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# Wind Energy: Offshore Permitting

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SUMMARY

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**Adam Vann**
Legislative Attorney

# Wind Energy: Offshore Permitting

Technological advancement, financial incentives, and policy concerns have driven a global expansion in the development of renewable energy resources. Wind energy, in particular, is often cited as one of the fastest-growing commercial energy sources in the world. Currently, most U.S. wind energy facilities are based on land. There is just one commercial offshore wind facility in U.S. waters: the Block Island Wind Farm, located approximately three miles off the coast of Rhode Island. However, a number of other offshore projects have been proposed and are at various stages of the federal permitting process.

The United States has the authority to permit and regulate offshore wind energy development within the offshore areas under its jurisdiction. The federal government and coastal states each have roles in the permitting process, and those roles depend on whether the project is located in state or federal waters. Section 388 of the Energy Policy Act of 2005 (EPAct; P.L. 109-58) amended the Outer Continental Shelf Lands Act (OCSLA) to address previous uncertainties regarding offshore wind projects. Under the EPAct, the Secretary of the Interior has ultimate authority over offshore wind energy development. The statutory authority granted by Section 388 is administered by the Bureau of Ocean Energy Management (BOEM), an agency within the Department of the Interior. Since the passage of EPAct, BOEM has promulgated rules and guidelines governing the permitting and operation of offshore wind facilities. In addition, several federal agencies have roles to play in permitting development and operation activities.

# Contents

Jurisdiction over the Ocean ..... 1
The Coastal Zone Management Act and the Role of the States ..... 2
Federal Permitting ..... 3
The Energy Policy Act of 2005 (EPAct) ..... 4
The National Environmental Policy Act (NEPA) ..... 7
Other Statutes of Note ..... 8
Conclusion ..... 12

## Contacts

Author Information ..... 12

Technological advancements, tax incentives, and concerns about climate change have driven a global expansion in the development of renewable energy resources. Wind energy is a fast-growing source of new electric power generation, and U.S. wind energy production capacity has been increasing consistently over the past several years.[1] Currently, in contrast to Europe,[2] all but one commercial wind power facility in the United States is based on land. However, multiple offshore wind and related infrastructure projects have been proposed in recent years to the Bureau of Ocean Energy Management (BOEM).[3]

The focus of this report is the current law applicable to siting offshore wind facilities, including the relationship between state and federal jurisdictional authorities. This report also discusses court challenges to early federal offshore wind energy permitting decisions; regulatory activity following the Energy Policy Act of 2005 that clarified jurisdiction over permitting of offshore wind facilities;[4] and recent developments with respect to the existing statutory and regulatory framework for offshore wind energy production.

# Jurisdiction over the Ocean

United States authority over the oceans and its natural resources begins at the coast—often called the "baseline" in this context—and extends 200 nautical miles out to sea. This is known as the United States' Exclusive Economic Zone (EEZ). The first 12 nautical miles comprise the U.S. territorial sea.[5] Under the 1982 United Nations Convention on the Law of the Sea[6] (UNCLOS), a coastal nation may claim sovereignty over the air space, water, seabed, and subsoil within its territorial sea.[7] U.S. Supreme Court precedent and international practice establish that this sovereignty authorizes coastal nations to permit offshore development within their territorial seas.[8] Although the United States has not ratified UNCLOS, it generally acts in alignment with its terms.[9]

The U.S. contiguous zone extends beyond the territorial sea to 24 nautical miles from the baseline. In this area, a coastal nation may regulate to protect its territorial sea and to enforce its customs, fiscal, immigration, and sanitary laws.[10]

The jurisdiction of the federal government with respect to individual states is also important. The Submerged Lands Act of 1953[11] assured coastal states control over the lands beneath coastal

[1] Energy Information Administration, at https://www.eia.gov/renewable/data.php#wind.

[2] More information about European offshore wind projects can be found at https://windeurope.org/data-and-analysis/statistics/.

[3] An updated list of these leases and other documents related to offshore renewable energy projects, which are largely wind energy projects, can be found at https://www.boem.gov/renewable-energy/lease-and-grant-information.

[4] P.L. 109-58.

[5] Proc. No. 5928 (December 27, 1988).

[6] United Nations Convention on the Law of the Sea, December 10, 1982, 21 I.L.M. 1261 (entered into force November 16, 1994).

[7] UNCLOS arts. 2.1, 2.2, 3; see also United States v. California, 332 U.S. 19 (1947); Alabama v. Texas, 347 U.S. 272, 273-274 (1954).

[8] See United States v. California, 436 U.S. 32, 36 (1978); United States v. Alaska, 422 U.S. 184, 199 (1975); Alabama v. Texas, 347 U.S. 272, 273-274 (1954); United States v. California, 332 U.S. 19 (1947).

