

## 1 INTRODUCTION

### 1.1 PURPOSE AND NEED

The proposed action analyzed in this final programmatic Environmental Impact Statement (EIS) is the establishment of the Minerals Management Service (MMS) Alternative Energy and Alternate Use Program on the Federal Outer Continental Shelf (OCS) through rulemaking. The Energy Policy Act of 2005 (EPAAct) amended Section 8 of the OCS Lands Act (OCSLA), 43 USC 1337, to give the Secretary of the U.S. Department of the Interior (USDOI) authority to issue a lease, easement, or right-of-way on the OCS for activities that are not otherwise authorized by the OCSLA, or other applicable law, if those activities:

- Produce or support production, transportation, or transmission of energy from sources other than oil and gas; or
- Use, for energy-related purposes or other authorized marine-related purposes, facilities currently or previously used for activities authorized under the OCSLA, 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.

Subsection 8(p) of the OCSLA (42 USC 1337(p)) requires that the Secretary, in consultation with other relevant agencies, develop and issue any necessary regulations to implement its new authority. The Secretary delegated this authority to the Director of the MMS.

The purpose of this action is to develop a regulatory program implementing the MMS's new authority pursuant to subsection 8(p) of the OCSLA. Agency action is needed in order to provide for efficient and orderly regulation of alternative energy projects on the Federal OCS, as well as alternate use of structures for other energy and marine-related activities. The proposed action is also needed to augment and diversify the nation's energy supplies and to allow conversion of existing structures to other purposes in an environmentally sound manner.

### 1.2 PURPOSES OF THIS PROGRAMMATIC EIS

This programmatic EIS was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), 42 USC 4321 et seq., the Council on Environmental Quality (CEQ) regulations, 40 CFR Parts 1500–1508, and Part 516 of the USDOI's Departmental Manual. This is a programmatic EIS because it evaluates the potential effects of a broad agency action (i.e., the establishment of the MMS Alternative Energy and Alternate Use Program). The NEPA process of developing an EIS is intended to help public officials make decisions based on a thorough discussion of environmental consequences and take actions that protect, restore, and enhance the environment.

The MMS chose to prepare this programmatic EIS to provide an examination of the potential impacts of the activities that could result from establishment of the MMS Alternative Energy and Alternate Use Program—from initial site characterization through decommissioning. This new alternative energy program involves new technologies, many of which are in the early stages of development. Consequently, this EIS has limited the scope of the analysis to technologies and activities likely to be initiated in the foreseeable future—5 to 7 years (2007–2014). While wind energy technologies are more advanced and have been employed onshore domestically and onshore and offshore outside of the United States, other potential alternative energy technologies are still in the testing phase. The experience with the environmental consequences of the technologies is limited in many cases and, therefore, site-specific environmental reviews will be required. Initiating a programmatic EIS at this stage allows the public to engage in an early dialogue with the MMS concerning important environmental issues.

In completing this programmatic EIS, the MMS has also been able to identify initial policies and best management practices (BMPs) that it will consider as mitigation measures. As the program matures, the BMPs may be modified and/or new mitigation measures developed. Similarly, other environmental assessments that are more focused on specific regions, areas, or technologies may be required.

Under the proposed action, the MMS would develop proposed rules for public comment that would establish the framework for issuing leases, easements, and rights-of-way for alternative energy and alternate use activities on the OCS. While this programmatic EIS will inform MMS efforts to develop the proposed rules, the purpose of this EIS is not to provide the required NEPA analysis for rulemaking. The MMS will later conduct the required NEPA analysis for rulemaking, which may tier off of this current EIS.

### **1.3 SCOPE OF THE ANALYSIS**

The scope of an EIS refers to the range of actions, alternatives, and impacts considered. Scope is generally determined in a two-part process, consisting of gathering and review of public comments (public scoping) and internal agency research on the appropriate alternatives and issues to be included in the EIS. Public scoping includes requests for comments from Federal, State, and local agencies as well as stakeholder organizations and members of the general public. This section summarizes the public scoping conducted for this EIS (Section 1.3.1) and discusses the included regions, alternative energy technologies, and alternatives that resulted from the internal and public scoping process (Section 1.3.2).

