease

To initiate the leasing process, BOEM will publish a Request for Interest in the Federal Register to gauge public interest in development of an identified portion of the OCS. If multiple parties are interested in development on the same tract of the OCS, then a competitive lease process begins. Bids are acquired through an auction process for each lease, which triggers a proposed sale notice with a comment period of 60 days. Subsequently, a final sale notice is published in the Federal Register at least 30 days prior to the sale [30 CFR § 585.211]. In addition, BOEM will publish calls for Information and Nomination in the Federal Register with a comment period of 45 days to gauge interest in the lease.

If a lessee is interested in responding to a Request for Interest, the party must provide the following information:

- Area of the potential lease
- General description of objectives and facilities required to achieve those objectives.
- General schedule of proposed activities, including those leading to commercial operations.
- Available pertinent data and information concerning renewable energy and environmental conditions in the area of interest. [30 CFR § 585.213]

While evaluation of bids varies by auction method, BOEM reserves the right to determine the winner based on the highest monetary bid from a technically and financially qualified applicant [30 CFR § 585.222(b)].

On July 31, 2013, Deepwater Wind became the first developer to obtain a lease for commercial offshore wind development via a competitive auction. Deepwater Wind's winning bid of \$3.8 million secured the right to begin initial studies in the project area. Deepwater Wind paid \$900,000 to participate in the auction and will pay approximately \$500,000 a year in rental fees until the project is operational, at which point a royalty will be paid based on the value of the energy produced.⁵⁶

Non-Competitive Lease

In the event that there is no Call for Information and Nomination, a potential lessee may submit an unsolicited request for a commercial lease on the OCS. BOEM will then publish a Request for Interest to determine if competitive interest exists for the identified location. If competitive interest is identified, BOEM will proceed with the competitive lease process identified above. However, if no other parties express interest, a public notice will be published in the Federal Register proclaiming that no competitive interest exists. If, after a Call for interest, only one party shows interest, BOEM may proceed with a non-competitive lease.

Distribution of Government Revenues

In accordance with the amendments to the OCS Lands Act described in the EPAct, 27% of revenues received by the Federal Government from project payments located on the OCS are to be distributed to states located within 15 miles of the geographic center of the project [43 USC §1337(p)(2)(B)]. The funds are allocated in accordance to a formula based on states' distance from a project.⁹

Once a lease is awarded, lease fees are charged to the lessee at a per acre rate until a project reaches a production stage. These rates (as of 2013) are approximately \$3 per acre and once the project starts to produce energy, a portion of the proceeds will be deducted to maintain the lease. All funds are sent to the US Treasury [30 CFR §585.500].⁵⁷

Site Assessment Plan

Once a party is awarded a lease, the lessee will have 6 months to submit a Site Assessment Plan (SAP) to BOEM for approval. The SAP must demonstrate that the applicant has planned and prepared the proposed site activities in a manner that ensures safety, and to the extent practicable, will not cause undue harm or damage to natural resources [30 CFR § 585.606]. In addition, the plan describes activities proposed on the OCS, including lessee plans to assess the resource (e.g., meteorological towers or oceanographic data analysis) [30 CFR § 585.605].

SAPs vary in length and complexity depending on the details of each individual project, however, the report must include the results of numerous geological and geophysical, archeological, and biological surveys which can be quite substantial (500-1000+ pages) in cost and length.^{5,iii}

Construction and Operation Plan

After a Site Assessment Plan is approved, the lessee has up to 4.5 years to submit a Construction and Operations Plan (COP) for approval. This stage requires detailed plans for the construction and operation of a wind energy project on the lease. After the COP is approved, the lessee will be granted an operation term of 25 years. During the operation of the lease, the applicant must continue to comply with BOEM regulations and submit reports.

It should be noted that numerous annual reporting duties could be required as a result of the lease and permitting process depending on site-specific characteristics. In the case of Cape Wind, there are unique annual reporting requirements that are linked to approved avian and bat monitoring plans required on the lease.⁵

ⁱⁱⁱ In the case of Cape Wind, a SAP was not required because the project of grandfathered into the process and able to proceed directly to the COP.

In the rare instance that a SAP and COP could be prepared within the same 6 month timespan, a combined SAP/COP document may be submitted.⁵

At the completion of the BOEM process, a successful developer is awarded a *Commercial Lease of Submerged Lands for Renewable Energy Development on the OCS*.

3.3.3 NEPA Process

Lead Agency

In the case of proposed offshore wind development in federal waters, BOEM is the lead federal agency, and in this role must facilitate the development of necessary NEPA documents for each stage of the project. Any state or federal agency with jurisdiction over or expertise on environmental issues associated with a project may participate in the process as a cooperating agency. BOEM is required to request involvement of cooperating agencies as early as possible in the process [40 CFR §1501.6]. Agencies reserve the right to decline BOEM's request.

The NEPA Process

There are three levels of NEPA analysis, which vary in data, financial, and temporal intensity according to estimated effects of a proposed project on the environment. These three levels include:

- Categorical exclusion determination
- Preparation of an environmental assessment/finding of no significant impact (EA/FONSI)
- Preparation of an environmental impact statement (EIS)⁵⁸

Categorical Exclusion

A project can receive categorical exclusion from a detailed environmental review if the proposed project meets pre-established agency criteria to have no significant environmental impact. Through a public review process, BOEM has developed a list of activities that are categorically excluded from further environmental review. This list of activities, documented in 43 CFR § 46.210, contains activities such as "personnel actions and investigations and personnel services contracts," and may be amended via additional public review processes.⁵⁹ It is highly unlikely that an offshore wind project would be granted a categorical exclusion.

Environmental Assessment

An Environmental Assessment (EA) serves to analyze the environmental effects of a proposed action to determine the significance of potential impacts. If the impacts prove to be potentially significant,^{iv} BOEM will prepare an Environmental Impact Statement (EIS) to further assess the identified impacts. If the EA determines that the proposed action does not represent a

^{iv} "Significantly" as used in NEPA requires considerations of both context and intensity:

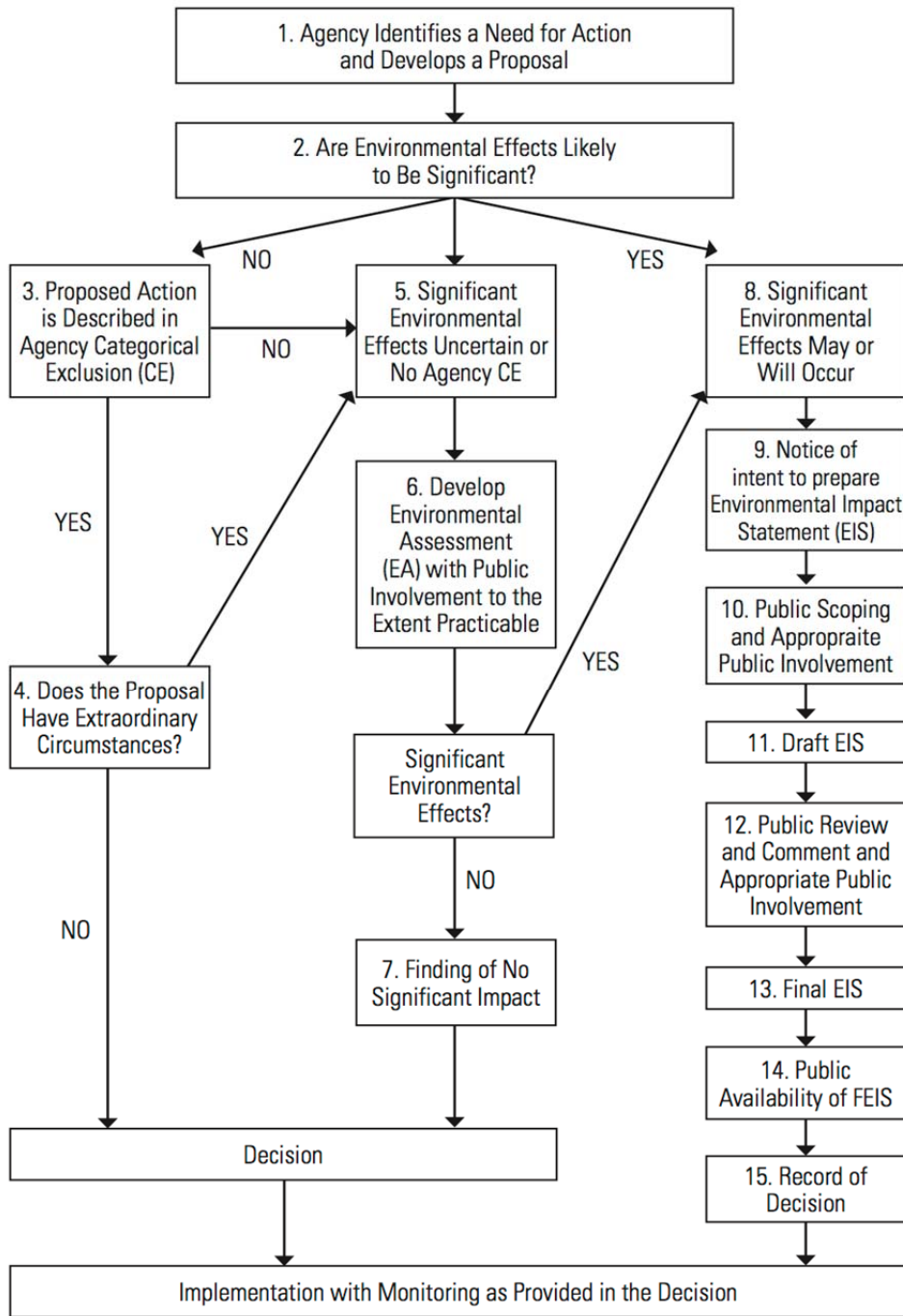
(a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality.

Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. [CEQ Regulations Sec. 1508.27]⁶⁰

significant environmental impact, the agency will issue a Finding of No Significant Impact (FONSI), which may contain actions an agency will take to mitigate potentially significant impacts. A project developer may be responsible for providing resources to complete the NEPA process depending on the project stage during which the NEPA takes place. Typically, developers hire experienced consultants to prepare the appropriate documentation.

The NEPA Process



**Significant new circumstances or information relevant to environmental concerns or substantial changes in the proposed action that are relevant to environmental concerns may necessitate preparation of a supplemental EIS following either the draft or final EIS or the Record of Decision (CEQ NEPA Regulations, 40 C.F.R. § 1502.9(c)).*

Figure 3: The NEPA Process as described in CEQ's *A Citizens Guide to the NEPA*.⁵⁹

Environmental Impact Statement

An EIS is triggered by EA findings of significant impact(s), or initiated by an agency that has forgone the EA process, acknowledging the potential impacts of a specific project. Compared to an EA, an EIS is a more detailed evaluation of a proposed action's potential impacts and alternatives.

Scoping, the first step in the EIS process, determines the appropriate content of the EIS report. Scoping heavily relies on public participation and input to identify important stakeholder issues associated with the project.⁶¹

Based in part on the issues identified in the scoping process, the lead agency, BOEM in this case, completes a Draft EIS, which contains a complete description of the potential impacts of the proposed action, as well as alternatives to the proposed action that may lessen the environmental impact.

The Draft EIS is then made available to the public for a minimum of 45 days for review and comment and announced in the Federal Register.^y Public comments, administered orally at public meetings or via written statements, are each individually considered by the lead agency.

BOEM accounts for and responds to all public comments deemed relevant within a separate section of the Final EIS. However, some comments are grouped into categories, and do not receive individual attention in the EIS document. Based on the substance of Draft EIS comments, BOEM may consider other alternatives or refine existing text. These changes are then incorporated into the Final EIS, which is subsequently released to the public via the Federal Register.

The Record of Decision (ROD) is the last step in the NEPA process for an agency. The ROD is a document which summarizes the findings of the EIS, identifies examined alternatives, highlights required environmental mitigation measures, and discusses any regulatory or monitoring commitments.⁶² Monitoring commitments may include construction, post construction, and/or decommissioning monitoring, and/or studies to examine a project's impact.

3.3.4 ESA Section 7 Consultation

The Endangered Species Act of 1973 (ESA) was established to protect and conserve endangered and threatened fish, wildlife, and plant species and their habitats. Section 7 of the Act specifically states that any action carried out or authorized by the Federal government cannot be likely to jeopardize the continued existence of a listed species, or destroy or adversely modify designated critical habitat.²⁰

Lead Agency

The National Marine Fisheries Service (NMFS) administers consultations that pertain to marine and anadromous species, while the United States Fish and Wildlife Service (FWS) considers federal actions pertaining to select pelagic (seabirds), terrestrial and freshwater species. Each federal action agency is obligated to consult with NMFS, FWS, or both, if the proposed action

^y In the case of Cape Wind, the comment period was extended to allow opportunity for additional commenters. Notably, there is no maximum comment period explicit in the regulations.

may impact a listed species. The consultation process is designed to assist federal agencies in fulfilling their duty to ensure federal actions do not jeopardize the continued existence of a species or destroy or adversely modify critical habitat.⁶³

Consultation

The consultation process starts with informal consultation between the federal agency proposing or permitting the action and NMFS and/or FWS (for offshore wind, consultation with both agencies is likely to occur). The informal consultation determines if the project “may adversely affect” or is “not likely to adversely affect” any ESA-listed species or critical habitat. If the lead agency determines that a formal ESA consultation with FWS or NOAA/NMFS is needed, the lead agency develops a Biological Assessment (BA). Development of a BA may require that the project developer conduct additional studies prior to completion of the BA, which can be time and cost intensive. If the BA determines that the proposed action may adversely affect a listed species or habitat, formal consultation is required. Formal consultation between agencies may uncover data gaps that need to be filled before a Biological Opinion (BO) is rendered, potentially creating additional time/cost burdens for the developer. The BO will state if the proposed action does or does not jeopardize the continued existence of an ESA-listed species. This document may contain measures for minimizing or mitigating any adverse effects on listed species that may be caused by the proposed action in the form of Reasonable and Prudent Alternatives (RPAs).⁶⁴