[9] See Proc. No. 5928 (December 27, 1988).

[10] UNCLOS art. 33.

[11] 43 U.S.C. §§1301-1303, 1311-1315.

waters in an area stretching three miles from the shore in most places, and nine miles in others.[12] States may regulate the coastal waters within their jurisdiction, subject to federal regulation for "commerce, navigation, national defense, and international affairs" and the power of the federal government to preempt state law.[13] The remaining outer portions of waters over which the United States exercises jurisdiction are federal waters.[14]

Thus the federal government has jurisdiction over the potential locations for offshore wind farms to the boundaries of its EEZ. The scope of this federal authority is discussed in greater detail later in this report.

# The Coastal Zone Management Act and the Role of the States

States play an important regulatory role when a wind energy project is proposed for construction in waters under both federal and state jurisdiction. As an initial matter, any wind energy project or facility associated with such a project to be constructed in state waters, including any cables that would be necessary to transmit power back to shore, is subject to applicable state regulation or permitting requirements. The federal Coastal Zone Management Act[15] (CZMA) recognizes three state regulatory frameworks that may be relevant: (1) "State establishment of criteria and standards for local implementation, subject to administrative review and enforcement"; (2) "[d]irect State land and water use planning and regulation"; and (3) regulation development and implementation by local agencies, with state-level review of program decisions.[16] Within these categories, coastal zone regulation varies significantly among the states.

In addition, the CZMA encourages states to enact coastal zone management plans to coordinate protection of habitats and resources in coastal waters.[17] The CZMA establishes a policy of preservation alongside sustainable use and development compatible with resource protection.[18] State coastal zone management programs that are approved by the Secretary of Commerce receive federal monetary and technical assistance. State programs must designate conservation measures and permissible uses for land and water resources[19] and must address various sources of water pollution.[20]

[12] *Id*. at §1301(a)(2). State jurisdiction typically extends three nautical miles (approximately 3.3 miles) seaward of the coast or "baseline." Texas and the Gulf Coast of Florida have jurisdiction over an area extending three "marine leagues" (nine nautical miles) from the baseline. 43 U.S.C. §1301(a)(2).

[13] *Id.* at §§1314(a), 1311(a)(2).

[14] *Id.* at §1302.

[15] 16 U.S.C. §§1451-1464.

[16] 16 U.S.C. §1455(d)(11).

[17] Coastal U.S. states and territories, including the Great Lakes states, are eligible to receive federal assistance for their coastal zone management programs. All eligible coastal and Great Lakes states and territories except Alaska participate in the program. See National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management, State and Territory Coastal Management Program Summaries, available at https://coast.noaa.gov/czm/mystate/.

[18] *Id*. at §1452(1), (2).

[19] *Id*. at §1455(d)(2), (9)-(12).

[20] *Id.* at §1455(d)(16).

Several states, including New Jersey, California, and Rhode Island, consolidate authority for their programs in one agency.[21] In New Jersey, for instance, the state Department of Environmental Protection (through the Coastal Management Office within the Commissioner's Office of Policy, Planning, and Science) is the lead agency for coastal zone management under several state laws.[22] The majority of states, however, operate coastal zone management programs under "networks" of parallel agencies, with various roles defined by policy guidance and memoranda of understanding (MOUs).[23] Based on a series of MOUs, each agency is obligated to issue and apply state regulations and permits consistently with the state's coastal zone management program.[24] Thus, offshore wind energy projects could be subject to comprehensive regulation with permitting authority spread among multiple state and local agencies.

Once a state program is in place, the CZMA requires that the federal government and federally permitted activities be "consistent to the maximum extent practicable with" that program.[25] Responding to a Supreme Court decision that excluded oil and gas leasing in the federal waters of the Outer Continental Shelf (OCS) from state review under the CZMA, Congress amended the "consistency review" provision to include the impacts on a state coastal zone from actions in federal waters.[26] Thus, states may participate in federal efforts to permit projects in federal waters to ensure that such projects are consistent with state coastal zone management regulation.

# Federal Permitting

The production of energy on federal and federally controlled lands, including the OCS, requires some form of permission, such as a right-of-way, easement, or license.[27] For *onshore* wind projects on federal public lands, the Department of the Interior (DOI), through the Bureau of Land Management, has created a regulatory program under the Federal Land Policy and Management Act,[28] but a federal statute expressly governing *offshore* wind energy development was not enacted until August 2005 as part of the Energy Policy Act of 2005 (EPAct). Before enactment of EPAct, some permitting in support of offshore wind energy development had taken place, but the use of the laws existing at that time proved controversial and was challenged in court. The previous regulatory regime, the conflicts it engendered, and EPAct legal authority are discussed below.

