

SUMMARY CHART: APPLICABLE REGULATION OF OFFSHORE ALTERNATIVE ENERGY USES

(current as of 6/30/2006)

Applicable Laws & Regulations	OTEC	Wave Energy Conversion, Current and Tidal	Offshore Wind
<p>Agency w/ primary permitting authority for offshore renewable projects on state submerged lands, <i>i.e.</i>, lands beneath waters lying three miles from shore, <i>except</i> off the coast of Texas and West Florida, where state submerged lands extend ten miles from shore.</p>	<p>NOAA, pursuant to OTEC Act, 42 U.S.C. § 9111 (“no person shall engage in the ownership, construction or operation of an OTEC facility...[located in the waters of the United States] except with a license issued [by NOAA].</p> <p>Even after Energy Policy Act of 2005, NOAA retains jurisdiction over OTEC projects located on OCS.</p>	<p>FERC, pursuant to Federal Power Act, 16 U.S.C. § 817(1) (“it shall be unlawful for any person...for the purpose of developing electric power, to construct, operate or maintain any dam...reservoir, power house or other works...across navigable waters of the United States or upon any part of public lands or reservations of the United States...except in accordance with a license...[issued by FERC]. FERC has determined that a wave energy buoy is a hydro project with a “power house” over which it has jurisdiction. <u>See Aqua Energy</u>, 102 FERC ¶ 61,242 (2003) . Likewise, FERC has jurisdiction over tidal and current projects up to three miles offshore; numerous entities have sought preliminary permits and licenses for tidal projects from FERC.</p>	<p>Unclear. Either, the Corps of Engineers, pursuant to Section 10, Rivers and Harbors Act, 33 U.S.C. § 403 (“it shall not be lawful to build...any...structure in any.... other water of the United...except on plans recommended by the Chief of Engineers and authorization by the Secretary of the Army...”) <i>and/or</i> state siting agency will exercise or share lead jurisdiction over offshore wind farms on state submerged lands.</p>

Applicable Laws & Regulations	OTEC	Wave Energy Conversion, Current and Tidal	Offshore Wind
<p>Agency w/ primary permitting authority for offshore renewable projects on Outer Continental Shelf Lands, <i>i.e.</i>, lands controlled by the United States, beyond three miles from shore, <i>except</i> off the coast of Texas and West Florida, where OCS begin ten miles from shore.</p>	<p>NOAA, pursuant to OTEC Act, 42 U.S.C. § 9111 (“no person shall engage in the ownership, construction or operation of an OTEC facility...[located in the waters of the United States] except with a license issued [by NOAA].</p> <p>Even after Energy Policy Act of 2005, NOAA retains jurisdiction over OTEC projects located on OCS.</p>	<p>Unclear. In <u>Acqua Energy</u>, 102 FERC ¶ 61,242 (2003), FERC asserted jurisdiction over wave energy projects up to 12 miles out (and under FERC’s reasoning, FERC jurisdiction would extend to limits of EEZ).</p> <p>However, Energy Policy Act of 2005 amended Section 8(p) of the OCS Lands Act to authorize MMS to lease OCS lands for alternate energy projects, including offshore wind, wave, tidal and current. MMS contends that the amendment to Section 8(p) makes MMS the lead agency for wave, current and tidal on OCS, but FERC continues to assert jurisdiction under the Federal Power Act.</p> <p>Status as of 6/06: agencies are negotiating at “upper levels” to resolve jurisdictional overlaps and lead agency status.</p>	<p>MMS, pursuant to Section 8(p) of the OCSLA, as amended by Energy Policy Act of 2005 has lead agency status over offshore wind on OCS.</p> <p>Historic Note: Prior to 2005, Corps of Engineers had lead agency status over offshore wind projects on OCS by default, under Section 10 of the Rivers and Harbors Act. Both Capewind and LIPA filed for Section 10 permits. MMS has now taken over permitting for the CapeWind and LIPA projects.</p>
<p>OTEC Act, 42 USC § 9111</p>	<p>The OTEC Act was specifically enacted to establish a comprehensive licensing scheme for OTEC plants. NOAA promulgated regulations governing applications (15 C.F.R. Part 981) but withdrew them in 1996 due to a lack of OTEC applicants. <u>See</u> FR 2969-2971 (January 30, 1996)</p>	<p>OTEC Act does not apply.</p>	<p>OTEC Act does not apply.</p>

Applicable Laws & Regulations	OTEC	Wave Energy Conversion, Current and Tidal	Offshore Wind
Section 10 Rivers and Harbors Act, 33 U.S.C. § 403 permit	Yes. Plants are a potential obstruction to navigation.	<p>No. Corps regs provide that FERC license obviates the need for a Section 10 permit. 33 CFR § 221.f</p> <p>Note: If developers employ the Verdant exemption, <i>below</i>, they may need to obtain a Section 10 permit</p>	Yes, Section 10 permit required.