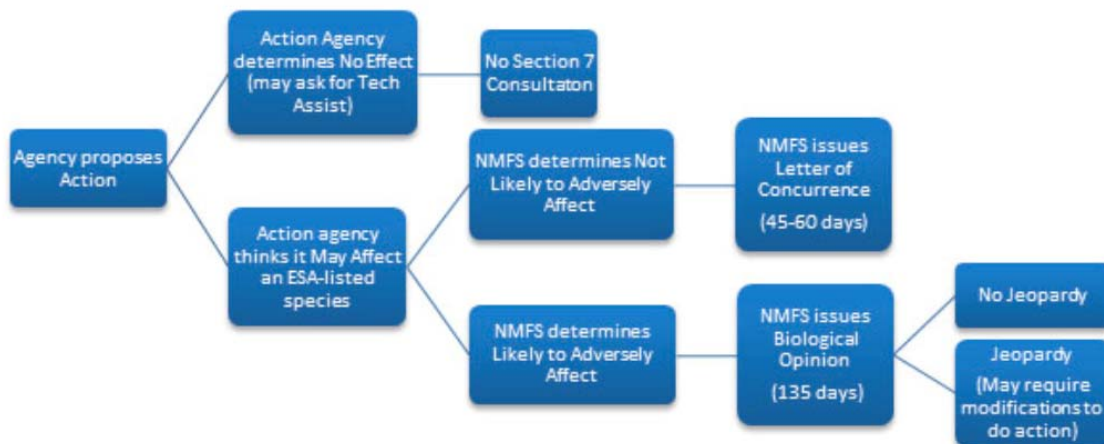


Figure 4: ESA Section 7 Consultation per NOAA (from <http://www.nero.noaa.gov/protected/section7/guidance/consultation/index.html>)

Process Time

The Section 7 consultation process can take 135 days or, with extensions, the process can last over a year.³²

3.3.5 ESA Section 10 Incidental Take Permit

If the Section 7 consultation finds that a project would result in “take”, defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species, the project proponent can seek an ESA Section 10 Incidental Take Permit (ITP). To apply for an ITP, the applicant must produce a Habitat Conservation Plan (HCP) that outlines likely impacts from anticipated taking, mitigation measures to minimize and mitigate such impacts, and alternatives considered.⁶⁵ Depending on the species, an ITP will be issued if NMFS or FWS finds that the taking would be incidental, the applicant will “to the maximum extent practicable,

minimize and mitigate the impacts of such a taking”, and that the taking “will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.”^{65,66}

Process Time

No statutory time limit exists. The complexity of a particular site (based on the number and type of species involved), public opposition, and availability of scientific data all impact how long the process will take. For reference, approval of the Section 10 HCP for the Cape Wind project took several months, although no ITP was sought.

3.3.6 BGEPA non-purposeful take permit

FWS is charged with implementing the Bald and Golden Eagle Protection Act (BGEPA) to ensure that any authorized take of bald and golden eagles is compatible with their preservation; levels of take must be consistent with the goal of maintaining stable, or increasing, breeding populations. In 2009, FWS promulgated regulations to create two new permit rules (50 CFR 22.26 and 22.27).

The new rules allow FWS to issue “Non-Purposeful Take” permits authorizing individual instances of bald and golden eagle take when it is associated with an otherwise lawful activity, and cannot be practicably avoided. FWS can also issue permits for “programmatic” take, which refers to instances of take that are recurring across a range of time and space. Programmatic take permits are only issued when take is unavoidable, and occurs despite the implementation of adaptive conservation management practices developed in cooperation with FWS.^{67,68} Approval of an incidental take permit under the BGEPA is conducted as part of the NEPA process, and compliance with several related laws (including MBTA, ESA, NEPA, and NHPA) must be verified prior to a take permit being issued.⁶⁷

Process Time

For context, according to the FWS website, process time in the Midwest of the United States for a “non-purposeful take” permit may take anywhere from 2 to 24 months to complete, depending on the complexity of the project.⁶⁹ Note this is not specific to an onshore wind project, but serves to provide a general sense of the permitting process time.

3.3.7 Marine Mammal Incidental Take / Harassment Authorizations

The Marine Mammal Protection Act (MMPA) authorizes “take” via an Incidental Take Authorization (ITA), which allows for the “unintentional taking of small numbers of marine mammals, provided the activity would have a negligible impact to marine mammals and would have no unmitigable adverse impact on subsistence use of marine mammals.”²⁷ The ITA may be issued as a Letter of Authorization (LOA), which is valid for up to five years. It is generally issued in circumstances when the risk of “take” exists as a result of otherwise lawful activities, but there are no mitigation measures that can be taken to prevent the take from occurring. The lead agency can issue an Incidental Harassment Authorization (IHA) which authorizes harassment to marine mammals from short-term activities (valid up to one year), such as would be expected during the construction of a wind turbine installation, as long as impacts to the species or stock are determined to be negligible.³²

BOEM encourages offshore operators and lessees to apply for an ITA if proposed activities have the potential for taking marine mammals. The information required for the ITA is extensive, and includes the following:⁷⁰

- A detailed description of the specific activity or class of activities that can be expected to result in incidental taking of marine mammals;
- The date(s) and duration of such activity and the specific geographical region where it will occur;
- The species and numbers of marine mammals likely to be found within the activity area;
- A description of the status, distribution, and seasonal distribution (when applicable) of the species or stocks of marine mammals likely to be affected by such activities;
- The type of incidental taking authorization that is being requested and the method of incidental taking;
- By age, sex, and reproductive condition (if possible), the number of marine mammals (by species) that may be taken by each type of taking identified in paragraph (a)(5) of this section, and the number of times such takings by each type of taking are likely to occur;
- The anticipated impact of the activity upon the species or stock;
- The anticipated impact of the activity on the availability of the species or stocks of marine mammals for subsistence uses;
- The anticipated impact of the activity upon the habitat of the marine mammal populations, and the likelihood of restoration of the affected habitat;
- The anticipated impact of the loss or modification of the habitat on the marine mammal populations involved;
- The availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, their habitat, and on their availability for subsistence uses, paying particular attention to rookeries, mating grounds, and areas of similar significance;
- The suggested means of accomplishing the necessary monitoring and reporting;
- Suggested means of learning of, encouraging, and coordinating research opportunities, plans, and activities relating to reducing such incidental taking and evaluating its effects.

Further, BOEM coordinates with NMFS and FWS to ensure compliance with the MMPA and to develop effective mitigation and monitoring requirements.²⁷ To apply for an ITA, the applicant must submit an application for Regulations and Letter of Authorization to the appropriate agency office. Public comment is solicited by publishing a Notice of Receipt in the Federal Register. Once the comments have been reviewed, the lead agency ensures compliance with the final findings of the ESA consultation, NEPA process, and any other applicable laws. Upon completion of this review, the Letter of Authorization is either issued or denied.⁷⁰ Please see Figure 5 below.

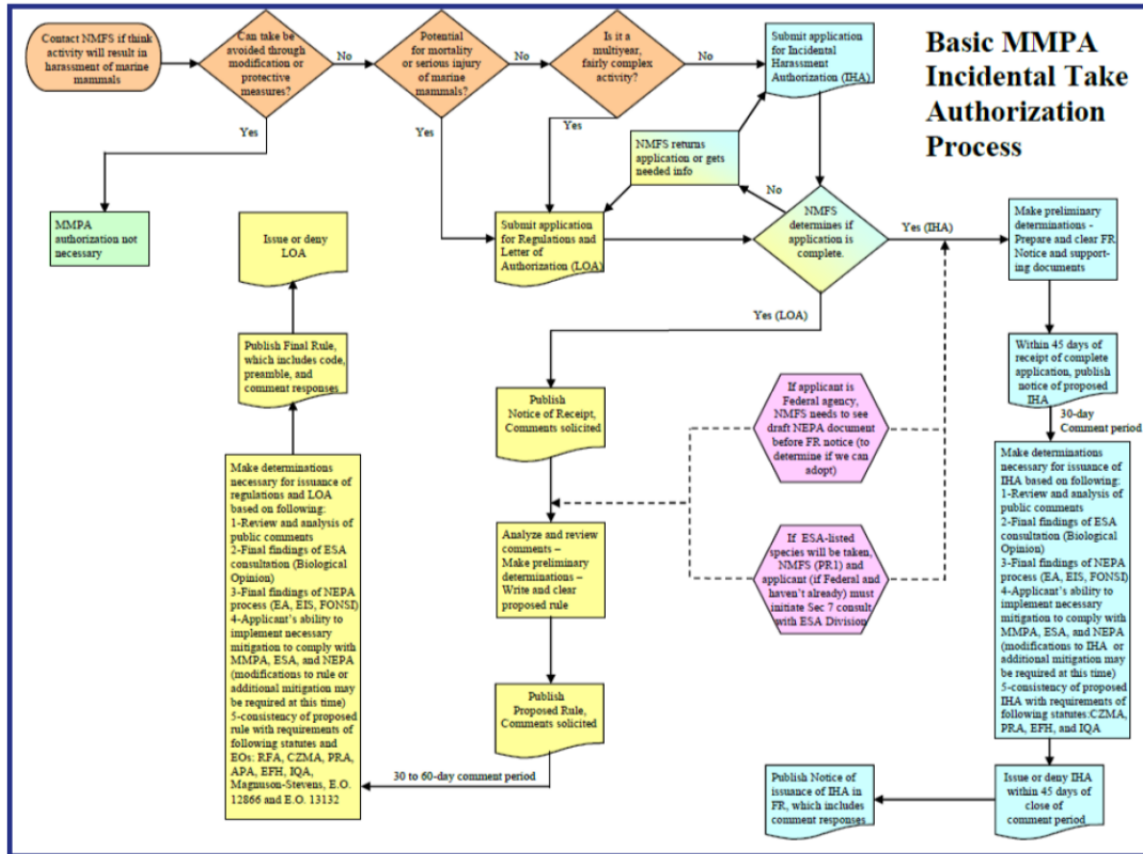


Figure 5: Marine Mammal Protection Act Incidental Take Authorization Process⁷⁰.

Process Time

MMPA IHA's can take approximately 120 days, while a LOA can take between 6-24 months to complete. Note that the LOA process does not include a timeline, which creates uncertainty in the estimated process time.³²

3.3.8 Essential Fish Habitat Assessment

Implementation of the Magnuson Stevens Act (MSA) falls to NMFS. Similar to the ESA, all federal agencies involved with activities that may adversely affect EFH must consult with NMFS. Specifically, the SFA amendments require BOEM to consult with NMFS concerning any actions that may adversely affect EFH.⁷¹ If the proposed action may impact EFH, an EFH assessment must be completed by the federal action agency to identify the effects of the proposed action on EFH and any required mitigation efforts.⁷² Any EFH that may be impacted by the proposed action must also be discussed in the NEPA EA/EIS associated with BOEM permitting documentation. In addition, NMFS provides Conservation Recommendations, which include suggested measures to mitigate impacts to EFH.

Process Time

Consultation in accordance with the MSA can take between 30 to 60 days.

3.3.9 Historic Preservation: Section 106 Review

The federal action agency is required to determine if a proposed action might impact historic properties, including those listed on the National Register of Historic Places, or that meet the

criteria for the National Register. According to BOEM, the OCS is not federally owned land, and therefore the federal government has not claimed direct ownership of historic properties on the OCS. Thus, BOEM only has authority under Section 106 of the National Historic Preservation Act (NHPA) to ensure that their actions do not adversely impact historic properties.³³

Consultation

Initiate the Section 106 Process

If a potential impact from a project is identified either through a database of relevant sites, or pre-construction surveys, the action agency must consult with local stakeholders, and state, tribal, and local Historic Preservation Offices (SHPO/THPO) to initiate the Section 106 (see Figure 6 for an outline of the process). After initiating the process, the federal action agency, or its consultant, will submit a report to the identified SHPO/THPO, which highlights potential impacts to historic properties near the project. If no impacts are identified, then the Section 106 process is complete and the project may proceed.

Assess Adverse Effects

In accordance with 36 CFR §800.6, if potential impacts are identified, a resolution of adverse effects shall be undertaken via continued consultation.⁷³ The SHPO/THPO ensure that stakeholders are afforded an opportunity to review the proposed work plan and provide comments. If an agreement can be reached in which conservation and project goals are met, then a Memorandum of Agreement (MOA) will be produced outlining mitigation activities.^{vi}

Failure to Resolve Adverse Effects

If consultation proves unproductive, or a resolution cannot be reached, the agency, the SHPO/THPO or the Advisory Council on Historic Preservation (ACHP) can terminate the consultation. If a SHPO terminates consultation, the federal action agency and ACHP may arrive at an MOA without SHPO involvement. However, if a THPO terminates consultation and the proposed project is on or affecting historic properties on tribal lands, ACHP must provide its comments. The agency must submit appropriate documentation to ACHP and request ACHP's written comments. The agency head must take into account ACHP's written comments in deciding how to proceed.³¹

This process outlines the impact assessment of a project on historic properties with the goal of minimizing potential harm and damage to historic properties.⁷⁴ The public plays a critical role in the process, and their views should be considered at each step. Federal action agencies are encouraged to facilitate compliance with Section 106, and are suggested to consult with their regulatory counterparts early and often in the process [36 CFR §800.6(a)(1)].

^{vi} In the case of the Cape Wind project, the BOEM lease included a "Chance Finds" clause that established protocols in the event culturally significant items were discovered during project activities.⁵ It can be expected that similar clauses would be included in future leases if similar circumstances were encountered.