[21] See Rusty Russell, Neither Out Far Nor In Deep: The Prospects for Utility-Scale Wind Power in the Coastal Zone, 31 B.C. Envtl. Aff. L. Rev. 221, 240-241 (2004).

[22] E.g., Freshwater Wetlands Protection Act, N.J.S.A. 13:9B; Flood Hazard Area Control Act, N.J.S.A. 58:16A; Wetlands Act of 1970, N.J.S.A. 13:9A; Waterfront Development Act, N.J.S.A. 12:5-3; NJ Water Pollution Control Act, N.J.S.A. 58:10A; Coastal Area Facility Review Act (CAFRA), N.J.S.A. 13:19; Tidelands Act, N.J.S.A. 12:3.

[23] Russell, supra note 22, at 241.

[24] *Id.* at App. E.

[25] 16 U.S.C. §1456(c).

[26] *Id.*; Sec'y of the Interior v. California, 464 U.S. 312, 315 (1984).

[27] Several federal laws appear to indicate that Congress intends the OCS to be used only when permission has been expressly granted. See 43 U.S.C. §1332(1), (3) ("the subsoil and seabed of the outer Continental Shelf appertain to the United States and are subject to its jurisdiction, control, and power of disposition"); see also 42 U.S.C. §9101(a)(1) (stating that the purpose of the Ocean Thermal Energy Conversion Act is to "authorize and regulate the construction, location, ownership, and operation of ocean thermal energy conversion facilities.").

[28] 43 U.S.C. §§1701 et seq.

## The Energy Policy Act of 2005 (EPAct)

Prior to enactment of EPAct in 2005, the Army Corps of Engineers (Corps) took the lead role in the federal offshore wind energy permitting process, exercising jurisdiction under Section 10 of the Rivers and Harbors Act (RHA),[29] as amended by the Outer Continental Shelf Lands Act (OCSLA).[30] The Corps has jurisdiction under these laws to permit obstructions to navigation within the "navigable waters of the United States" and on the OCS.[31] The Corps' jurisdiction over potential offshore wind projects had never been made explicit, however.

Section 388 of EPAct sought to address some of the uncertainty related to federal jurisdiction over offshore wind energy development by amending OCSLA to establish legal authority for federal review and approval of various offshore energy-related projects. Section 388 authorized the Secretary of the Interior, in consultation with other federal agencies, to grant leases, easements, or rights-of-way on the OCS for certain activities—wind energy development among them—not authorized by other relevant statutes.[32] A memorandum of understanding between the Department of the Interior and the Federal Energy Regulatory Commission (FERC) signed in

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[29] 33 U.S.C. §§407-687. Section 10 was enacted in 1899, and its text has not changed substantively since that time. It states:

> The creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of the Army; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army prior to beginning the same.

33 U.S.C. §403.

[30] 43 U.S.C. §§1331-1356a.

[31] 33 U.S.C. §403. Corps regulations define the "navigable waters of the United States" as "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce." 33 C.F.R. §329.4. Under the RHA, navigable waters "includes only those ocean and coastal waters that can be found up to three geographic miles seaward of the coast." Alliance To Protect Nantucket Sound, Inc. v. U.S. Dep't of Army, 288 F.Supp.2d 64, 72 (D. Mass. 2003), aff'd, 398 F.3d 105 (1st Cir. 2005); see also 33 C.F.R. §329.12(a). On the OCS, however, the Corps' regulatory jurisdiction extends beyond that three-mile limit for certain purposes. 43 U.S.C. §1333(a)(1), (e).

[32] 43 U.S.C. §1337(p)(1). DOI authority to grant leases, easements, or rights-of-way on the OCS is contingent upon the permitted activities being consistent with the purposes specified by the law. The relevant property interest may only be issued if the OCS activity will:

> (A) support exploration, development, production, or storage of oil or natural gas, except that a lease, easement, or right-of-way shall not be granted in an area in which oil and gas preleasing, leasing, and related activities are prohibited by a moratorium;
>
> (B) support transportation of oil or natural gas, excluding shipping activities;
>
> (C) produce or support production, transportation, or transmission of energy from sources other than oil and gas; or
>
> (D) use, for energy-related purposes or for other authorized marine-related purposes, facilities currently or previously used for activities authorized under ... [the OCLSA], except that any oil and gas energy-related uses shall not be authorized in areas in which oil and gas preleasing, leasing, and related activities are prohibited by a moratorium.

EPAct, §388(a), adding new 43 U.S.C. §1337(p)(1)(A)-(D).