#### **1.3.1 Public Scoping**

A Notice of Intent (NOI) to prepare the *Outer Continental Shelf Renewable Energy and Alternate Use Programmatic EIS* was published in the *Federal Register* on May 5, 2006 (71 FR 26559). The NOI invited interested members of the public to provide comments on the scope and objectives of the EIS. The NOI stated that the EIS would focus on the potential

environmental effects of the National Offshore Alternate Energy-Related Use (AERU) program and related rulemaking, and invited public comments on the significant issues, alternatives, and mitigation measures to be considered. While the MMS's proposed program is currently styled as "Alternative Energy and Alternate Use," the proposed program is intended to address the statutory authority granted by Section 388 of the EPO Act, which is titled "Alternate Energy-Related Uses on the Outer Continental Shelf." The NOI announced that the scoping period for the programmatic EIS was open until July 5, 2006.

Public scoping meetings were held at 10 locations in May and June 2006: Herndon, Virginia (May 18); Trenton, New Jersey (May 23); Austin, Texas (May 23); Melville, New York (May 24); Dedham, Massachusetts (May 25); Long Beach, California (May 25); Atlanta, Georgia (June 6); Portland, Oregon (June 6), Orlando, Florida (June 8); and San Francisco, California (June 8). At each meeting, the MMS presented background information about the EIS, and representatives from the Department of Energy (DOE) National Renewable Energy Laboratory presented information about each type of technology. The presentation materials from these meetings, including slides, maps depicting the various planning area boundaries, and white papers for five potential technologies, were made available on the project website (<http://ocsenergy.anl.gov/index.cfm>).

Three ways to submit comments were provided to the public: traditional mail delivery, the on-line comment form on the project website, or submission of written or oral comments at any of the public meetings. Nearly 235 individuals, organizations, and government agencies provided comments on the scope of the programmatic EIS. Some people used more than one method to submit comments. Nearly 100 comment documents were received from individuals. In addition, comments were received from 4 Federal agencies, 16 State agencies, 2 local government organizations, and more than 70 other organizations, including environmental groups, interest groups, and industry. Comment documents were received from 26 States, the District of Columbia, and Canada.

The comments received on the development of alternative energy sources on the OCS are most appropriately categorized as follows: (1) environmental concerns (e.g., monitoring and data collection, air quality and global warming, ecology and marine life, visual impacts, noise and vibration, waste generation and disposal, water quality, and environmental justice); (2) socioeconomics; (3) siting and technology concerns; (4) stakeholder involvement; (5) cumulative impacts; (6) mitigation; (7) policy; and (8) alternatives. Comments were also received on issues concerning the alternate use of existing oil and gas platforms.

A number of comments were received that addressed two other ongoing applications, the Cape Wind Project, proposed to be located offshore Massachusetts in Nantucket Sound, and the Long Island Offshore Wind Park Project, proposed to be located offshore Long Island, New York. The MMS is preparing a separate EIS for each of these projects, and each will focus on the unique environmental impacts these projects (and certain identified alternatives) may have on the particular regions in which they have been proposed. Comments received by the MMS that addressed specific impacts pertaining to these projects were considered out of scope for purposes of this programmatic EIS.

### 1.3.2 Scope of This Programmatic EIS

This EIS is programmatic and, therefore, evaluates the generic impacts from potential activities occurring in the environment. Specific examinations of localized impacts are deferred to subsequent analyses. This programmatic EIS informs the MMS generally about the types and extent of environmental effects that could result from future authorizations. Any future proposal for an alternative energy project on the OCS under this new authority will be subject to its own project-specific environmental analyses under NEPA. This EIS will also serve to identify the potential impact-producing factors and the key resources that could be impacted.

This EIS is focused on alternative energy technologies and areas on the OCS about which industry has expressed a potential interest and ability to develop or evaluate from 2007–2014. The Federal OCS begins approximately 5.6 to 17 kilometers (km) (3 to 9 nautical miles [mi]) off coastal shorelines and extends to about 370 km (200 nautical mi) offshore, with depths ranging from a few meters to thousands of meters. This area of the OCS includes about 6.96 million km<sup>2</sup> (1.72 billion acres); however, for wind and wave technologies being assessed within the time frame of this EIS, development is expected to occur near to shore with maximum water depths of 100 meters (m) (328 feet [ft]). With the exception of ocean current technology as discussed below, the analysis in this EIS is, therefore, limited to the area defined by this water depth for these technologies.