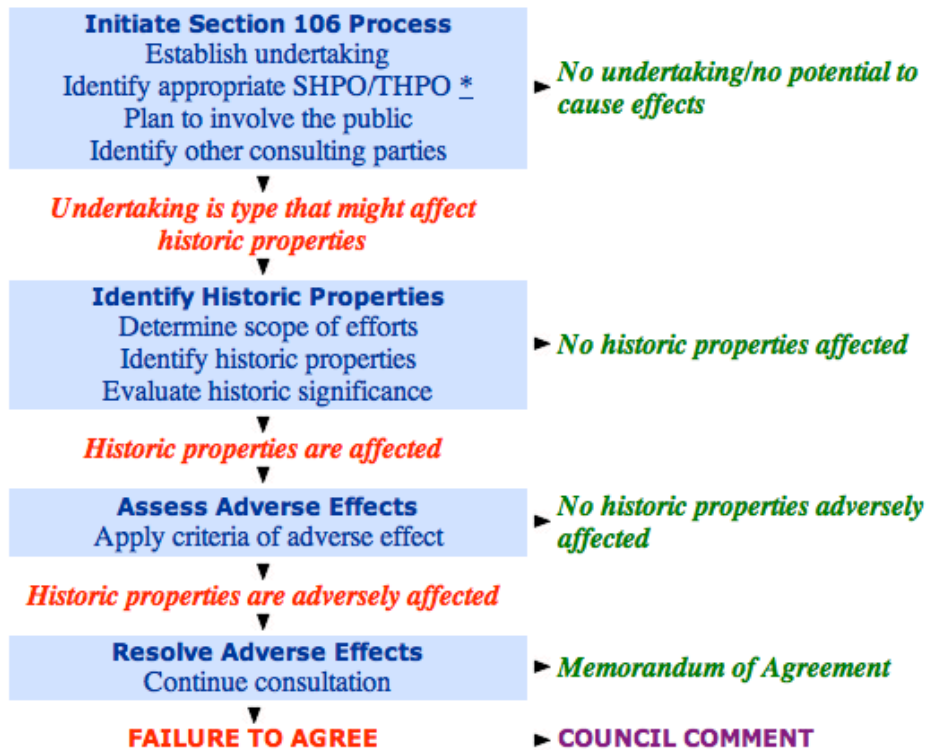


Figure 6: Section 106 Process⁷⁵

Process Time

No formal timeline exists; however, project agents are urged to begin consultation early in the permitting process. Estimated process time for a Memorandum of Agreement is 12 months, but varies widely depending on specific project characteristics.

3.3.10 Clean Water Act: Section 401 certification

In order to obtain a Section 401 certification, the developer must submit an application to the State Water Board with sufficient information for the Board to determine whether the proposed project complies with state water quality standards and will not result in adverse impacts to state waters.⁷⁶ Please refer to Figure 7.

Federal licenses and permits subject to §401 certification include CWA §402^{vii}, CWA §404 permits for discharge of dredged or fill material, and Rivers and Harbors Act §10 permit for activities that alter navigable waters of the U.S.⁷⁸

^{vii} National Pollutant Discharge Elimination System (NPDES) permits in states where EPA administers the permitting program, including CA⁷⁷

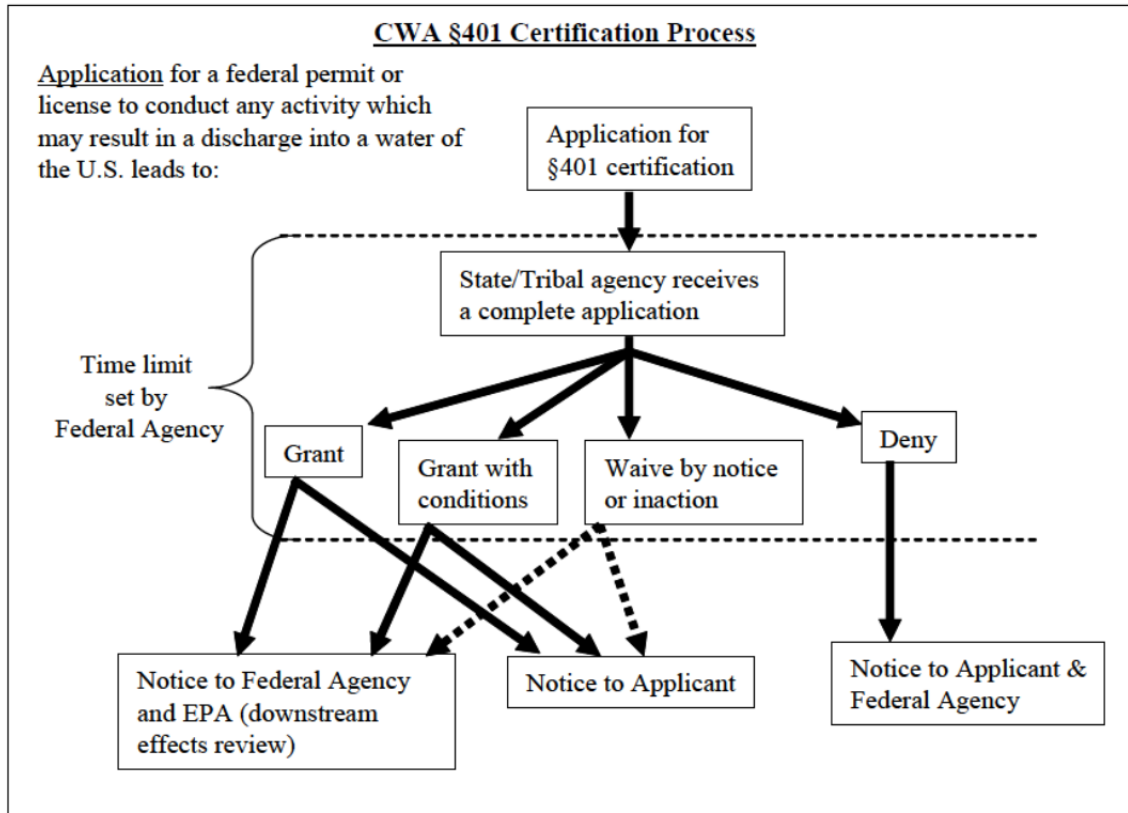


Figure 7 The 401 Certification Process⁷⁸

3.3.11 Clean Water Act: Section 404 certification

The Section 404 permit is jointly administered by the EPA and Army Corps of Engineers (ACOE). ACOE is the permit issuing agency, and is tasked with ensuring compliance with the permit conditions. EPA develops and interprets environmental criteria used in evaluating permit applications, identifies activities that are exempt from permitting, reviews/comments on individual permit applications, enforces Section 404 provisions, and has authority to veto ACOE permit decisions.⁷⁹

As part of the application process, ACOE consults with federal and state agencies to evaluate potential ecological and economic impacts of the project. The consultation process also involves negotiations to identify necessary measures to mitigate potential project impacts.

3.3.12 CZMA Consistency Determination

Section 307 of the Coastal Zone Management Act (CZMA) requires that federally authorized activities be consistent with state coastal management policies.³² As discussed on page 40, the California Coastal Commission is responsible for implementing the California Coastal Act, the state's required CZMA management program. To complete the federal consistency determination, a summary of the effects of a project on coastal uses must be generated, followed by a set of findings demonstrating that a proposed project's impacts will be consistent with state policies [15 CFR §930].³² The coordination that the CZMA requires between the state and federal government affords the state an important opportunity in the development process. Public involvement is a fundamental component of the state review process, and only those

projects that are in keeping with a state's federally approved coastal management plan are eligible for approval.

Process Time

A state has 180 days (six months) to conduct a consistency review and issue a consistency determination. If the state exceeds that time limit, the federal government may proceed with the project under presumed concurrence from the state.³²

3.3.13 Rivers & Harbors Act §10 Permit

The Army Corps of Engineers (ACOE) is responsible for issuing §10 permits and often consults with other agencies such as FWS, NMFS, and the California Office of Historic Preservation. ACOE can issue the permit in four ways, (i) a standard individual permit, (ii) a letter-of-permission, (iii) nationwide permit, or (iv) a regional permit. The permit type is determined based on the level of impacts associated with the proposed project.

Consultation

The Fish and Wildlife Coordination Act (FWCA) provides basic authority for the involvement of FWS in evaluating impacts to fish and wildlife from proposed water resource development projects. In addition, it requires federal agencies, like ACOE, to consult with FWS and applicable state organizations before issuing any permit or lease that would allow construction impacting water resources.⁸⁰ Permit applicants are required to submit a Biological Evaluation describing the species in the area of development, the impact that the proposed project may have on the identified species and/or habitat, and measures that can be taken to mitigate those risks.

Before issuing a decision on a permit, ACOE must provide a 15-30 day public notice period and public hearings.

Process Time

Approximatley 60 to 120 days (two to three months).³²

3.3.14 PATON Permit

The United States Coast Guard (USCG) is the agency in charge of administering the Private Aids to Navigation (PATON) permits. However, before certifying a navigational aid and obtaining a PATON permit, a project must have a CWA §404 and Harbors and Rivers Act §10 permit. ACOE is responsible for issuing those permits, providing them secondary influence in the PATON process.³²

Process Time

Approximately 90 days (three months).

3.4 Federal Permitting Flowchart

As indicated in the preceding text, the federal permitting process is led by BOEM and may include up to three separate NEPA review cycles (indicated in red, below). In addition to NEPA reviews, a number of federal permits and approvals are required from federal agencies.

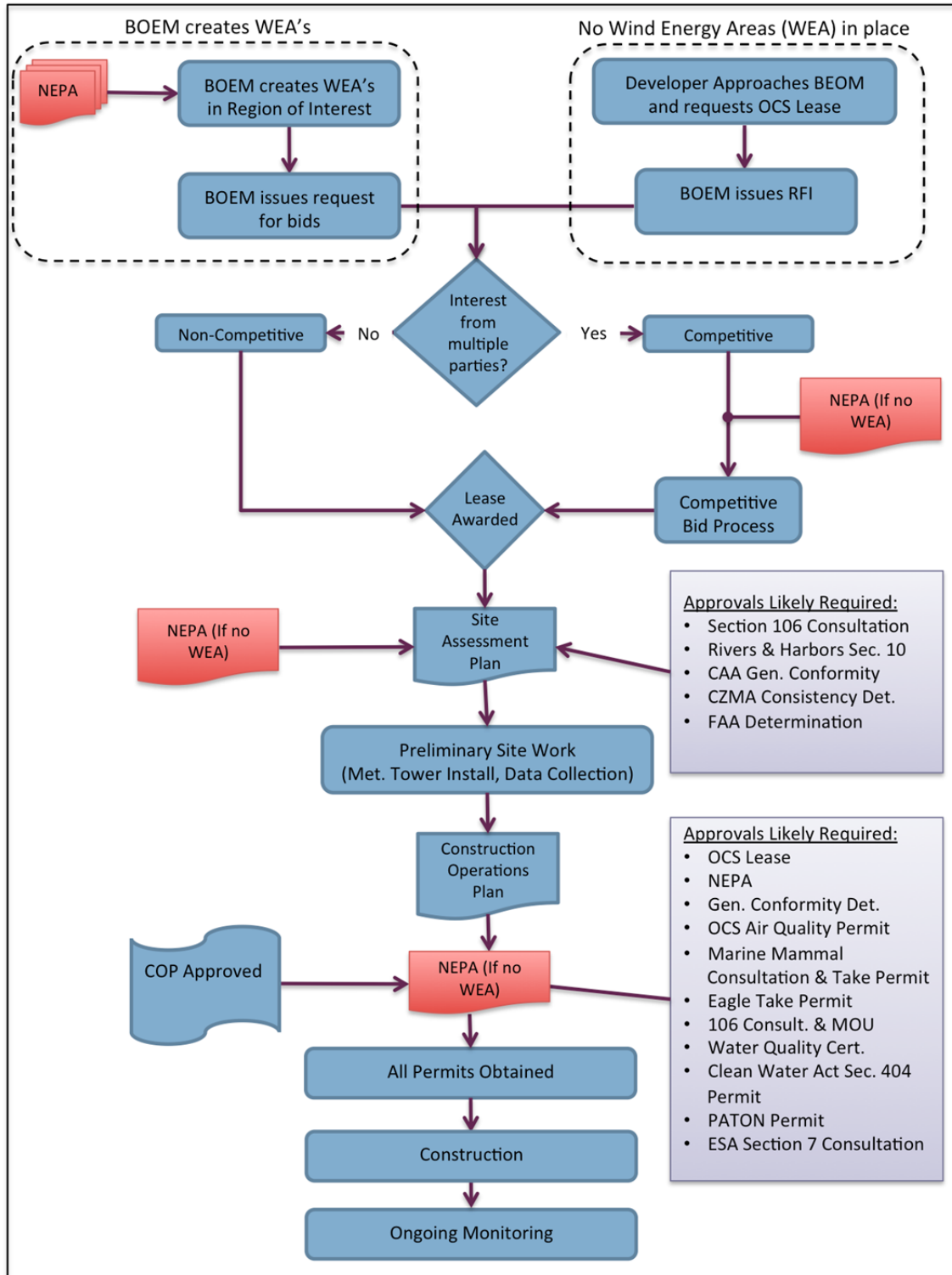


Figure 8: Federal Permitting Flowchart

3.5 Conclusion: Federal Permitting

The framework of federal laws, regulations, and processes that the developer of an offshore wind energy project must navigate to secure permission to build a project requires engagement with multiple federal agencies and constitutes a significant investment of time and capital. Successful completion of the federal permitting process requires receipt of 10 separate permits conforming to 16 statutes enforced by 9 federal bodies. These permits are in addition to permits required by state and local authorities, however there is much interaction between federal, state, and local agencies regarding specific portions of the Clean Air and Clean Water Acts.

The majority of federal permitting work is accomplished as part of the NEPA review process, with the issuance of permits by all involved agencies signaling a successful completion of NEPA reviews. A number of additional permits are required outside of the NEPA process, including CZMA Consistency Determination, PATON permit, FAA determination, and air and water quality permits coordinated with state agencies.

The federal permitting process is convoluted, and improvements could be made by fostering closer coordination amongst federal agencies and between federal and state reviews. Creation of a California BOEM Task Force would help to streamline the permitting and leasing process and would significantly lower the transaction costs for developers seeking to permit a project.

4.0 California Permitting

In addition to satisfying all applicable federal requirements, an offshore wind energy project proposed for the waters off the coast of central California must meet the requirements of state laws and regulations. California has a long history of implementing rigorous legislation aimed at protecting the unique economic, environmental, and social resources of the state. In many cases the intent of legislation in California mirrors that of federal laws, but finite differences between state and federal laws may create additional requirements for permit applicants. In some cases California law is closely coordinated with federal law, and project applicants may address both levels of regulation simultaneously. In any case, the partial overlapping of California state and federal requirements result in a complex relationship that must be thoroughly understood by any party undertaking a project that spans both jurisdictions.

Several common themes span across the goals that the state has established in acting as an agent for the Public Trust. Protection of, and access to natural resources, promotion of economic development, and deployment of renewable energy technologies are all in keeping with the Public Trust doctrine. While some may view the regulatory framework of the state as excessive and unnecessary, the people of California have created and supported these regulations through ballot initiatives and voter approval. Deeper inspection into the state's regulatory system will reveal that each regulation, regulator, and required permit has a specific area of focus and addresses a specific need. California's regulatory framework is constantly evolving, and new offshore wind energy technology will likely catalyze state adjustments to the current legislative environment.