April of 2009 confirmed the exclusive jurisdiction of the Secretary of the Interior, exercised through what was then the Bureau of Ocean Energy Management, Regulation, and Enforcement,[33] over "the production, transportation, or transmission of energy from nonhydrokinetic renewable energy projects on the OCS."

EPAct also made clear that federal agencies with permitting authority under other federal laws retain their jurisdiction.[34] Thus, offshore development continues to require a Corps permit pursuant to the RHA. Federal agencies that take actions with respect to energy development must also, for example, comply with environmental review requirements and species protection laws. The legislative language does not clearly dictate which agency should take the lead role in coordinating federal permitting and responsibility for preparing analysis under the National Environmental Policy Act (NEPA).[35] However, it does suggest that DOI is charged with primary responsibility, and DOI has assumed that responsibility in practice.[36]

The law directs the Secretary of the Interior to consult with other agencies as a part of its leasing, easement, and right-of-way granting process.[37] DOI is also responsible for ensuring that activities carried out pursuant to its new authority provide for "coordination with relevant federal agencies."[38] The law also directs the Secretary to establish a system of "royalties, fees, rentals, bonuses, or other payments" that will ensure a fair return to the United States for any property interest granted under this provision.[39]

While Section 388 of EPAct provided DOI with significant flexibility in crafting a regulatory regime for offshore wind energy development, the act specifically addressed certain aspects of the process related to the grant of property interests. First, the act directed that leases, easements, and rights-of-way are to be issued on a competitive basis, subject to limited exceptions.[40] The Secretary is further authorized to provide for the duration of any property interest granted under

[33] The April 2009 MOU referenced in the text originally confirmed the exclusive jurisdiction of the Minerals Management Service (MMS) over the described projects. The jurisdiction of MMS was subsequently transferred to the Bureau of Ocean Energy, Management, Regulation, and Enforcement, and then to its successor agency for these purposes, BOEM. Similarly, many of the rulemakings or other administrative actions taken by MMS as described in this memorandum now authorize activity by or assert the jurisdiction of BOEM as the successor agency to MMS.

[34] *Id*. at §1337(p)(9).

[35] NEPA and its role in the offshore wind permitting process are discussed *infra* in the subsection entitled "Other Statutes of Note."

[36] Section 388(d) of EPAct exempted certain actions from specific Section 388 requirements. This "savings provision" states that the law does not require the resubmittal of any document that was previously submitted or the reauthorization of any action that was previously authorized with respect to a project for which, before the date of enactment of EPAct: (1) an offshore test facility has been constructed; or (2) a request for a proposal has been issued by a public authority (30 C.F.R. §585.540(c)). Thus, where a project had resulted from a public entity's request for proposals or where a project is associated with an existing offshore test facility, previously submitted documents do not need to be resubmitted and previously authorized actions do not need to be reauthorized. This provision does not seem to exempt *unauthorized* actions associated with the exempted actions, or, indeed, any other aspect of the related project, from a requirement to comply with the property interest acquisition provisions of Section 388. Thus, for example, siting and construction of an offshore data tower that was previously approved would not have to be reauthorized. However, any activity that was not authorized before EPAct's enactment on August 8, 2005, such as the construction of additional facilities, would appear to be subject to the requirements of Section 388.

[37] *Id.* at §1337(p)(1).

[38] *Id*. at §1337(p)(4).

[39] *Id.* at §1337(p)(2)(A).

[40] *Id*. at §1337(p)(3). The statute provides for two exceptions to the general requirement that a property interest issued under this provision be granted on a "competitive basis": (1) if the Secretary of the Interior determines that there is no competitive interest, or (2) if the project meets certain criteria indicating a limited scope.

this subsection and to provide for suspension and cancellation of any lease, easement, or right-of-way.[41]

In general, an offshore wind energy developer that is granted a lease, easement or right-of-way is responsible for royalties or other payments. Section 388 of EPAct also established the method for allocating those payments among states. The allocation is based upon a formula that equitably distributes to states 27% of the revenues collected by the federal government, based on the proximity of the project to the affected states' offshore boundaries.[42] The act established that states that have a "coastline that is located within 15 miles of the geographic center of the project" are entitled to a revenue share.[43] More than one state may be eligible to receive a portion of these revenues, depending upon the location of a project.

In addition, EPAct authorized considerable regulation of impacts associated with offshore development. It required the Secretary to ensure that "any activity under this subsection" be carried out in a manner that adequately addresses specified issues, including environmental protection, safety, protection of U.S. national security, and protection of the rights of others to use the OCS and its resources.[44] It also established specific financial security requirements for projects. The law requires the holder of a Section 388 property interest to "provide for the restoration of the lease, easement, or right-of-way" and to furnish a surety bond or other form of security, leaving the amount and the exact purposes to which any forfeited sums will be applied to the Secretary's discretion.[45] Further, in conjunction with the authority to require some form of financial assurance, the Secretary is empowered to impose "such other requirements as the Secretary considers necessary to protect the interests of the public and the United States."[46] Thus the Secretary, depending on how these authorities are exercised, may potentially regulate many aspects of any industry that is permitted to operate on the OCS under this subsection of the OCSLA.