MMS management of the OCS is divided into four regions<sup>1</sup>: Atlantic, Gulf of Mexico, Pacific, and Alaska. The Atlantic region covers the offshore area from Maine southward to the Straits of Florida; the Gulf of Mexico region includes the area off the western coast of Florida to Texas; the Pacific region follows the coasts of California, Oregon, and Washington; and the Alaska region covers the offshore areas of Alaska. Hawaii is considered separately from these four regions. Development of alternative energy resources around Hawaii is not considered in this programmatic EIS because of the steep drop-off of the OCS in Federal waters beyond the 5.6 km (3 nautical mi) State boundary, where depths easily exceed 100 m (328 ft) in most areas (see Figure 1.3.2-1). Furthermore, the boundaries of the National Oceanic and Atmospheric Administration (NOAA) Hawaiian Islands Humpback Whale National Marine Sanctuary encompass many areas in Hawaii where Federal waters are less than 100 m (328 ft). In accordance with Section 8(p)(10) of the OCSLA as amended by Section 388(a)(10) of the EPAct of 2005, any area on the OCS within the exterior boundaries of any unit of the National Park System, National Wildlife Refuge System, or National Marine Sanctuary System, or any National Monument, is excluded from consideration for development in this program. Development of alternative energy resources on the OCS in the Alaska region is also not considered in this EIS because of the relatively harsh environment and probability that potential projects will first be evaluated within State waters. Figures 1.3.2-2 to 1.3.2-4 show the applicable areas on the OCS that may support the development of alternative energy resources within each region during the time frame of analysis.

---

<sup>1</sup> The word *region* is used to describe geographic areas on the OCS off the coast of the United States where the MMS has jurisdiction to regulate the actions described in this programmatic EIS as well as other activities, including oil and gas development and development of mineral resources. The regions described in this section do not have a one-to-one correspondence to the MMS regional offices.