This section examines California's governing laws and regulations associated with the permitting of an offshore wind farm, the regulatory bodies involved, and required approvals and permits. It concludes with a discussion of related considerations that are not directly associated with permitting requirements but have direct or indirect impacts on an OSW project.

4.1 Governing Laws and Regulations

*“By the law of nature these things are common to mankind –
the air, running water, the sea, and consequently the shores of
the sea.”*

—Emperor Justinian, 530 AD

The Public Trust Doctrine is an ancient legal principal with roots in Roman law under which some waters, tidelands, and wildlife resources are held in trust by the State for its citizens. The State acts as a trustee to protect those resources for present and future generations.⁸¹ Following a 1983 California Supreme Court Ruling, *National Audubon Society v Superior Court*, it was held that the State has an “affirmative duty to take the public trust into account” in making decisions involving public trust resources.⁸² Development in lands held in public trust must benefit the public at large and cannot be carried out for the sole benefit of an individual or small group. California environmental law reflects this doctrine and seeks to maximize and preserve environmental access and quality for the citizens of the state in perpetuity.

In accordance with the Submerged Lands Act of 1953, the state of California maintains jurisdiction from the mean high-tide water level on its shoreline to three nautical miles offshore.

Activities beyond this limit are subject to Federal oversight. Activities located within the three mile area, such as the installation of submarine cables, or wind turbine foundation installations are subject to State regulation.

4.1.1 The California Public Utilities Code

The California Public Utilities Code (PUC) is Article XII of the California State Constitution. The PUC establishes the legal authority for the legislature to regulate all public utilities within the state. The State Constitution defines public utilities to include, "Private corporations and persons that own, operate, control, or manage a line, plant, or system for the transportation of people or property, the transmission of telephone and telegraph messages, or the production, generation, transmission, or furnishing of heat, light, water, power, storage, or wharfage directly or indirectly to or for the public, and common carriers, are public utilities subject to control by the Legislature..."(California Constitution, Article 12, §3). The PUC established the California Public Utilities Commission to carry out regulation and enforcement activities called for by the PUC. For additional information regarding the CPUC see Section 4.2.3.

4.1.2 The California Environmental Quality Act (CEQA)

Shortly after President Nixon signed the National Environmental Policy Act (NEPA) into law on January 1, 1970, the California government and Governor Ronald Reagan followed by signing the California Environmental Quality Act (CEQA) on September 18, 1970.⁸³ CEQA acts as an "umbrella" environmental law in that it encompasses all other state environmentally oriented regulation. CEQA requires California's public agencies to identify significant environmental impacts of their actions, and to avoid and/or mitigate those impacts where feasible.⁸⁴ The California Natural Resources Agency is tasked with implementing CEQA and issuing regulations, referred to as the State CEQA Guidelines (California Code Reg., tit. 14 §§ 15000-15397). These guidelines provide objectives, criteria and procedures for the orderly evaluation of projects and preparation of applicable CEQA documentation. From an enforcement perspective, neither CEQA nor NEPA contain prescriptive requirements. Instead, the acts "...expressly required the incorporation of environmental values into governmental decision making,"⁸³ requiring state agencies to consider the environmental effects of their actions in a coordinated, methodical, and well-documented manner. A major difference between CEQA and NEPA does exist, in that CEQA mandates mitigation measures be taken if the potential for environmental harm is identified. NEPA contains no such requirements.

4.1.4 Porter-Cologne Water Quality Control Act

The history of water use, rights, and regulation in California has been contentious since the mining boom of 1849 placed unprecedented demands on the rivers and streams of the Western Sierras. Multiple regulations have been added to the state Constitution by amendment, and additional laws have been come into force through legal precedent. In terms of water pollution control, one law was fundamental in creating the California's framework for approaching water quality. Enacted by state Legislature in 1969, the Porter-Cologne Water Quality Control Act (Porter-Cologne) was adopted from a water quality report commissioned by the State Assembly. Porter-Cologne is considered to be, "the cornerstone of today's water protection efforts in California,"⁸⁵ and was influential to the point that portions of this document were used as the basis of the Federal Clean Water Act of 1972.

The Dickey Water Pollution Act took effect in 1949 and established nine regional water pollution control boards located in each of the major California watersheds. However,

“Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), the State Water Resources Control Board (State Board) has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne establishes nine Regional Water Quality Control Boards (Regional Boards) to oversee water quality on a day-to-day basis at the local/regional level.”⁸⁶

For more information on the State and Regional Boards, see page 38.

4.1.3 California Ocean Resources Management Act

The California Ocean Resources Management Act of 1990 (CORMA, California Public Resource Code §36000-36402) had three objectives in the creation of the Ocean Resources Management Program: 1) to coordinate the policies of state departments with jurisdiction over ocean and coastal resources; 2) coordinate state agency management of ocean resources with local government; 3) ensure effective participation in federal planning and management. The Act acknowledges the ocean’s living resources migrate beyond the state’s three-mile statutory limit and that effective management and protection of these species requires a coordinated approach between state and federal bodies.

4.1.4 California Ocean Protection Act

The California Ocean Protection Act (COPA, California Public Resource Code §35500-35650) was signed into law by Governor Arnold Schwarzenegger in 2004 and created the California Ocean Protection Council, whose mission is to, “ensure that California maintains healthy, resilient, and productive ocean and coastal ecosystems for the benefit of current and future generations.”⁸⁷. The Act was in response to the Pew Ocean Commission’s 2003 report, “America’s Living Oceans: Charting a Course For Sea Change” that highlighted the severely compromised state of the nation’s coastal waters and marine life. The intent of COPA was to streamline and consolidate management of the state’s coastal waters to one decision-making body, the Ocean Protection Council, which includes Secretaries from several state agencies including the California Environmental Protection Agency and the California Natural Resources Agency. COPA also established the California Ocean Protection Trust Fund, which is administered by the Ocean Protection Council and provides grants and loans for activities (such as scientific research) that further the Council’s mission.

***Defining “Take” of
Endangered Species***

Section 80 of the California Fish and Game Code defines “take” as, “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”.

Source:
CA. Dept. of Fish and Wildlife.
(http://www.dfg.ca.gov/habcon/cesa/incidental/cesa_policy_law.html)

Figure 9: Take of Species Definition

4.1.5 California Fish and Game Code

4.1.5.1 California Endangered Species Act

Promulgated in Section 2080 of the Fish and Game Code, the California Endangered Species Act (CESA) is similar to the federal ESA, which prohibits the “taking” of listed species. However, CESA is slightly more conservative as it prohibits take of endangered or threatened (listed) species in addition to species that are being petitioned for listing.

An offshore wind farm on the central California coast may encounter a number of endangered or threatened species of birds, marine mammals, and fish. The Channel Islands in particular are

home to a number of protected species including Bald Eagles, all of which are protected under federal and state law. CESA emphasizes early consultation with the California Department of Fish and Wildlife to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project-caused losses of listed species.⁸⁸

4.1.5.2 California Marine Life Protection Act (MLPA)

The California Marine Life Protection Act (MLPA, Division 3, Chapter 10.5, §2850 - 2863 of the California Fish and Game Code) was passed in 1999 by the California Legislature; implementation of the Act began in 2007 and lasted until 2012. The MLPA substantively revised management practices of state waters by the creation of Marine Protected Areas (MPAs) all along California's 1,100 mile coastline. MPAs are, "separate geographic marine or estuarine areas designed to protect or conserve marine life and habitat. There are three types of MPAs designated (or recognized) in California: State Marine Reserve (SMR), State Marine Park (SMP) and State Marine Conservation Areas (SMCA)."⁸⁹ Restrictions on use and take exist for each classification of MPA, with State Marine Reserves being the most restrictive. The intent of the MLPA is to create a holistic system of marine management in state waters, recognizing that marine resources and marine problems migrate between local boundaries and that the impacts of coastal development, pollution, and inappropriate use do not respect boundaries.

An offshore wind development on the central California coast will be impacted by the presence of MPAs, as several exist within the boundaries of the ROI.

4.1.6 California Coastal Act

In response to ongoing concerns about degradation of the coastal environment, California, voters approved Proposition 20 in 1972, thereby adopting the California Coastal Zone Conservation Act of 1972 (CCZCA) into law. The purpose of the CCZCA was to, "...provide for the establishment of a comprehensive, coordinated and enforceable management program for the orderly, long range conservation and management of the natural resources of the coastal zone."⁹⁰ The CCZCA was temporary, but created a framework for coastal management that remains in place today. This framework consists of a singular state-wide California Coastal Zone Conservation Commission plus six Regional Commissions responsible for implementation of the law. These commissions were directed by the Act to prepare and submit the California Coastal Zone Conservation Plan to the state legislature for approval and adoption into law.⁹¹ The California Coastal Act of 1976 (CCA) resulted from this effort. In addition to codifying a long-range management strategy for the state's coastal areas, the CCA formally established the California Coastal Commission, in addition to Regional Coastal Commissions, The commissions have been granted the authority to preserve, restore, and maintain access to California's coast, while also allowing economic development to occur.

In an effort to establish a federal and state partnership for management of coastal resources, the Congress created the Coastal Zone Management Act of 1972 (CZMA, page 8). The CZMA relies on state expertise of coastal management issues and provides financial assistance for coastal protection to states that develop approved coastal management plans. The federal government approved the CCA as the California Coastal Management Program in 1978 [CCA, §30008].

A common goal of federal and state coastal management strategies is to place control of coastal resources in the hands of the public, specifically those residing in coastal areas. To this end, the

CCA encourages public awareness and participation in the decision-making process. The reliance upon local land use planning procedures and enforcement is the state articulation of this goal [CCA, §30004(a)].

Coastal Act Impacts to Offshore Wind Energy Development

The CCA acknowledges that, for economic reasons, coastal development that has, “...significant adverse effects on coastal resources or coastal access” may be necessary and therefore permitted by the act [CCA, §30001.2]. Types of development listed in the act include electrical generating facilities, refineries, offshore petroleum and gas development, and liquefied natural gas facilities. The CCA does not contain explicit provisions or exceptions for any form of renewable energy development, including offshore wind energy. In response to a Supreme Court decision that excluded oil and gas leasing in federal waters from state review, Congress amended the Coastal Zone Management Act.⁹² The amendments gave states some authority to seek consistency between federal efforts to develop projects and state coastal zone management regulations.⁹

The CCA states that:

“The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas” [CCA, §30251].

The potential visual impact of OSW energy development would need to be assessed through the Local Coastal Plan governing a particular region to determine consistency with the requirements of the CCA. Stakeholder opposition to visual impacts created by offshore wind has been found to be significant in England.⁹³ Given the CCA’s emphasis on public inclusion in the planning and decision-making process, any objections to visual impacts will be heard, and possibly responded to, under this Act.

4.2 Regulatory Bodies

California's regulatory bodies are organized within the Executive Branch of state government. Similar to the federal system, cabinet-level agencies report directly to the Governor and are led by gubernatorial appointees that have been confirmed by the state Senate. These agencies have broad authority to create, monitor, and enforce laws and regulations within the area of their oversight. They are tasked with the conflicting goal of protecting and promoting the welfare of the public, while also encouraging economic development within the state. Eleven such agencies exist, including the California Environmental Protection Agency and the California Natural Resources Agency. These Agencies, in turn, have boards, departments, and offices operating under their control and oversight. This section briefly identifies the agencies that would be involved in the permitting of an offshore wind project and describes the boards, departments, and offices that would be directly involved in making sure that a potential project meets the requirements set forth in state law.

4.2.1 California Environmental Protection Agency

Created by Governor's Executive Order in 1991, the California Environmental Protection Agency (CalEPA) is an executive cabinet office with the mission to, "restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality."⁹⁴ To carry out this mission CalEPA is responsible for the creation, monitoring, and enforcement of environmental laws in the state, and similar to the federal EPA, has broad authority and scope. CalEPA contains six boards, departments, and offices to carry out its mission. These departments are:

- Air Resources Board
- Department of Pesticide Regulation
- Department of Resources Recycling and Recovery
- Department of Toxic Substances Control
- Office of Environment Health Hazard Assessment
- State Water Resources Control Board

Two of these departments, the Air Resources Board and the State Water Resources Control Board, would be involved with the permitting of an offshore wind energy facility via their involvement in the CEQA review process.

4.2.1.1 State Water Resources Control Board

The State Water Resources Control Board was created by the state legislature in 1967. Management of the state's water resources was divided among 9 Regional Water Quality Control Boards with the Porter-Cologne Act of 1969. The State Water Resources Control Board is directed by the Legislature to "ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses,"⁹⁵ and is responsible for the creation of waste discharge requirements. These requirements also serve as the basis for National Pollutant Discharge Elimination System (NPDES) permits for surface waters.⁷⁷ Planning, enforcement, and monitoring activities are carried out by the Regional Water Quality Control Boards, with Board boundaries defined by watershed. The central coast region of California is divided between multiple Regional Boards, with the ROI for this study split between Region 3 (Central Coast Regional Water Quality Control Board) and Region 4 (Los Angeles Regional Water Quality Control Board).

Regional Boards are responsible for drafting Basin Plans for the management of water within the Board's watershed. Any application for a NPDES permit must conform to the requirements of the Basin Plan. Additionally:

"Regional Boards regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. Any person proposing to discharge waste within any region must file a report of waste discharge with the appropriate regional board. No discharge may take place until:

- The Regional Board issues waste discharge requirements or a waiver of the waste discharge requirements, and
- 120 days have passed since complying with reporting requirements."⁸⁶

Although the construction and operation of an OSW energy project would not likely create an ongoing source of water pollution, specific activities during construction, such as installation of the land fall transmission cable, may disturb submerged lands and be considered a discharge into state waters.