EPAct also contained a provision expressly providing for a state consultative role in the permitting process. Section 388 requires the Secretary of the Interior to provide for coordination and consultation with a state's governor or the executive of any local government that may be affected by a lease, easement, or right-of-way granted under this new authority.[47] In addition, the law makes clear that it does not affect any state's claim to "jurisdiction over, or any right, title, or interest in, any submerged lands."[48]

In 2009, DOI issued a final rule establishing the permitting process and setting forth a royalty collection and allocation structure for OCS energy projects, as directed by EPAct.[49] The rulemaking authorized BOEM[50] to issue two types of OCS leases. Limited leases grant access and

[41] *Id.* at §1337(p)(5).

[42] *Id.* at §1337(p)(2)(B).

[43] *Id.*

[44] 43 U.S.C. §1337(p)(4). DOI also appears to have adopted this interpretation in a rulemaking, stating that it "interprets the authority granted in section 388(a) of the Energy Policy Act of 2005 to issue leases, easements or rights-of-way as also providing MMS authority to regulate or permit the activities that occur on those leases, easements or rights-of-way, if those activities are energy related." 70 Fed. Reg. 77345, 77346 (December 30, 2005).

[45] 43 U.S.C. §1337(p)(6).

[46] *Id*.

[47] *Id*. at §1337(p)(7).

[48] EPAct, §388(e).

[49] 74 Fed. Reg. 19,638 (April 29, 2009).

[50] *See supra* fn. 32.

operational rights to the lessee for activities related to the production of energy, including assessment and testing activities, but do not authorize production of energy products for sale or distribution.[51] Such leases generally support exploration and allow the lessee to develop a fuller proposal for energy production, potentially leading to the potential sale of a commercial lease. Commercial leases would give the lessee full rights to receive authorizations necessary to assess, test, and produce renewable energy on a commercial scale over the long-term (approximately 30 years).[52]

The rulemaking sets forth a formula for determining payment amounts, including lease payments and royalties, owed by parties participating in OCS renewable energy projects.[53] The rulemaking also establishes how federal revenues from lessees will be allocated. As mandated by EPAct, BOEM shares 27% of revenues for any project "located wholly or partially within the area extending three nautical miles seaward of State submerged lands"[54] with any "eligible state," which is defined as a "coastal State having a coastline (measured from the nearest point) no more than 15 miles from the geographic center of a qualified project area."[55] To determine each eligible state's share of those revenues, the agency uses an "inverse distance formula, which apportions shares according to the relative proximity of the nearest point on the coastline of each eligible State to the geographic center of the qualified project area."[56]

## The National Environmental Policy Act (NEPA)

NEPA requires federal agencies to take a "hard look" at, and to disclose, the environmental consequences of their actions. In general, NEPA and its implementing regulations require various levels of environmental analysis depending on the circumstances and the type of federal action contemplated. Major federal actions that are found to significantly affect the environment require the preparation of an environmental impact statement (EIS), a document containing detailed analysis of the project as proposed, as well as other alternatives, including taking no action at all. If it is uncertain whether the action will have a significant environmental impact, an agency may prepare an environmental assessment (EA) to assess the impacts of the project, and proceed to an EIS only if necessary. In general, for most offshore wind energy projects NEPA does not direct an agency to choose any particular course of action; the only purpose of an EIS is to ensure that environmental consequences are considered and made available to the public for comment.

Potential environmental impacts of offshore wind energy projects include, but are not limited to, impacts on existing resources of alternative sites in terms of physical oceanography and geology; impacts on wildlife, avian, shellfish, finfish and benthic habitat; impacts on aesthetics, cultural resources, socioeconomic conditions; and impacts on and air and water quality. Human uses such as boating and fishing may also be affected, and must be considered in a NEPA analysis.

DOI has generally used a staged NEPA review for offshore wind energy projects. This reflects the fact that many wind energy projects will have similar environmental impacts, that the impacts of activities at the exploration or assessment stages may be less significant, and that a lessee may need to develop a detailed project description for commercial leasing before the impacts of the

[51] 30 C.F.R. §585.112.

[52] *Id.* at §585.235.

[53] *Id.* at §§585.500 *et seq*.

[54] 43 U.S.C. §1337(p)(2)(B).

[55] 30 C.F.R. at §§585.112, 585.540(a), 585.542.