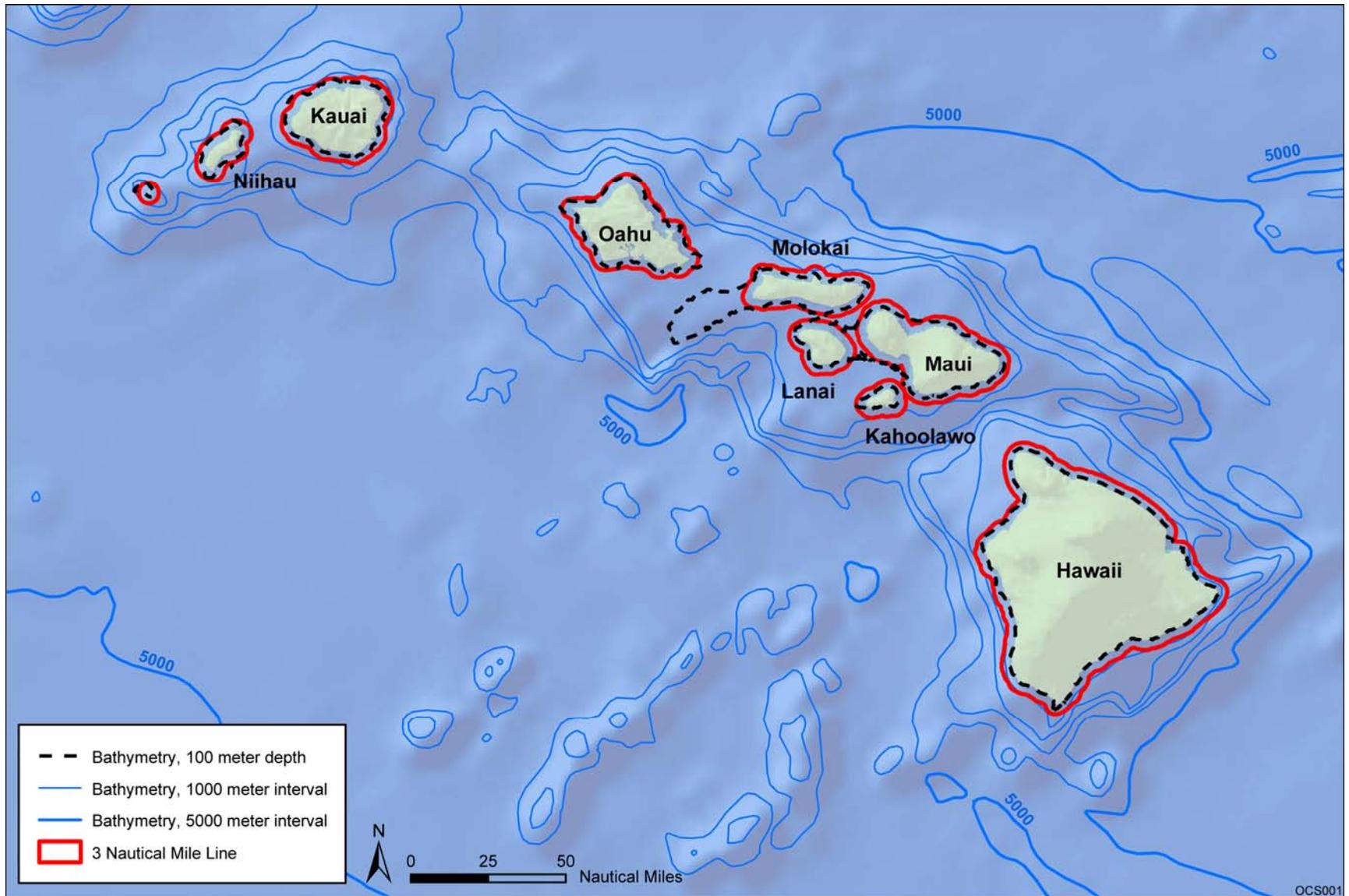


FIGURE 1.3.2-1 Map of the Hawaiian Islands and the Surrounding Bathymetry (Water Depth [m])

The types of alternative energy projects included in this EIS are offshore wind, wave, and ocean current energy capture technologies. The MMS anticipates receiving applications for development of these technologies on the OCS over the next 5 to 7 years (2007–2014). Resource maps of estimated offshore wind and wave energy potential are shown in Figures 1.3.2-5 and 1.3.2-6, respectively. The extraction of energy from ocean currents requires a location that has strong, steady currents. The only ocean current that has these characteristics on the OCS is the Florida Current, located off the eastern coast of North America (Figure 1.3.2-7). Therefore, the analysis of ocean current energy capture technologies is limited to impacts associated with the geographic area of the Florida Current in waters deeper than 100 m (328 ft). Ocean Thermal Energy Conversion (OTEC) projects are authorized under the OTEC Act of 1980 (42 USC 9101 et seq.) and, pursuant to Section 388 of the EPAct, are excluded from the MMS Alternative Energy and Alternate Use Program. Solar energy capture technologies are not analyzed because the technology is not yet considered technologically and economically viable in the marine environment. Hydrogen energy storage technologies are considered unlikely to be demonstrated or developed in the 5- to 7-year time frame based on the current available market for the product and technological considerations for the development in a marine environment greater than 5.6 km (3 nautical mi) from shore. Should the situation change for hydrogen, the MMS will revisit the issue. Tidal energy projects are also not analyzed in detail because such projects would be developed in areas very close to shore and outside the jurisdiction of the MMS.

Under Section 388 of the EPAct of 2005, the MMS has new authority to permit activities that make alternate use of existing oil and natural gas platforms on the OCS, to the extent that such activities are not otherwise authorized by other Federal law. Alternate uses of existing facilities may include, but are not limited to, offshore aquaculture, research and monitoring, and alternative energy production. This EIS focuses on leaving structures in place rather than removing them at the end of production. Site-specific and project-specific analyses will be required prior to the permitting of activities. Alternate use of existing structures at this time is limited to facilities in the Gulf of Mexico and southern California. The MMS will work closely with other agencies such as NOAA in addressing these alternate uses.