<p>Federal Power Act - FERC license requirements</p>	<p>No. OTEC Act establishes licensing alternative to FERC jurisdiction.</p>	<p>Yes. FERC classified an ocean wave energy conversion system as a hydro project, because it uses water to generate electricity and also, that the buoy where generation takes place is a "powerhouse." FERC's definition will likely apply to any similar technologies which use ocean water, such as tidal, current and variations of wave energy conversion systems.</p> <p>Caveat: In 2005, FERC created the "Verdant exemption," which allows developers to deploy wave and tidal projects on an experimental basis, for a limited time frame (the Verdant exemption was for 18 months) provided that developers do not impact commerce by selling power to the grid and deploy projects to gather data for licensing.</p>	<p>No. Offshore wind uses air, not water so it would not fall within the definition of "hydro" and be subject to FERC license requirements. But if a wind developer seeks to add a wave energy component to the project, that project would likely be subject to FERC regulation.</p>
--	---	---	---

<p>Does agency with jurisdiction have special procedures or exemptions in place for “demo projects?”</p>	<p>NOAA regulations on OTEC exempted demo projects qualified by the Department of Energy as well as non-permanent OTEC test platforms.</p>	<p>Verdant exemption, a limited exemption from licensing to gather data. But project must comply with all other state and federal permit requirements.</p> <p>Also, FERC allows for “exemptions” from licensing but licensee still must comply with FERC regulations unless it can get a waiver. Not fully clear if exemptions will apply to ocean projects; will need to argue that they utilize “natural water feature,” they must be smaller than 5 MW to qualify and owner must obtain all property rights to occupy lands.</p> <p>Also, potential exemption from license where federal entity like Navy sites builds project on its own military base.</p> <p>Finally, for projects on OCS, MMS is exploring exemptions for demonstration projects in rulemaking.</p>	<p>No. But MMS may explore exemptions for demos in rulemaking.</p>
<p>Applicable Standard for agency’s issuance of license or permit.</p>	<p>NOAA can issue an OTEC license where project is in national interest, will comply with applicable laws and after consultation with other federal agencies sharing jurisdiction.</p>	<p>In issuing a license, FERC must give “equal consideration” to environmental and energy concerns (Sec. 4(e) FPA, 16 U.S.C. § 797) and be “best adapted to a comprehensive plan for developing a waterway, for protecting fish and wildlife and for other beneficial uses such as recreation, irrigation, water supply.) Sec. 10 (a) FPA, 16 U.S.C. § 803(a).</p>	<p>In issuing a Section 10 permit, the Corps must determine that a project must meet environmental requirements, applicable laws, not pose an obstruction to navigation and satisfy the public interest. 33 C.F.R. § 322.2.</p>
<p>Section 8(p) of Department of Interior Outer Continental Shelf Leasing Program (43 U.S.C. § 1331-§ 1337</p>	<p>Does not apply. OTEC licensing statute governs.</p>	<p>Applies. Wave and tidal energy developers on OCS will need lease for projects, even if FERC has lead agency jurisdiction.</p>	<p>Applies to offshore wind projects on OCS, per Energy Policy Act 2005 amendments to Section 8(p) of OCSLA.</p>

<p>Corps of Engineers 33 U.S.C. § 404 (“Section 404 “dredge and fill” permit</p>	<p>Likely required at least for transmission lines.</p>	<p>Generally required for FERC projects, but only applicable up to three mile offshore limit.</p>	<p>Likely required but only applicable up to 3 mile offshore limit.</p>
<p>Clean Water Act “discharge” permit, 33 U.S.C. §1251-1387 (required for discharge of pollutants which includes sand, rocks, chemical waste but not water. Discharge permit is required even where there’s only a possibility of discharge.</p>	<p>For systems using ammonia as working fluid, discharge permit might be required since potential release of ammonia could be considered “chemical waste.”</p>	<p>Not likely.</p>	<p>Not likely.</p>
<p>Section 401 Water Quality Certificate, 33 U.S.C. § 1341 (requiring applicants for federal license to conduct any activity which may result in any discharge, including water, to obtain a water quality certificate. Only applies to projects which emit discharges up to three miles from shore.</p>	<p>Unlikely to discharge.</p>	<p>Depends on location and technology. Certain tidal or current projects could be construed as “discharging” water. But Section 401 only applies to those which discharge up to three miles from shore.</p>	<p>No. No discharges likely.</p>
<p>Coast Guard Regulations - “hazards to navigation” (33 C.F.R. Part 62,64, 66)</p>	<p>Yes.</p>	<p>Yes.</p>	<p>Yes.</p>
<p>FAA regulations affecting navigable airspace. 14 C.F.R. Part 77.</p>	<p>No.</p>	<p>No.</p>	<p>Likely, though ultimately dependent upon height of structure.</p>
<p>National Environmental Policy Act, 42 U.S.C. § 4332(c) - requires preparation of environmental impact statement for “major federal actions significantly affecting the quality of the human environment.” Agency must first prepare Environmental Assessment (EA) to determine if EIS is needed. EA and EIS must consider alternatives (no-build, alternative location) and variety of socio-economic, environmental, cultural impacts.</p>	<p>Will need EA or EIS.</p>	<p>Will need EA or EIS. Federal Power Act allows licensees to retain “third party contractors” on agency’s approved list to prepare EA or EIS.</p>	<p>Will need EA or EIS.</p>