[56] *Id.* at §585.540(c).

full project may be known. DOI began this staged review process in late 2007, publishing the Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf.[57] Among other things, this document establishes a baseline analysis that helps to satisfy the requirements of NEPA for offshore renewable energy leasing, including offshore wind projects. The agency made it clear at that time that "additional environmental review pursuant to the NEPA will be required for all future site-specific projects on the OCS."[58]

For the most part, site-specific reviews to date have taken the form of an EA.[59] However, the filing of a "construction and operation plan" for commercial activity by a lessee necessitates a separate NEPA analysis that will "likely take the form of an Environmental Impact Statement (EIS)."[60] Indeed, BOEM prepared a Draft EIS for the Construction and Operation Plan submitted by Vineyard Wind for an 800 megawatt facility in 2018.[61]

## Other Statutes of Note[62]

In addition to the role interested parties and cooperating agencies may play under NEPA, certain federal agencies have independent sources of jurisdiction over specific ocean resources. Some of the most relevant authorities are the Endangered Species Act (ESA),[63] the Marine Mammal Protection Act (MMPA),[64] and the Migratory Bird Treaty Act (MBTA).[65] The agencies that administer those statutes do not have final authority over leasing decisions, but are likely to be involved in the environmental review process leading to a final DOI decision.

Briefly, each of these laws sets parameters for federal activities that potentially harm designated species of plants and animals. Offshore wind energy projects may impact marine species due to their obstructive, noise, or water quality impacts, and they may impact avian species primarily as a navigational hazard (i.e., birds striking wind turbine blades in motion).

[57] Document available at https://www.boem.gov/renewable-energy/guide-ocs-alternative-energy-final-programmatic-environmental-impact-statement-eis.

[58] *Id.*

[59] See, *e.g.*, Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf (OCS) Offshore Rhode Island and Massachusetts- Notice of Availability of a Revised Environmental Assessment and Finding of No Significant Impact, 78 Fed. Reg. 33908 (June 5, 2013); Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf (OCS) Offshore New Jersey, Delaware, Maryland, and Virginia- Notice of Availability (NOA) of an Environmental Assessment (EA) and Finding of No Significant Impact, 77 Fed. Reg. 5560 (Feb. 3, 2012).

[60] Commercial Wind Leasing and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts; Notice of Intent to Prepare an Environmental Assessment, 77 Fed. Reg. 5830 (Feb. 6, 2012).

[61] Notice of Intent to Prepare an Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts, 83 Fed. Reg. 13777 (March 30, 2018).

[62] CRS Legislative Attorneys Linda Tsang and Erin Ward assisted with the preparation of this section.

[63] 16 U.S.C. §§1531-1544.

[64] 16 U.S.C. §§1361-1407.

[65] 16 U.S.C. §§703-712.

The ESA prohibits any person, including private entities and government agencies, from "tak[ing]" an endangered species.[66] This prohibition may be extended to "threatened" species.[67] *Take* is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct."[68] Additionally, a federal agency undertaking an action, such as issuing a permit that could affect a listed species or its critical habitat, is subject to Section 7 of the ESA. Section 7 of the ESA requires that federal agencies ensure that their actions do not jeopardize listed species or adversely modify or destroy critical habitat.[69] To comply with this obligation, the act requires federal agencies to consult with the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS or NOAA Fisheries), depending upon the species affected, about the potential effect of their actions on listed species and critical habitat.[70]

The Section 7 consultation process begins with a determination, with the help of the Services, that a listed species or its designated critical habitat may be present in a project area.[71] If a listed species or critical habitat may be present, then the "action agency" (in this context, DOI, as it considers acting on a permitting decision) must prepare a biological assessment, evaluating the potential effects of the action on the listed species and critical habitat.[72] If the acting federal agency determines that a project may adversely affect a listed species or critical habitat, it must undertake formal consultation with the Services, which concludes with a biological opinion.[73] The biological opinion, which is prepared by FWS or NMFS as appropriate, contains a detailed analysis of the effects of the agency action and determines whether the proposed action is likely to (1) jeopardize the species or (2) destroy or adversely modify its critical habitat.[74]

Projects that may take listed species but will not jeopardize its survival may proceed, subject to certain terms and conditions called "reasonable and prudent measures."[75]Any such biological opinion includes an "incidental take statement" that allows the agency to move forward with the action or lease that will result in take of some individuals of a listed species without triggering penalties under the act. The term *incidental* means the harm occurs as part of, but is not the purpose of, carrying out an otherwise lawful activity.[76] The incidental take statement specifies the

[66] Under the ESA, species are listed as either "endangered" or "threatened" based on the risk of their extinction. An "endangered" species is "any species which is in danger of extinction throughout all or a significant portion of its range." A "threatened" species is "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." 16 U.S.C. §§1532(6), (20).