The alternatives analyzed in this programmatic EIS include:

- A proposed action (i.e., the establishment of the Alternative Energy and Alternate Use Program on the OCS through rulemaking);
- A case-by-case alternative (i.e., the MMS would consider individual project proposals for alternative energy or alternate use on a case-by-case basis but would not issue formal regulations);
- A no action alternative (i.e., the MMS would not approve leases, easements, or rights-of-way for any alternative energy facility on the Federal OCS or alternate use of existing offshore facilities); and
- A preferred alternative (i.e., a combination of the proposed action and the case-by-case alternative).



FIGURE 1.3.2-2 Atlantic Coast Planning Areas



FIGURE 1.3.2-3 Gulf of Mexico Planning Areas



**FIGURE 1.3.2-4 Pacific Coast Planning Areas**

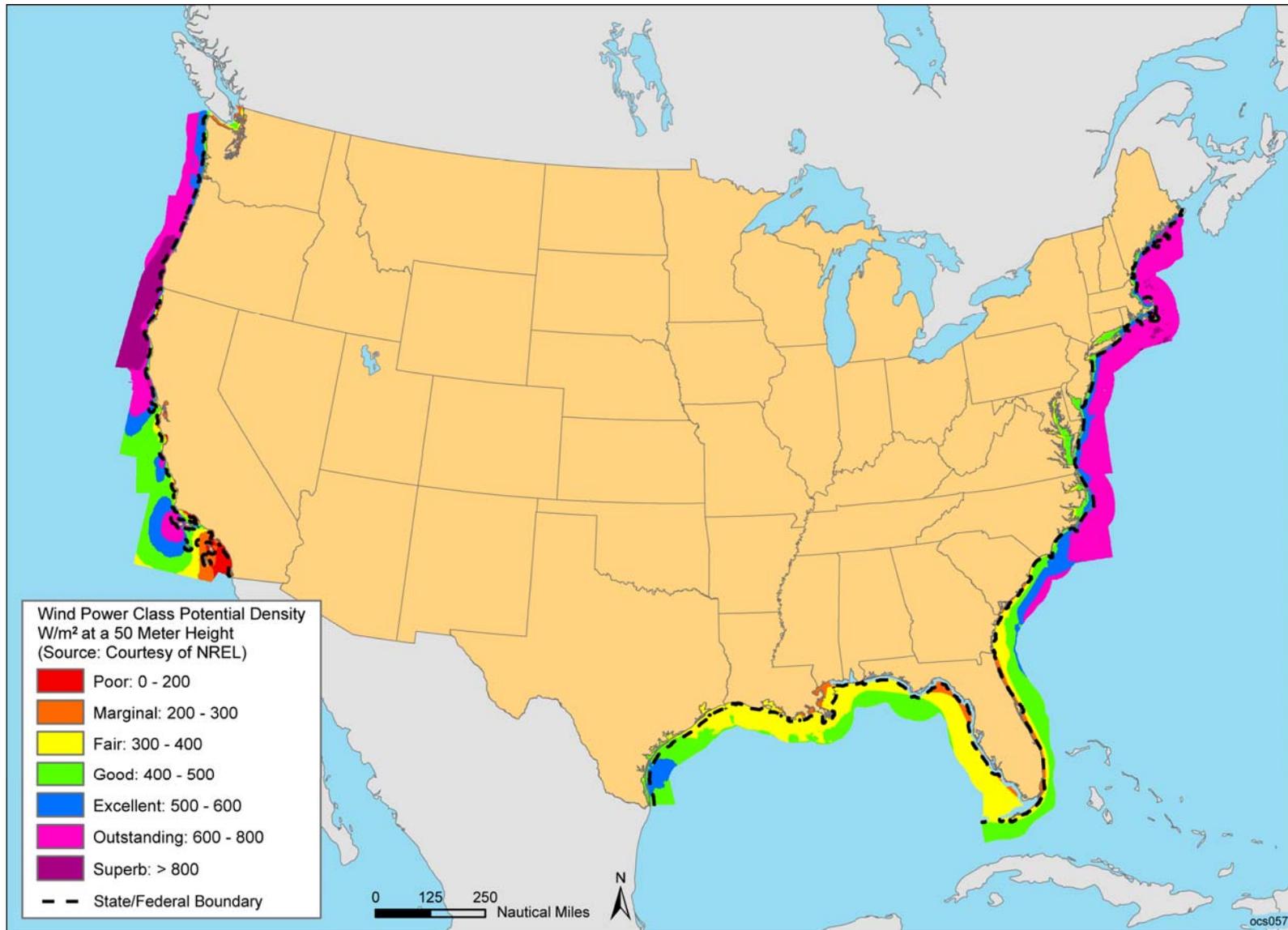


FIGURE 1.3.2-5 Offshore Wind Energy Potential (Source: Heimiller 2007)