4.2.1.2 Air Resources Board

The California Air Resources Board (ARB) was created in 1967 by the Mulford-Carrell Act with the mission of improving and protecting the state's air quality.⁹⁶ The Board is comprised of 11 appointed members whose responsibilities include:

- Creation and implementation of a State Implementation Plan (SIP) as required by the federal Clean Air Act;
- Creation of standards, rules, and regulations for mobile sources, harbors, vessels, and equipment;
- Monitoring and reducing greenhouse gas emission in California under AB 32;
- The oversight of 35 Local and Regional Air Pollution Control Districts (APCD).⁹⁶

4.2.1.3 Local Air Pollution Control Districts / Air Quality Management Districts

Local air pollution control districts (APCDs) and Air Quality Management Districts (AQMDs) were created by California's 1947 Air Pollution Control Act, "authorizing the creation of an Air Pollution Control District in every county of the state."⁹⁷ Under the federal Clean Air Act of 1970, the U.S. EPA delegated its authority for air quality standard creation and enforcement to local APCDs or AQMDs. APCDs and AQMDs "issue permits, develop local plans to attain healthy air quality and ensure that the industries in their area adhere to air quality mandates."⁹⁶

The EPA may rescind the delegated authority if local agencies fail to attain air quality standards as required by the federal Clean Air Act. APCDs issuing permits must comply with federal rules, specifically 40 CFR 70, Federal Operating Permits. Federal rules have been adopted into local rules for the Santa Barbara Channel pursuant to 40 CFR 55.

The CalWind project's ROI spans three APCDs: San Luis Obispo, Santa Barbara, and Ventura. Projects conducted within the state's boundaries (up to three miles from mean high tide) must comply with state air quality control requirements, and projects within a local district's jurisdiction must comply with local as well as state requirements. Both local and state requirements incorporate federal standards.

APCDs act as a *concerned agency* during the CEQA process and review projects for conformance with local, state, and federal requirements.⁹⁸ Projects occurring in federal waters are reviewed

for conformance with EPA's OCS Air Regulation (40 CFR Part 55), which determines if a project constitutes an OCS Source as defined by that regulation. If the project is deemed an OCS source, the APCD with jurisdiction over the project will have a role in permitting its construction, however the exact nature of the permits required are a function of the variables included in the project, are not determined until the developer has submitted a detailed COP to the APCD for review.⁹⁹

4.2.2 California Natural Resources Agency

The California Natural Resources Agency is a Cabinet-level agency with broad regulatory authority over the natural resources of the state. The agency's mission, "To restore, protect and manage the state's natural, historical and cultural resources for current and future generations using creative approaches and solutions based on science, collaboration and respect for all the communities and interests involved," reflects the broad scope of the agency's activities across natural and man-made resources. As part of their scope, the Natural Resources Agency is tasked with implementing CEQA and issuing regulations, referred to as the State CEQA Guidelines. Twelve departments exist within the Natural Resources Agency to carry out its mission. For the purposes of offshore wind development, the relevant entities include the California State Lands Commission, the California Coastal Commission, the California Department of Fish and Wildlife, and the California Office of Historic Preservation.

4.2.2.1 California State Lands Commission

As described on page 2, the State of California maintains jurisdiction of sub-tidal and submerged lands from the mean high tide line to three nautical miles offshore.^{viii} Any proposed action within that area must be reviewed by the State Lands Commission (SLC) to determine if the proposed use of state lands is consistent with the Public Trust Doctrine. In this capacity, the SLC is the primary land manager for state marine waters and has the authority to lease state lands and issue a State Lands Lease. In addition, the SLC has been designated the lead agency under CEQA for projects located within state marine waters.

4.2.2.2 California Coastal Commission

The California Coastal Commission (CCC) was established in 1972 and later promulgated by the California Coastal Act of 1976. The act formally granted the CCC authority to plan and regulate the use of land and water in the coastal zone in partnership with coastal cities and counties.¹⁰¹ The California Coastal Commission (CCC) has jurisdiction over California's "coastal zone," which varies on land from several hundred feet in highly urbanized areas to five miles in certain rural areas; the offshore the coastal zone includes a three-mile-wide band of ocean.¹⁰¹ San Francisco Bay is not part of the CCC's coastal zone and is handled by the San Francisco Bay Conservation and Development Commission.

^{viii} As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and other waterways upon its admission to the United States in 1850. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. By statute, the California Legislature granted certain of these sovereign lands in trust to 85 cities, counties, and harbor districts. The lands are known as "granted lands," and include the major ports of Los Angeles, Long Beach, San Diego, San Francisco, Oakland, Richmond, Benicia and Eureka. Land use permissions and CEQA determinations for projects on these granted lands would come from the grantees and not the SLC.¹⁰⁰

In addition to codifying a long-range management strategy for the state's coastal areas, the CCA also formally established Regional Coastal Commissions, and granted these Commissions the authority to regulate the use of land and water in the coastal zone in partnership with coastal cities and counties.¹⁰¹ The CCC's mission includes the mandate to preserve, restore, and maintain access to California's coast while also allowing beneficial economic development to occur. The structure of the CCA transfers responsibility for permitting of coastal activities to local governments with Commission-approved Local Coastal Plans (LCP). The California coastline is divided into 128 separate LCP segments, and, "As of 2011, approximately 72% of the LCP segments have been effectively certified, representing about 85% of the geographic area of the coastal zone, and local governments are issuing coastal permits in these areas."¹⁰² Jurisdictions that do not have an approved LCP rely on Coastal Commission review and approval of local projects, and "The Commission retains permanent coastal permit jurisdiction over development proposed on tidelands, submerged lands, and public trust lands, and the Commission also acts on appeals from certain local government coastal permit decisions."¹⁰² For further elaboration on the Local Coastal Plan process, please refer to page 50. With respect to an OSW development project, the CCC has discretionary review authority and as such acts as the Responsible Agency during the CEQA review process. See page 45 for additional information on the CEQA review process.

4.2.2.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) exists under the authority of the California Natural Resources Agency and "maintains native fish, wildlife, plant species, and natural communities for their intrinsic and ecological value and their benefits to people. This includes habitat protection and maintenance in sufficient amounts and quality to ensure the survival of all species and natural communities."¹⁰³

CDFW administers the California Endangered Species Act and works to, "Ensure compliance with and issues permits under the California Endangered Species Act (CESA), meet the requirements of the Natural Community Conservation Planning Act, SB 34, Advance Mitigation Implementation."¹⁰⁴ Similar to the federal process for protecting endangered species (page 22), state agencies are required to consult with CDFW to ensure that actions taken do not jeopardize listed species.

4.2.1.4 California Office of Historic Preservation

The California Office of Historic Preservation (OHP) is organized under the Department of Parks and Recreation as part of the California Natural Resources Agency. OHP has no direct authority over an offshore wind project, but does have review obligations under CEQA to ensure that artifacts or sites of historical significance will not be adversely impacted by a proposed development. The central coast of California, including the Channel Islands, contain many pre-Colombian archeological sites and was home to significant populations of Native Americans prior to European settlement. While these populations have dwindled, Chumash Indian Bands are still present throughout the CalWind ROI. Important sites may be located underwater, as mean sea level was considerably lower during pre-Colombian times.¹⁰⁵ In addition to Native American cultural artifacts, the submerged lands of the central coast contain historically important shipwrecks and other artifacts that may have cultural significance. Although an offshore wind farm may have minimal impact on land, undersea cables, anchors, and support structures may impact submerged archeological sites. Additionally, on-shore infrastructure such

as substations, roads, or other infrastructure associated with offshore wind farm development may conflict with known or yet to be discovered historic material.

OHP has detailed listings of the state's known archeological heritage and potential applicants would benefit from consultation with OHP to determine if proposed projects will conflict with known sites. Additionally, preliminary site assessment activities should include a survey for historically important artifacts.

4.2.3 California Public Utilities Commission

The California Public Utilities Commission (CPUC) (originally The California Railroad Commission¹⁰⁶), "...regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy."¹⁰⁷ Created by Constitutional Amendment in 1911 (California Constitution, Article 12, Public Utilities Code), the Commission is an Executive-level body whose president is appointed by, and reports to, the Governor. As part of the state Constitution, the Public Utilities Code (PUC) is the most authoritative law in the state, and as the regulators and enforcers of the law, the Commission has been given broad authority, including subpoena power (PUC, Article 12, §6).

Among a multitude of other responsibilities, the CPUC creates the state's Renewable Portfolio Standard, creates tariffs for the purchase and sale of electricity, performs environmental and technical impact reviews of electrical generation and transmission facilities (including review of proposed projects as part of the CEQA process) and creates rules for the connection of generating facilities to the electrical grid. This broad scope of regulatory authority creates several possibilities for CPUC intervention in an OSW project, including grid interconnection, transmission system construction, and environmental impacts of a proposed project. As it relates to OSW development, the CPUC's authority extends to all points that interact with the state's electrical grid, meaning that OSW projects that will interconnect with the State's transmission or distribution grids must gain approval from the CPUC and CALISO, regardless if the generation facility lies outside of state waters. CPUC is responsible for issuing a *Permit To Construct* to project developers, which grants the ability to connect an electricity generation device to the California utility grid. Determining the financial and technical requirements for grid interconnection are essential early steps for a developer seeking to secure project financing and/or determining the overall feasibility of a proposed project.

As part of its mandate to regulate public utilities, the PUC has established a series of tariffs under which each investor-owned utility company (IOU) operates. These tariffs are implemented in a series of numbered Electric Rules that address all aspects of procuring and providing energy, establish the relationship between utilities and customers, and set prices for the purchase and sale of electricity. Electric Rule 21, "is a tariff that describes the interconnection, operating and metering requirements for generation facilities to be connected to a utility's distribution system, over which the California Public Utilities Commission (CPUC) has jurisdiction."¹⁰⁸ Under the Rule, all electricity generation facilities must apply to the grid operator (CALISO) for interconnection, and are subject to the operator's tariff under FERC (page 14). In light of the state's goals for the integration of large amounts of distributed energy generation from renewable sources, Rule 21 became outdated and was viewed by many,

including IOU's, to be detrimental to high volumes of distributed generation integration.¹⁰⁸ As the result of a settlement brought by multiple parties, including the state's IOUs and the Sierra Club, Rule 21 has been substantially revised as of September 13, 2012.¹⁰⁹ Revisions to Rule 21 apply primarily to exporting generating facilities, and are intended to introduce transparency, predictability, and cost-effectiveness into the review and approval process. A fast-track approval process has been established for qualifying projects (less than 20MW with no interconnection to other generation facilities) and definitive timelines have been created for projects requiring supplemental review.¹⁰⁹ The interconnection application process and the costs and timelines associated with it are discussed further on page 54.

4.2.3 California Independent System Operator

The California Independent System Operator (CAISO) operates and maintains the network of high-voltage electrical transmission lines in the state. CAISO's primary responsibilities are twofold: 1) To ensure that adequate supplies of energy are available to meet demand at all times; and 2) To maintain grid stability, safety, and functionality. CAISO projects the future electrical needs of the state, and plans and oversees upgrades to the transmission grid to keep pace with these projections. Due to the size of the California electricity market, CAISO also plays an important role in representing California's and several other western states interests with regard to electricity infrastructure and transmission to federal agencies such as the Department of Energy and FERC. The transmission grid under CAISO's jurisdiction does not include local distribution grids, which are maintained and operated by local utility companies. Developers of electrical generation facilities must obtain CALISO approval prior to interconnection of their project to the state's distribution or transmission grids, as noted in the previous section and on page 54.

4.2.4 Governor's Office of Planning and Research

The Governor's Office of Planning and Research (OPR) was established by statute in 1970 and is part of the Office of the Governor.¹¹⁰ Among varied activities, the OPR is the state's long-range planning agency and is also responsible for acting as the state's clearinghouse for the CEQA review process. Drawing authority from Public Utilities Code sections 21080.3 through 21165, OPR designates lead and responsible agencies, assists lead agencies in determining relevant public agencies, reviews and updates CEQA requirements and implementation plans, and reviews requests for addition or deletion of classes of exempted projects.¹¹¹

As the State Clearinghouse (SCH) for the CEQA review process, the OPR:

“...coordinates the state-level review of environmental documents that are prepared pursuant to the California Environmental Quality Act (CEQA). As a division of the Governor's Office of Planning and Research (OPR), the SCH is at the center of state agency involvement in the CEQA environmental review process. Operation of the SCH is governed and defined by the CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000-15387), which describes the SCH's roles and responsibilities regarding environmental review.”¹¹²

Additionally, the SCH:

“...also functions as the “State Single Point of Contact” for coordinating state and local review of applications for federal grants or loans under select state programs (Presidential Executive Order 12372). In this capacity, the SCH coordinates state and local review of federal financial assistance applications, federally required state plans,

direct federal development activities, and federal environmental documents. The purpose of the process is to afford state and local participation in federal activities occurring within California. The Executive Order does not replace public participation, comment, or review requirements of other federal laws, such as the National Environmental Policy Act (NEPA), but gives the states an additional mechanism to ensure federal agency responsiveness to state and local concerns.”¹¹²

Applicants submitting documents for CEQA review are required to provide the OPR with copies of the submittal for distribution to various state agencies.

4.3 Approval and Permitting Process

By describing the state regulations and regulatory bodies that are applicable to offshore wind development, we have seen that the path to gaining comprehensive approval is a non-linear process involving a multitude of steps. A “one stop” approach to permitting does not exist. Although multiple permits and forms of approval will ultimately be required, each of these approvals addresses a specific problem within the state and offers unique protections for the public’s resources.

Interviews with stakeholders, government officials, and review of available literature support the notion that project developers should consult with all agencies “early and often” in order to make the permitting and approval process as smooth as possible. While agency representatives recognize that the process is complex, utilizing the expertise of these public employees early in the development process may result in a savings of time and resources for the developer, and is strongly encouraged.

In this section we identify and describe the various permits and approvals required to construct and operate an offshore wind energy project in the state of California. Timelines and costs of each approval are indicated where information has been available. Approvals described here are in addition to those noted in Federal and Local permitting sections; please see those sections for additional information.

4.3.1 FAA / Department of Defense

Although the state of California maintains control of waters and submerged lands from mean high tide to three miles from shore, The Federal Aviation Administration and Department of Defense have a vested interest in activities within this area, as noted on pages 9 and 16. Despite state control of near-shore waters, each of these agencies may invoke federal authority to mitigate or terminate a proposed project. Project developers are therefore advised to initiate the FAA and DoD review and approval process at the earliest possible stage in a project. For additional information on these processes, see page 16.