[67] 16 U.S.C. §1533(d).

[68] 16 U.S.C. §1532(19).

[69] 16 U.S.C. §1536(a)(2).

[70] *Id.* §1536(a)(2). For more on the consultation process, see CRS Report R46677, *The Endangered Species Act: Overview and Implementation*, by Pervaze A. Sheikh, Erin H. Ward, and R. Eliot Crafton.

[71] 16 U.S.C. §1536(c)(1); 50 C.F.R. §402.12(c). It should also be noted that some protections also attach to species proposed for listing and critical habitat proposed for designation. 16 U.S.C. §1536(a)(4). Federal agencies must "confer" with the appropriate Secretary if their actions are likely to jeopardize the continued existence of any proposed species or adversely modify critical habitat proposed for designation. *Id.* This process is distinct from the Section 7 consultation process, less formal, and meant to assist planning early in the process should the species be listed and more definite protections attach. *See* 16 U.S.C. §1536(a)(4); 50 C.F.R. §402.10.

[72] 16 U.S.C. §1536(c); 50 C.F.R. §402.12(b), (d).

[73] 16 U.S.C. §1536(b); 50 C.F.R. §402.14(e).

[74] 16 U.S.C. §1536(b)(3); 50 C.F.R. §402.14(h).

[75] 16 U.S.C. §1536(b)(4); 50 C.F.R. §402.14(i).

[76] 16 U.S.C. §1539(a)(1)(B).

anticipated amount of incidental take from the action, and any take consistent with the incidental take statement's terms and conditions is not considered a prohibited taking.[77]

The MMPA prohibits, with certain exceptions, taking marine mammals in U.S. waters and by persons and vessels subject to U.S. jurisdiction on the high seas. The statute is jointly administered by the Secretary of Commerce (through NOAA/NMFS) and the Secretary of the Interior (through FWS).[78] The MMPA allows the Services to authorize the incidental taking of small numbers of marine mammals for a period of not more than five consecutive years.[79] Such incidental take may be authorized only upon certain findings, in particular that the take will have a *negligible impact* on the species or stock.[80]

Implementing regulations establish procedures for administering the MMPA, including how to apply for authorization for incidental takes.[81] These regulations set forth the procedures for submitting requests for such authorization to the NMFS or FWS, standards for review, and the form of the authorization.[82]

The MBTA is the domestic law that implements U.S. obligations under separate treaties with Canada, Japan, Mexico, and Russia for the protection of migratory birds.[83] The MBTA generally prohibits the taking, killing, possession, or transportation of, and trafficking in, migratory birds, their eggs, parts, and nests unless authorized by a permit. The rotating turbines of wind energy projects may unintentionally cause this type of harm to migratory bird species. To the extent this prohibition applies to the incidental take of migratory birds by the operation of permitted wind energy facilities, the Secretary of the Interior is authorized to determine if, and by what means, the taking of migratory birds should be allowed.[84]

FWS regulations at 50 C.F.R. Section 21 establish permitting requirements for various purposes and provide for several specific types of permits, such as import and export permits, banding and marking permits, and scientific collection permits.[85] More general permits for special uses are also provided for under the regulations, although an applicant must make "a sufficient showing of benefit to the migratory bird resource, important research reasons, reasons of human concern for individual birds, or other compelling justification."[86] However, unlike the ESA and the MMPA, the MBTA does not explicitly authorize the incidental taking of birds related to a lawful activity, such as by a wind energy project.[87]

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[77] 16 U.S.C. §1536(b)(4), 1536(o)(2); 50 C.F.R. §402.14(i)(1)(i)-(v).

[78] The statute defines *Secretary* as the Secretary of the department in which NOAA is operating (Commerce) for purposes of regulation related to all members of the order Cetacea (whales and porpoises) and all members, except walruses, of the order Pinnipedia (seals). The statute defines *Secretary* as Secretary of the Interior (operating through the FWS) with respect to all other marine mammals (manatees, dugongs, polar bears, sea otters, and walruses). 16 U.S.C. §1362(12)(A).

[79] 16 U.S.C. §1371(5)(A).

[80] 16 U.S.C. §1371(5)(A)(i).

[81] 50 C.F.R. Part 18 (FWS regulations); 50 C.F.R. Part 216, Subpart I (NMFS regulations).

[82] 50 C.F.R. §18.27; 50 C.F.R. §§216.31–216.47.

[83] Birds that receive protection under the MBTA are listed at 50 C.F.R. §10.13.

[84] 16 U.S.C. §704.

[85] 50 C.F.R. §§21.11-21.26.