<p>Coastal Zone Management Act, 16 U.S.C. § 1374 (coastal states with approved CZM plan must issue a “consistency finding” that proposed project is consistent with state’s CZM plan. Secretary of Commerce can consider whether overrule state’s inconsistency finding if applicant seeks review).</p>	<p>Yes, applies.</p>	<p>Yes. License will not be issued without consistency finding. <u>See Mt. Rhythm Reservoir v. FERC</u>, 2002 U.S. App. LEXIS 17585 (Ninth Circuit August 23, 2002) (affirming denial of license where state does not issue a “consistency finding under CZMA)</p>	<p>Yes. CZM consistency finding required.</p>
<p>National Historic Preservation Act, 16 U.S.C. § 470 (for protection of historic resources; consultation with state historic preservation agencies)</p>	<p>Yes, must be taken into account if such resources are affected.</p>	<p>Yes, must be taken into account if such resources are affect.</p>	<p>Yes, must be taken into account if such resources are affect.</p>
<p>Fish and Wildlife Coordination Act, 16 U.S.C. § 661 (requires consultation with federal and state fish and wildlife agencies where federal project impacts a body of water)</p>	<p>Yes.</p>	<p>Yes. In addition, FERC has its own independent consultation requirements under Section 10(j) of the Federal Power Act.</p>	<p>Yes.</p>
<p>Endangered Species Act, 16 U.S.C. § 1531. Section 7 of ESA requires consultation with Secretary of Interior prior to a project to determine if endangered species may be present</p>	<p>Yes.</p>	<p>Yes, applies.</p>	<p>Yes, applies.</p>
<p>Marine Mammals Protection Act 16 U.S.C. § 1361-1407 (prohibits harassment, hunting or capture of depleted endangered marine mammals)</p>	<p>Only if projects will “harass” marine mammals.</p>	<p>Applies only if project will “harass” marine mammals.</p>	<p>Applies only if project will “harass” marine mammals.</p>
<p>Lease for use of state lands underwater (per Submerged Lands Act, state lands extend three miles offshore 43 U.S.C. 1301),</p>	<p>Depends on plant location. At a minimum land lease would be required for transmission lines to shore.</p>	<p>Depends on plant location. At a minimum land lease would be required for transmission lines to shore. Also, under FPA, 16 U.S.C. § 814, licensee has power of eminent domain which could possibly be used to acquire state lands. <i>Note: eminent domain authority has never been tested for</i></p>	<p>Depends on plant location. At a minimum land lease would be required for transmission lines to shore.</p>

Summary of Applicable Regulations for Various Offshore Renewables Regulations - p. 8

<p>State power project siting permits (also called "Certificate of Public Necessity and Convenience). Typically, smaller projects are exempt from this requirement but depends on state law.</p>	<p>Not clear whether OTEC license obviates need for siting permit.</p>	<p>No. FERC licensing process preempts state siting laws.</p>	<p>Likely required, depending on project size.</p>
<p>Various other state environmental statutes (wetlands protection, waterfront revitalization, coastal erosion).</p>	<p>Likely applicable.</p>	<p>Must be followed but where FERC recommended conditions differ from state, FERC can in some instances preempt state requirements.</p>	<p>Must be followed.</p>
<p>Production tax credits, Section 45 IRS Code and REPI (REPI is payment to muni in lieu of tax credits)</p>	<p>No PTC, possibly REPI</p>	<p>No PTC, yes REPI.</p>	<p>Yes, offshore wind qualifies for PTC(1.9 cents/kw) for wind, also for REPI.</p>