4.3.2 CEQA Process

Completion of the CEQA review process is a fundamental requirement for the development and construction of an offshore wind farm. Although it is a required process, there is no specific permit associated with CEQA; rather the series of steps mandated by CEQA determines the review process that a project must undergo prior to receiving required permits from relevant state agencies. Because of these requirements, the CEQA process serves as the keystone for the state environmental permitting process, uniting all relevant state agencies with a common set of rules and procedures. As determined by statute, these agencies have varying roles during the review cycle, ranging from Lead to Local Agency. Each of these roles contains specific responsibilities during the CEQA process.

Lead and Other Agencies

According to the CEQA Guidelines, if multiple agencies can claim jurisdiction to a project, one agency shall be deemed the lead agency.¹¹³ In the case of offshore wind energy development, the California State Lands Commission (SLC) is designated the lead agency and is responsible for preparing applicable CEQA documentation. Additionally, all other state agencies that can claim jurisdiction over a project must consider SLC’s CEQA documentation prior to issuing their own approval for a project.

Responsible Agencies are those state agencies, “which have discretionary approval power over the project.”¹¹⁴ When Responsible Agencies exist, they are important participants in the CEQA process through their consultation with the lead agency. With discretionary approval power, these agencies have the ability to reject a proposed project, thus halting its progress. For the purposes of an OSW development, the California Coastal Commission would act as the Responsible Agency.

Trustee Agencies are defined by CEQA as being a state agency, “having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California.” Trustee Agencies include:

- California Department of Fish and Wildlife
- The State Lands Commission
- State Department of Parks and Recreation
- University of California¹¹⁴

For the purposes of an OSW development, the California Department of Fish and Game would act as a Trustee Agency.

Local Agencies are non-state agencies, boards, or commissions. Similar to California’s intent to place management of local air, coastal, and water resources under the control of those who are immediately impacted by changes to use or quality, CEQA includes local agencies in the review process to provide those impacted by a proposed project a voice in the approval process. CEQA defines Local Agencies as including, but not limited to:

“...cities, counties, charter cities and counties, districts, school districts, special districts, redevelopment agencies, local agency formation commissions, and any board, commission, or organizational subdivision of a local agency when so designated by order or resolution of the governing legislative body of the local agency.” (Title 14, CCR (CEQA), Chapter 3, Article 20, §15368)

The CEQA Process

To initiate the CEQA process, a party must submit an application to the lead agency and any required documentation to the OPR’s State Clearing House (SCH). In the case of OSW development, this would occur when a developer applies to the State Lands Commission for a lease. The designated lead agency must determine if the proposed activity can be defined as a “project,”^{ix} if so, the public agency must comply with CEQA before allowing a project to proceed. The second step toward compliance is to determine if a project is “exempt” from CEQA. If a

^{ix} According to § 20165 of the CEQA Regulations, a project is defined as, “an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following:

(a) An activity directly undertaken by any public agency,

(b) An activity undertaken by a person which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.

(c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

project is deemed to be statutorily or categorically exempt, there is no need to continue through CEQA regulations.

Assuming that the proposed public action is not exempt from CEQA, the lead agency is required to conduct an Initial Study to identify the environmental impacts of the project and determine whether the impacts are "significant." Based on its findings of significance, the lead agency prepares one of the following environmental review documents:

- a) "Negative Declaration if it finds no significant impacts;
- b) Mitigated Negative Declaration if it finds significant impacts but revises the project to avoid or mitigate those significant impacts;
- c) Environmental Impact Report (EIR) if it finds significant impacts that have not or cannot be avoided or mitigated." ¹¹⁵

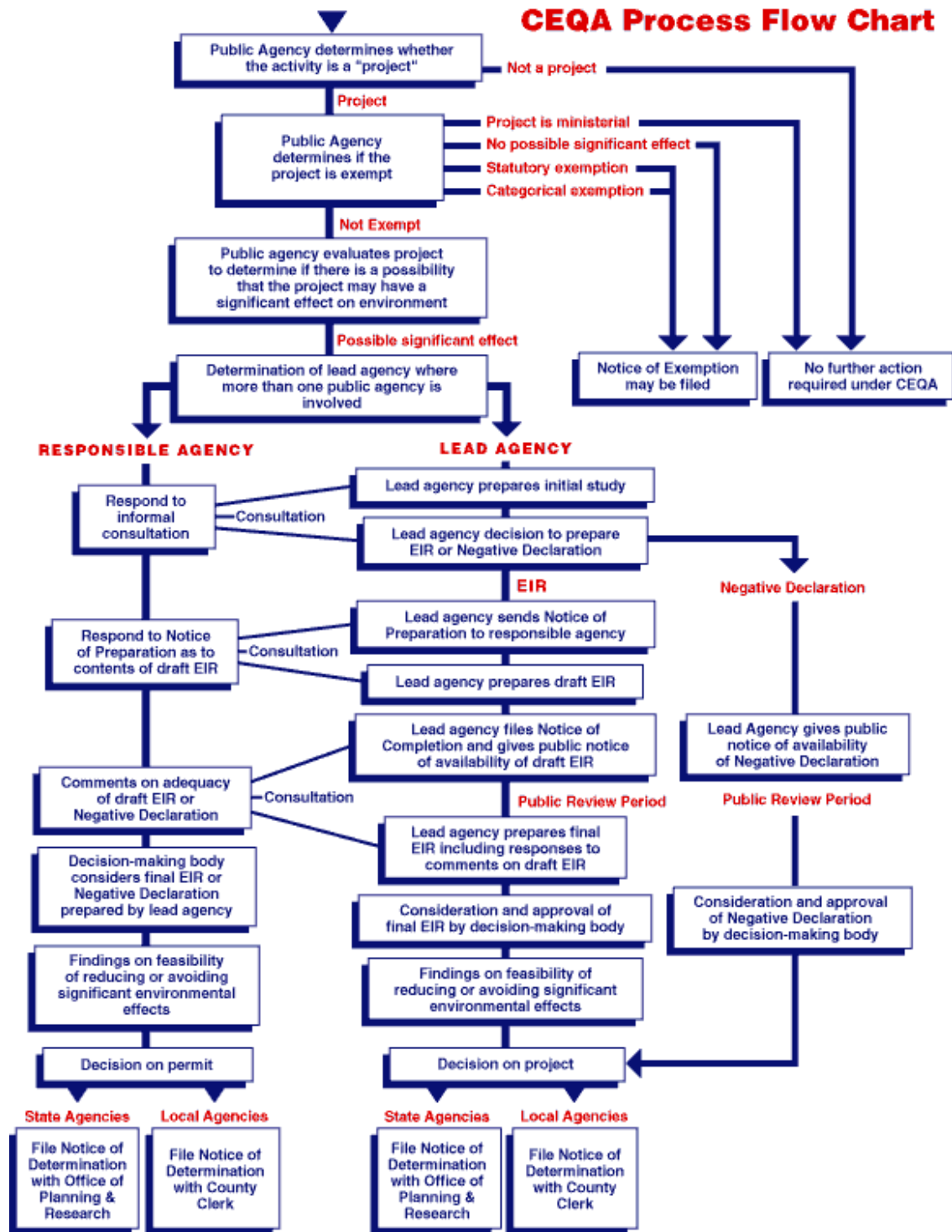


Figure 10: CEQA Process Flowchart¹¹⁶

In its role as the State Clearing House for the CEQA process, The Governor’s Office of Planning and Research (OPR, see page 43) requires that project applicants submit all relevant documentation to the OPR for distribution to affected state and federal agencies.¹¹² This step is taken parallel to the application to the State Lands Commission. The OPR acts as a hub for

information management for the Lead, Responsible, and Local agencies, as well as for joint NEPA and CEQA reviews.

Joint NEPA and CEQA Review

CEQA and NEPA share many common goals, namely that government agencies evaluate the environmental effects of their actions, consider alternatives, and develop mitigation measures when and if necessary. While these goals are similar, the laws have different approaches to implementation in some areas. With numerous similarities and differences between state and federal laws, project developers could potentially face complex and duplicitous permitting requirements. To address such inefficiencies, CEQA has basic approaches for conducting joint NEPA/CEQA reviews [CCR Title 14, Chapter 3, Article 14, SS 15220 to 15229].¹¹⁷

Recently, further efforts have been made to create joint NEPA/CEQA documents and a joint permitting process. On March 5, 2013, the Council on Environmental Quality (CEQ) and the California Governor's Office of Planning and Research (OPR) released a draft handbook on integrating NEPA and CEQA review processes. The handbook provides practitioners with an overview of NEPA and CEQA, as well as suggestions for developing a single environmental review process that meets the requirements of both statutes. The draft handbook was available for public review and comment at the time of this writing.⁸³ Additionally, individual agencies within California, such as the State Lands Commission, have adopted specific protocols for conducting joint NEPA/CEQA reviews.¹¹⁸ The ultimate aim of all of these measures is to reduce duplication, increase coordination, and improve transparency between state and federal agencies.

Process Time

The CEQA process time varies based on a variety of outcomes; a Negative Declaration must be issued within 105 days, while a lead agency has up to a year to prepare an EIR. However, if the project is subject to both NEPA and CEQA, as would be the case for any offshore wind project in federal waters, the time limits can be waived to allow time for the preparation of joint documents (i.e. EIS and EIR (NEPA) or Negative Declaration (CEQA) and FONSI (NEPA)), as long as preparation of a joint document would require less time than preparing two separate documents.¹¹⁵

4.3.3 State Lands Lease

A developer of an offshore wind energy project in California must obtain a lease for the public land needed for any project, which would likely include areas used for the routing of the transmission cable, cable landfall, and any on-shore infrastructure needed to support the project. The State Lands Commission (SLC) is the lead agency for the California State Lands Lease, however, for projects located in the San Francisco Bay, the San Francisco Bay Conservation and Development Commission is the applicable authority. Applicants for a state lands lease submit an application to the SLC that is reviewed for consistency with the public trust doctrine, protection of natural resources, and preservation or enhancement of public access to state lands.

In addition to the proposed project conforming to the Public Trust Doctrine, the CEQA review process must be completed prior to issuance of a State Lands Lease.¹¹⁹ All agencies involved with review and approval as part of CEQA must issue their respective permit or otherwise grant approval for a project prior to the Lease being executed.

Process Time

The time to complete a State Lands Lease varies by project. No statutory time limit has been set.

4.3.4 Coastal Development Permit

A Coastal Development Permit is required from the California Coastal Commission (CCC) for development in the Coastal Zone, including the placement of any solid material or structure; a change in land use density or intensity (including any land division); change in the intensity of water use or access to water; and removal of major vegetation.¹²⁰ x CCC has identified the following pathway to obtaining a Coastal Development Permit from the CCC :

1. Conduct Pre-Application Meetings with relevant agencies
2. Conduct CEQA / NEPA review process
3. Apply for, and obtain, Local Coastal Development Permit (including local landowner approval and a completed State Lands Lease).
4. Apply for CCC Coastal Development Permit
5. CCC staff review, then recommendation to Commission
6. Public hearing and Commission decision
7. Obtainment of other relevant permits, such as those required by the Regional Water Board or federal agencies.¹²¹

Obtainment of a State Lands Lease from the SLC and obtainment of a Coastal Development Permit from the CCC may be jointly exclusive, meaning that each approval may require completion of the other in order to proceed. Additionally, potential conflicts or overlaps with the CEQA/NEPA review process may exist that cause the sequence noted above to be modified. One purpose of Pre-Application meetings with relevant state agencies (item #1, above) is to define the process that will be used for a particular project, and to allow various state agencies to come to agreement regarding the sequence of approvals.

Process Time

Upon determination that an application for a Coastal Development Permit is complete, CCC staff is allowed 49 working days to present the application to the Commission. No additional time limits are established for the completion of the Coastal Development Permit process, as the timeframe for each project may vary significantly based on the details of the project and the responsiveness of the applicant to CCC recommendations and requirements.

4.3.5 Coastal Zone Marine Act Consistency Determination

Congress created the CZMA (Section 2.10) in an effort to establish a federal and state partnership for management of coastal resources. Section 307 of the CZMA, “requires that federally licensed or permitted activities be consistent with state coastal management policies (e.g., land use planning statutes, marine spatial planning, water quality standards). A consistency determination is the process used to implement this requirement for federal permits and licenses.”¹²² The federal government approved the California Coastal Management Program (CCMP) in 1977, and as a result, federal agencies must conduct activities (including federal development projects, permits and licenses, and assistance to state and local governments) in a manner consistent with the approved management program.¹²³ The process

^x Note there are several exceptions which do not require a permit; however, a proposed offshore wind development would likely result in a landfall electrical connection triggering the requirement of a permit.

to implement this requirement is called the Federal Consistency Review, and for federal activities and development projects, a Consistency Determination must be met prior to project's advancement. Evidence of the successful completion of this process is the applicant's receipt of a CCC Certification of Consistency, which must be presented to federal action agencies prior to the issuance of federal permits.

Lead Agency

The California Coastal Commission (CCC) has jurisdiction over California's "coastal zone," therefore, CCC is the lead agency within this jurisdiction and is responsible for administering the state responsibilities of the CZMA.

Review Process

CCC's strives to use the federal consistency process to provide open communication and coordination with federal agencies and applicants, as well as to provide the public with an opportunity to participate in the process. The Commission believes that this process allows it to authorize federal activities in a manner that minimizes impacts to coastal resources and is consistent with the CCMP.¹²³ The process by which a Certification of Consistency is issued is noted below:

1. Applicant must submit its consistency certification to the CCC, along with necessary data and information, which includes "a copy of the federal permit application, a detailed description of the proposal, its associated facilities, its coastal effects, comprehensive data and information sufficient to support the applicant's consistency certification, and an evaluation of the consistency of the project and its associated facilities with the enforceable policies of the CCMP.
2. The CCC reviews the Certification for completeness. Review period begins if Certification is complete; if incomplete the CCC will notify the applicant within 30 days stating that the Consistency Certification is incomplete and that the review period has not begun. CCC will identify the missing information.
3. After reviewing the applicant's consistency certification, CCC staff will prepare a report and recommendation for CCC action. If the CCC does not issue a decision within three months, it must notify the applicant and the federal agency of the status of the matter and the basis for further delay. At this point, the CCC will issue a public notice. After the public notice, during a public hearing, the CCC will decide whether to concur with or to object to the consistency certification.
4. The CCC may make one of four determinations for a project:
 - a. The CCC can conditionally concur with a consistency certification. However, if the federal-permit applicant does not agree with the conditions and does not modify the project to incorporate the conditions, then the CCC's conditional concurrence will be treated as an objection.
 - b. If the CCC objects to the applicant's consistency certification because it is inconsistent with the CCMP, it may describe alternative measures (if they exist) that would allow the CCC to concur.
 - c. If the CCC objection is based on a finding that the applicant has not supplied adequate information to assess the proposed activity's consistency with the CCMP, then the CCC will identify the additional information and the reason it is necessary.
 - d. If the CCC objects to the consistency certification, then the federal action agency cannot issue a permit or license for the proposed project. The applicant

has 30 days from receipt of an objection letter to file an appeal to the Secretary of Commerce. If the Secretary determines that the proposed activity is consistent with the objectives and purposes of the CZMA, or that the activity is necessary in the interest of national security, then the Secretary may overturn the objection and the federal action agency may issue the permit or license for the proposed project.^{xi}

In order for a project to proceed, BOEM must receive a Certification of Consistency from the applicant.