[86] *Id.* at §21.27.

[87] To address some of the uncertainty regarding incidental takes and compliance with the MBTA, in 2015, the FWS announced that it was considering developing an MBTA permitting program to authorize incidental takes of migratory birds. Migratory Bird Permits: Programmatic Environmental Impact Statement; Notice of Intent, 80 Fed. Reg. 30,032,

Due to the FWS's changing interpretations of the MBTA, it is unclear how the MBTA prohibitions apply to incidental taking of migratory birds from offshore wind energy projects. In 2017, the DOI Solicitor issued a legal opinion, concluding that the "MBTA's broad prohibition on taking and killing migratory birds by any means and in any manner includes incidental taking and killing." The legal memorandum noted that this broad interpretation included "take that is incidental to industrial or commercial activities."[88] Under the Trump Administration, the FWS withdrew and replaced its 2017 memorandum[89] and issued a rule on January 7, 2021 that concluded that the "MBTA does not prohibit incidental take, including any resulting from wind-energy facilities."[90] However, under the Biden Administration, the FWS delayed the effective date of the rule until March 8, 2021 to review the rule and seeks public comment on the rule and whether to extend further the effective date of the rule.[91]

With the delay and pending review of the 2021 rule, it is not clear that the permitting process under current regulations is either required or available to authorize the take of migratory birds by wind energy projects.[92] However, closely related contexts may provide some guidance on this issue. For example, the FWS is authorized to issue 30-year permits for projects with a low risk of taking bald or golden eagles under the Bald and Golden Eagle Protection Act.[93] Also, the FWS has adopted voluntary guidelines for minimizing the wildlife impacts from wind energy turbines, although the guidance is directed at land-based projects.[94] Although compliance with these voluntary guidelines does not shield a company from prosecution for MBTA violations, "the Office of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals, companies, or agencies who have made good faith efforts to avoid the incidental take of migratory birds."[95]

30,035 (May 26, 2015) (noting that the FWS was considering "whether a general conditional authorization can be developed for hazards to birds related to wind energy generation"). However, in 2018, the FWS announced that it was no longer pursuing the action). Migratory Bird Permits; Programmatic Environmental Impact Statement, Announcement, 83 Fed. Reg. 24,080 (May 24, 2018).

[88] Memorandum M–37041 from Solicitor, Dir., DOI, to Dir., FWS (Jan. 10, 2017), *withdrawn and replaced* by Memorandum M–37050 from Principal Deputy Solicitor, DOI, to Sec. DOI (Dec. 22, 2017).

[89] Memorandum M–37050 from Principal Deputy Solicitor, DOI, to Sec. DOI (Dec. 22, 2017), vacated by *Nat. Res. Def. Council, Inc. v. U.S. Dep't of the Interior*, 478 F. Supp. 3d 469 (S.D.N.Y. 2020),

[90] Regulations Governing Take of Migratory Birds, Final Rule, 86 Fed. Reg. 1134 (Jan. 7, 2021) (codifying DOI Solicitor's Opinion M–37050) (setting an effective date of February 8, 2021).

[91] Regulations Governing Take of Migratory Birds; Delay of Effective Date, 86 Fed. Reg. 8715 (Feb. 9, 2021).

[92] See 69 Fed. Reg. 31074 (June 2, 2004) ("Current regulations authorize permits for take of migratory birds for activities such as scientific research, education, and depredation control. However, these regulations do not expressly address the issuance of permits for incidental take."). The DOI Solicitor Opinion M-37041, which concluded that the MBTA's prohibition applies to incidental taking, is back in force since the federal district court vacated M-37050 (which suspended and placed M-37041) and the 2021 rule that codified M-37050 is now delayed pending review of the rule.

[93] 16 U.S.C. §§668-668d; 50 C.F.R. §22.26.

[94] U.S. Fish and Wildlife Service, Interim Guidance on Avoiding and Minimizing Wildlife Impacts from Wind Turbines (May 2003) (available at http://www.fws.gov/windenergy/).

[95] *Id.* at 6.

# Conclusion

Interest in developing offshore wind energy resources continues to grow, and a number of projects are in various stages of development. The legal and regulatory framework to manage the issuance of permits for offshore development in its territorial sea and on the Outer Continental Shelf is still developing. The EPAct of 2005 was an important step in defining that framework, as it amended OCSLA to provide DOI with authority to grant offshore property interests for the purpose of wind energy development (exercised through BOEM). Additional laws that predate the 2005 EPAct enactment continue in force and also appear likely to remain a source of regulation. Further, states have a role under existing federal law in permitting offshore wind energy development, including ensuring that the projects are consistent with their plans for management of coastal zones.

## Author Information

Adam Vann
Legislative Attorney

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