Process Time

The CCC has six months from when it receives a complete certification application to conduct its consistency review of federal licenses, permits or other authorizations. If the CCC does not issue an opinion within six months, the federal agency can presume the state's concurrence with the consistency certification.

4.3.6 Incidental Take Permit

If any species protected under the California Endangered Species Act (CESA) would be potentially impacted by a proposed project that is otherwise permitted, the applicant is advised to apply to the California Department of Fish and Wildlife for an Incidental Take Permit, which allows a prescribed amount of "incidental take" to occur without causing a violation of CESA.³² Violations of CESA can result in civil and criminal penalties, including fines of up to \$10,000 per occurrence for unpermitted take (CA. Fish and Game Code, §2583). To qualify for this permit, the Applicant must fully mitigate the impacts of the authorized take, prove that adequate funding exists to implement and monitor mitigation measures, prove that issuance of a take permit will not threaten the continued existence of a listed species, and prove that the measures are capable of successful implementation.¹²⁴ The amount of acceptable take varies according to the species impacted and the geographic and environmental context of the project.

Consultation

If the proposed project is located in federal waters, a consultation under Section 7 of the federal Endangered Species Act (ESA) will likely be required. As part of this process, the federal action agency (BOEM) reviews the project for impacts to listed species and habitat. If the federal action agency determines that impact to listed species or habitat is unlikely to occur, they will provide a recommendation to other involved resource agencies (including the CDFW) stating as such and requesting their agreement.

Resource agencies may concur with the federal determination, concur with modifications, or choose not to concur. Concurrence with modifications requires the applicant to revise the project to comply with applicable laws. If a resource agency does not concur, or if the federal action agency is unable to make a determination of no significant impact, then:

^{xi} (Note: Items 1-4 above excerpted from: http://www.oceanrenewableenergy.com/content/california-czma-federal-consistency-determination#Lead_Agency)

“the agency may request more information or require formal consultation. If a project requires formal consultation then the resource agency will develop a Biological Opinion for the project, which will provide authority for:

- (1) the incidental take of listed species (for CDFG this would likely be a permit under Fish & Game Code § 2081);
- (2) provide measures designed to avoid or minimize adverse effects; or
- (3) issue a jeopardy opinion.”¹²⁵

Mitigation Measures

Projects found to adversely impact listed species or habitats may be required to mitigate these impacts through a variety of measures, including redesign of a project, revision of the operation plan, or relocation. As each of these potential mitigation measures may have impacts to an offshore wind development’s financial feasibility, project developers are advised to consult with relevant agencies early in the design of projects to minimize any mitigation measures that may be required during the permit application process.

Process Time

Process time varies on a project-by-project basis. If review is concurrent with federal ESA consultation, “the generally anticipated process time is 4 ½ months. Federal regulations allow 135 days to complete formal consultation under § 7 of the ESA.”¹²⁵

4.3.7 Water Certification

The federal Clean Water Act of 1972 requires that states use the process identified in the Act to ensure that no federal action violates the state’s water quality standards, or may become a future source of violation. §401 Water Quality Certification (WQC) “covers construction, operation, maintenance, and decommissioning of a proposed project, and conditions of the WQC become conditions of the federal license or permit. All aspects of the project, including energy production devices and any cables in, on, or under state waters (including wetlands) are considered in the review.”¹²⁶

Lead Agency

An offshore wind energy development project that does not require Federal Energy Regulatory Commission (FERC) approval, does not involve multiple Regional Water Quality Control Boards, and does not require a state water rights license will be reviewed by the appropriate Regional Water Resources Control Board, which will act as the lead agency for the review process.

Review Process

Project applicants submit applications for a Water Quality Certification is submitted directly to the lead agency. The application must include all relevant project information, including a listing of all local, state, and federal authorizations required for the project, and must provide copies of either the actual license or permits, or applications for the authorizations.¹²⁶ If the project is subject to CEQA, the final CEQA environmental document must be provided before a WQC may be issued. While applications may be submitted prior to preparation of draft or final CEQA documentation, no permit will be issued without final CEQA documentation, and the Regional Board may reject an application without such documentation. The Board will make a decision to grant a WQC permit “after reviewing the application, all relevant data, and any recommendations from interested stakeholders.”¹²⁶

Process Time

States are provided one year to review projects under Section 7 of the Clean Water Act. However, the review process typically exceeds this timeframe due to states' lack of administrative records supporting the application. Insufficient administrative records typically stem from incomplete application materials. Should the state reject an application due to incompleteness, the one-year review period begins anew. An applicant may avoid this situation by withdrawing from the review process upon issuance of a "reasonable assurance determination" from the state, which "allows the applicant to withdraw and resubmit the application once it contains adequate information."¹²⁶

4.3.8 Interconnection Permit

Because of new generation sources' potential impacts on the electrical grid's performance, safety, and reliability, all new electricity exporting facilities must obtain permission from the grid operator (CALISO) to connect to the transmission or distribution grids per the CPUC's "Rule 21" (see page 42). To initiate this process, the Interconnection Customer (IC) must submit an application to CALISO and choose one of three options for review: Cluster Study Process, Independent Study Process (ISP), or a Fast-Track Process. Figure 11 (page 54) illustrates the options available under each of these processes. Once a project is submitted for review, it is placed in a queue with other pending projects on a first-come, first-serve basis. Fast-Track review processes are limited to projects less than 5MW in size, thus OSW development would not likely qualify for this option. An IC would need to study the particular details of a proposed OSW farm to determine if a Cluster Study Process or the ISP process is best suited for their needs. Regardless of which process is chosen, the interconnection approval process consists of 5 steps: Application Processing, Technical Scoping Meeting, Technical Studies, Interconnection Agreement, and Project Implementation. Site Exclusivity documentation, indicating that the IC has exclusive use and control of the subject site, is required at the time of application.

Cluster Study Process

Under the Cluster Study Process, projects may be submitted to CALISO during two windows, the first being March 1 – 31, and the second being October 15 – November 15. All projects received during those windows are reviewed as singular "clusters", and the net impacts to the transmission and distribution systems that is created by the clustered projects is determined by CALISO. Costs for any required system upgrades as a result of the impacts of the cluster's addition to the grid are divided amongst applications, with allocations based on the impacts of each project.

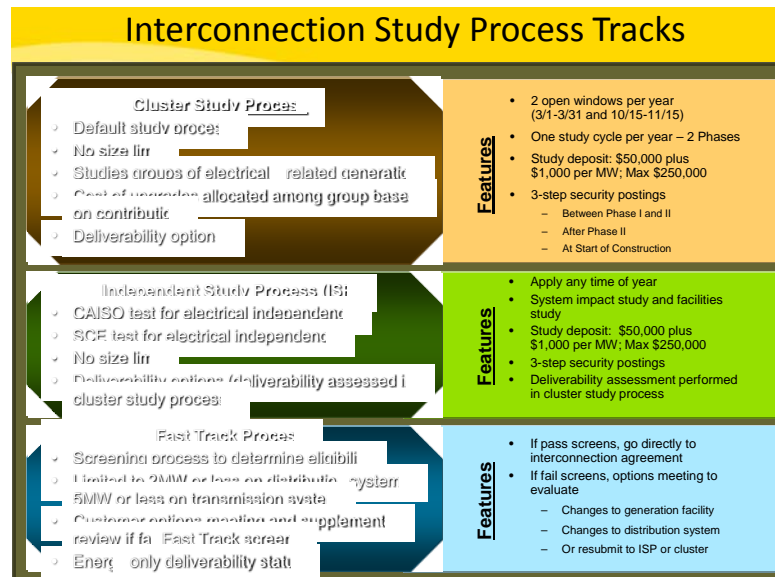


Figure 11: Interconnection Tracks (www.caiso.com)

Independent Study Process

The second option for review by CALISO is the Independent Study Process. Using this pathway, a project developer can submit their application at any point during the year. Projects are reviewed independently of other projects in the queue, and system impacts are allocated strictly on the basis of the individual project. The possible benefit of this option is decreased review time relative to the Cluster Review process, however that is not guaranteed, as the details of each project are unique.

Interconnection Costs and Timeline

In addition to assessing the technical capability of the grid to accept new sources of generation, the Interconnection Study seeks to identify costs associated with required grid upgrades resulting from the project. Applicants are required to submit security deposits with a base cost of \$50,000 and a maximum of \$250,000, depending on the size of the project. ICs seeking review using the Cluster Study process can submit a security deposit in lieu of a site exclusivity agreement. This amount is \$100,000 for projects smaller than 20MW, and \$250,000 for larger projects. Additionally, security postings must be paid to CALISO at defined points of the review process: Between Phase I and II Technical Studies, after Phase II, and at the start of construction. These postings are intended to cover the cost of grid infrastructure upgrades required as a result of the proposed project. For generators over 20MW, costs at the First Posting for Network Upgrades are the lower of A) 15% of the total cost of responsibility outlined in Phase I study, B) \$20,000 per MW, C) \$7.5 million dollars. These funds are due to CALISO within 90 days of the completion of the Phase I study.¹²⁷

The Second Posting for Network Upgrades is due 180 days after the Phase II study, and for generators over 20MW consists of the lower of: A) 30% of total cost responsibility outlined in the Phase I or Phase II study, whichever is lower; B) \$15 million dollars.¹²⁷ The Final Security Posting consists of the balance due to address 100% of network upgrades, distribution upgrades, and/or interconnection facilities at the start of construction. CALISO notes that total fees for interconnection may range from several hundred thousand dollars to hundreds of millions of dollars, depending on the size and scope of the project and its impact on the existing electrical grid.¹²⁸

Interconnection Completion

Following completion of the Technical Studies, an Interconnection Agreement is executed between the IC and IOU, and sent to FERC for review and approval. The exact nature of the facilities, infrastructure, responsibilities for construction and maintenance, and transfer of ownership are included in this agreement.¹²⁷

The final phase of interconnection, Project Implementation, consists of design, procurement and construction of facilities per the interconnection agreement. The IOU is typically responsible for the engineering, procurement, and construction of all utility-side infrastructure, while the IC is responsible for the equipment on the IC's side of the point of ownership transfer. Any facility constructed by the IC must be designed and constructed to the IOU's specifications prior to deeding the equipment to the IOU. Upon completion of the Project Implementation phase, the project begins operation, with operation and maintenance of the generating facility and transmission infrastructure occurring per the interconnection agreement.¹²⁷

4.4 Other Considerations

In addition to the laws and regulatory bodies that influence the process of obtaining a permit for an offshore wind farm in California, a number of entities exist who influence the political and technical feasibility of offshore development. While these entities do not have direct control over the permitting process, they are important actors that a project developer may interact with prior to, or during a project.

4.4.1 BOEM California Renewable Energy Task Force

BOEM Renewable Energy Task Forces are designed to assist with government decision-making within the established BOEM regulatory framework on the OCS. Task forces are assembled of government personnel from federal, state, local, and tribal organizations. A Task Force can only be created via request from the governor of the applicable state to BOEM.

The creation of a BOEM Task Force provides several benefits for developers of offshore wind energy projects and for the state. These benefits arise from the presence of a unified planning effort that reduces uncertainty, pools information assets, provides transparency to the planning process, and helps to create market efficiencies. More specifically, benefits are derived from:

- The designation of defined areas for wind energy development, and identification of areas where development will require curtailment, mitigation, or exclusion.
- The creation of NEPA reviews for portions of ocean leasable for offshore wind energy. Federal government review shifts burdens away from project developers and allows all potential bidders for projects to share common NEPA results.
- The creation of a single entity that coordinates the actions of local, state, and federal activities regarding offshore wind energy development.
- The creation of a permitting process that incorporates all relevant agencies and expertise.

California has created such task forces in the past, most recently to review the issue of liquefied natural gas shipping terminals in California. To date, the state has not requested the formation of a task force for offshore wind. Stakeholders interviewed by CalWind cited the absence of such a task force as a major hurdle to the development of an offshore wind energy industry in California.^{xii}

4.4.2 California Energy Commission

The California Energy Commission (CEC) was created by the California Legislature in 1974 and is organized within the California Natural Resources Agency. The CEC has six primary responsibilities:

- Forecasting future energy needs;
- Promoting energy efficiency and conservation by setting the state's appliance and building efficiency standards;
- Supporting public interest energy research that advances energy science and technology through research, development and demonstration programs;

^{xii} Stakeholders also cited uncoordinated state and federal action on offshore wind as an obstacle for investment in the industry.

- Developing renewable energy resources and alternative renewable energy technologies for buildings, industry, and transportation;
- Licensing thermal power plants (50 megawatts or larger);
- Planning for and directing state response to energy emergencies.¹²⁹

Although CEC is an integral part of energy planning in the state, it would have no direct jurisdictional authority over an offshore wind project in California. Research and policy recommendations put forth by CEC could impact broader state policy towards offshore wind, the Commission's support will be a vital step in building political momentum to encourage the development of offshore energy resources in California.

4.4.3 California Marine Renewable Energy Working Group

The California Marine Renewable Energy Working Group is an interagency group chaired by the California Ocean Protection Council. The California Ocean Protection Council was created pursuant to the California Ocean Protection Act (COPA) in 2004. The group consists of the:

- California Energy Commission
- California Department of Fish and Wildlife
- California State Lands Commission,
- California Coastal Commission
- California Public Utilities Commission

The goals of the group are threefold; (i) to address uncertainties in regulatory processes for marine renewable energy projects in California; (ii) address the information needs of state agencies and stakeholders to inform potential impacts and user conflicts with marine renewable energy projects; (iii) and to facilitate the development of agreements and joint state-federal committees to improve coordination of state and federal permitting processes.¹³⁰ The group has produced several guidance documents and facilitates communication between multiple stakeholders.

The California Marine Renewable Energy Working Group is separate from a BOEM State Task Force (discussed on page 56) and has no direct jurisdictional authority over an offshore wind energy project. Like the CEC, the Marine Renewable Energy Working group is an important political force whose support of offshore wind energy development will be an useful precursor to state policy in support of this resource's development.

4.4.4 West Coast Governor's Alliance on Ocean Health

The West Coast Governor's Alliance on Ocean Health (WCGA) is a multi-state regional partnership agreement between the Governors of California, Oregon, and Washington state intended to promote and protect the viability of west coast ecosystems. The agreement seeks to advance the goals of:

- Clean coastal waters and beaches
- Healthy ocean and coastal habitats
- Effective ecosystem-based management
- Reduced impacts of offshore development
- Increased ocean awareness and literacy among the region's citizens
- Expanded ocean and coastal scientific information, research, and monitoring
- Sustainable economic development of coastal communities¹³¹

WCGA has “agreed to collaborate with the BOEM, Department of Energy, Federal Energy Regulatory Commission (FERC), National Oceanic and Atmospheric Administration, and other agencies to evaluate the potential benefits and impacts of renewable ocean energy projects off the West Coast. An additional goal is to develop the planning and regulatory structure for these activities.”¹³² While the group has no formal regulatory authority, it does represent the only existing executive-level body dedicated to renewable energy policy on the west coast. Similar to the organizations noted previously, the WCGA is a potential precursor to the establishment of a BOEM Task Force in California. It also provides a coordinated, multi-state approach to offshore wind energy development.

4.4.5 California’s Renewable Portfolio Standard

The California Public Utilities Commission (CPUC) has enacted rules requiring that electric utility companies within the state obtain at least 33% of their power from renewable sources by 2020.¹³³ This requirement is known as a Renewable Portfolio Standard (RPS) and is the most aggressive in the United States with respect to attaining a high penetration of renewable energy in a relatively short period. These rules pertain to utility-scale energy generation facilities and do not include small-scale, distributed generation systems such as rooftop-mounted solar photovoltaic systems on single family homes. Offshore wind energy will qualify for the state’s RPS requirements if and when development of the resource is realized.

CPUC has statutory authority to increase RPS requirements beyond 33%. The choice to increase RPS requirement would directly impact the demand for renewable energy in the state.

4.4.5 Renewable Energy Transmission Initiative

The Renewable Energy Transmission Initiative (RETI) is a coordinated effort between the CPUC, CEC, California ISO, and the state’s publicly-owned utility companies to identify necessary transmission projects to facilitate the growth of renewable energy in the state.¹³⁴ Should offshore wind energy projects be considered on a large scale in California, transmission of the energy generated from this resource would become a significant point of analysis for RETI.

4.5 California Permitting Flowchart

Permitting an OSW project at the state level involves three main processes, as indicated below. Additionally, interaction with federal permitting activities occurs through the CZMA Consistency Determination process as well as via the Clean Air and Clean Water Acts.

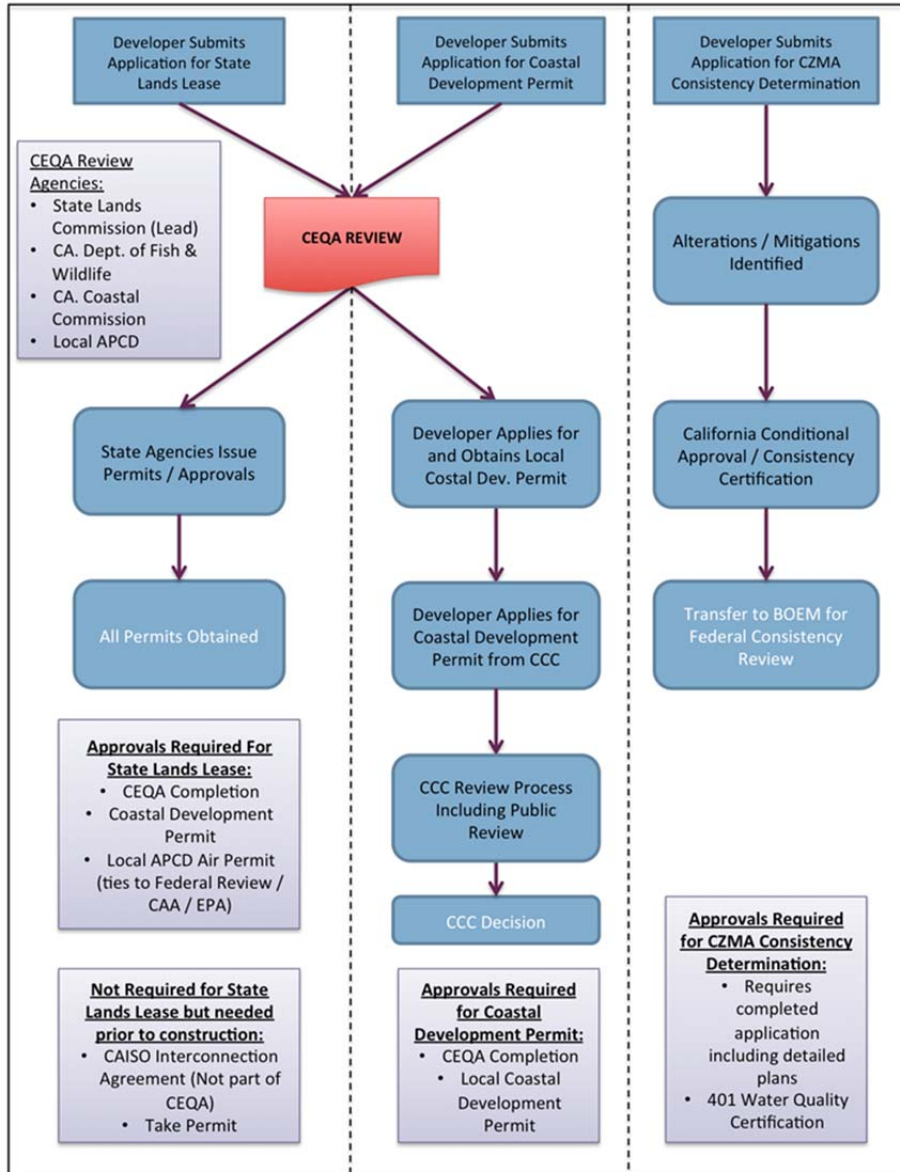


Figure 12: California Permitting Flowchart

5.0 County / Local Permitting

There are three counties within the CalWind region of interest (ROI), San Luis Obispo, Santa Barbara, and Ventura Counties. In each case, the county jurisdiction starts at the mean high tide line and extends to the end of the coastal zone. The coastal zone is defined by the respective counties' Coastal Zoning Ordinances and can vary significantly based on land uses and zoning classifications.¹³⁵⁻¹³⁷

5.1 Jurisdiction

Planning and regulation of land use comes from the tenth amendment to the U.S. Constitution, which gives police power to the states.¹³⁸ Based on this power, counties develop general plans to guide the counties' long-term planning and policy development.

County jurisdiction starts at the mean high tide line and extends inland to the county boundaries. Therefore, the only aspect of an offshore wind project that would be within the jurisdiction of the county would be the infrastructure needed to transmit energy to shore. Santa Barbara County, for example, does not currently have an enabling ordinance for such activities, so developers would need to conform to the current zoning of the chosen landfall site.^{139,xiii}

5.2 California Coastal Act

As introduced on page 36, the California Coastal Act of 1976 requires local communities to develop Local Coastal Programs (LCPs). These documents contain the ground rules for future development and protection of coastal resources. LCPs also reflect the unique characteristics of each county, while conforming to the Coastal Act goals and policies, and are reviewed for conformity by the California Coastal Commission (CCC).¹⁴⁰ In recognition of the coastal variability within counties, several counties have elected to create separate geographic segments with unique LCPs. As a result, the local permitting process is heavily dependent on the cable landfall location.

Though CCC has jurisdiction of the coastal zone, they often defer authority to counties once an LCP has been approved. In some cases, CCC retains permit jurisdiction and regulatory authority, so called "white holes," in places like wetlands and coastal estuaries.

LCPs also designate the coastal zone, or area under the jurisdiction of the applicable local codes. In the case of Santa Barbara County, the Coastal Zone, as depicted in Figure 13 and described in the LCP is governed by the Santa Barbara Article II Coastal Zoning Ordinance¹³⁷ while inland property is governed by the Santa Barbara County Land Use & Development Code (Section 35-1).¹⁴¹

5.2.1 Coastal Development Permit

In order to alter the coastal zone, a developer must obtain a Coastal Development Permit with a public hearing (formerly a special use permit), as described in the coastal zoning ordinance. According to permit documentation, a permit is necessary for major public works and energy projects, as well as for development that is proposed within the coastal zone. The hearing is fully discretionary and conducted in front of the county zoning administrator. The permitting would trigger environmental review and make the county a responsible party to the NEPA/CEQA process. Approval of this type of Coastal Development Permit may be appealed to the Board of Supervisors and ultimately CCC.

5.3 Substation Permitting

The permitting required for placement of a substation is highly dependent on its location. The county would maintain jurisdiction if the substation were constructed on a parcel within the

^{xiii} The only wind project that the County of Santa Barbara has permitted is the Lompoc Wind Energy Project which was located in AG-II zoned land.

coastal zone, or on a properly zoned parcel of the inland area. The specific regulations and permitting requirements in this instance would be determined by the zoning status of the developed parcel.

Table 2: Possible County Substation Permits

Substation Location	Applicable Regulations	Permit Required
Coastal Zone	Coastal Zoning Ordinance	Coastal Development Permit
Inland Area	Land Use Development Code	Conditional Use Permit
Utility Property	CPUC	CPUC Authorization

However, if the substation were built in the Inland Area and operated by the Utility under the authority of the California Public Utilities Commission, the county would not have jurisdiction, and no county permit would be required. Permitting efforts would be handled by the CPUC.

Process Time

According to CalWind interviews with the Santa Barbara Planning and Development Department, the permitting process would likely take several years to complete. Process time would likely be tied to the length of required wildlife studies and litigation.

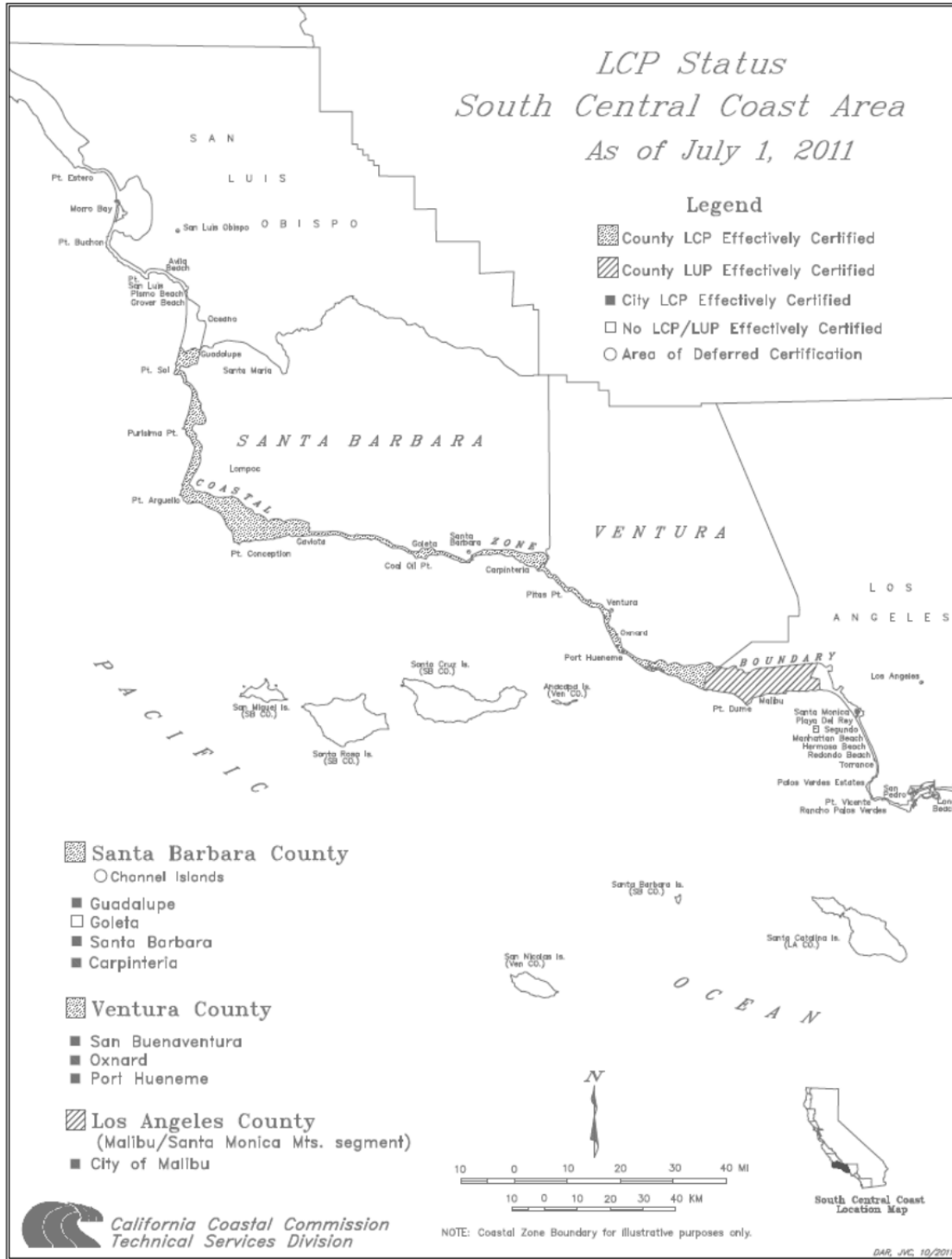


Figure 13: Local Coastal Plan Status of South Central California (From California Coastal Commission)

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