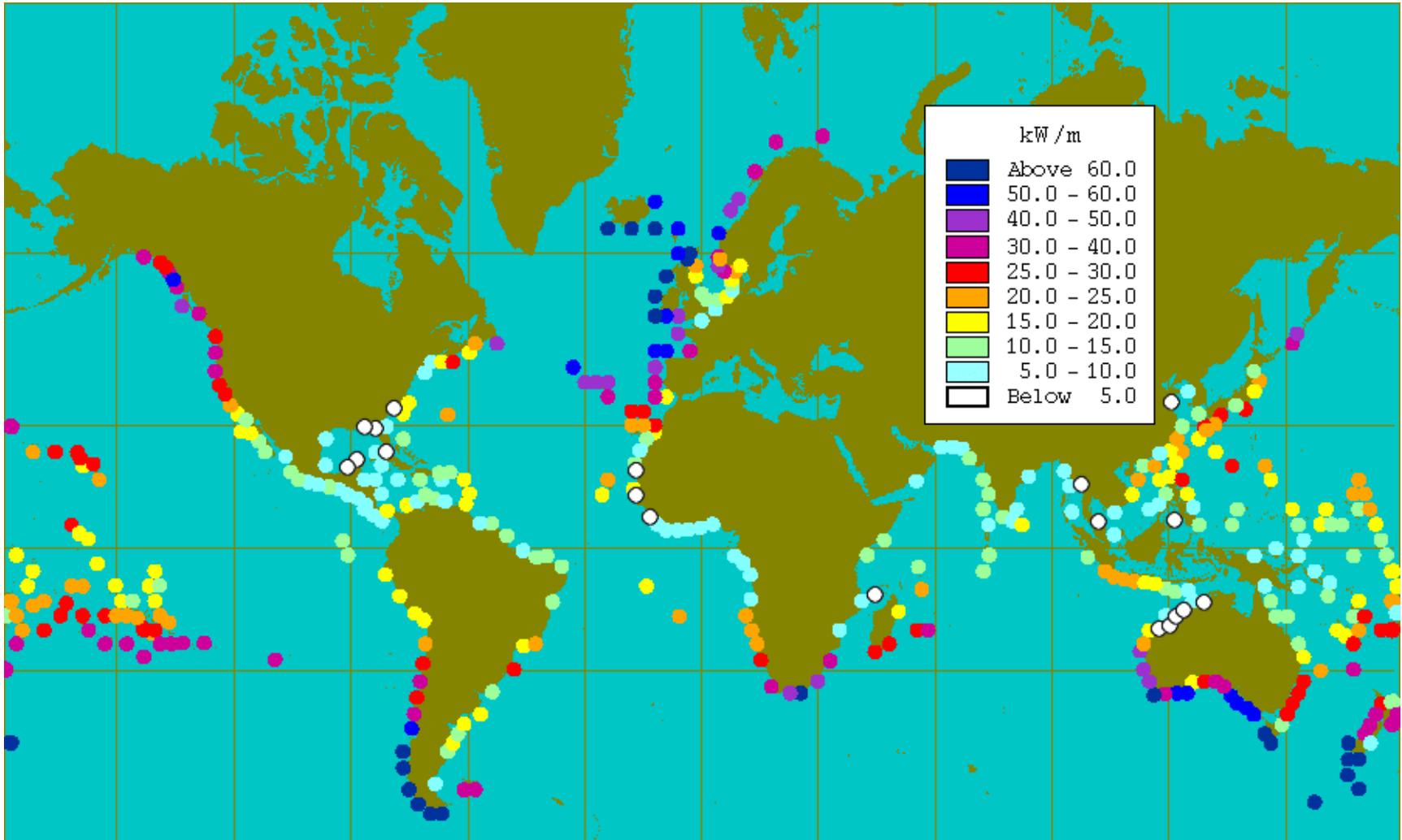
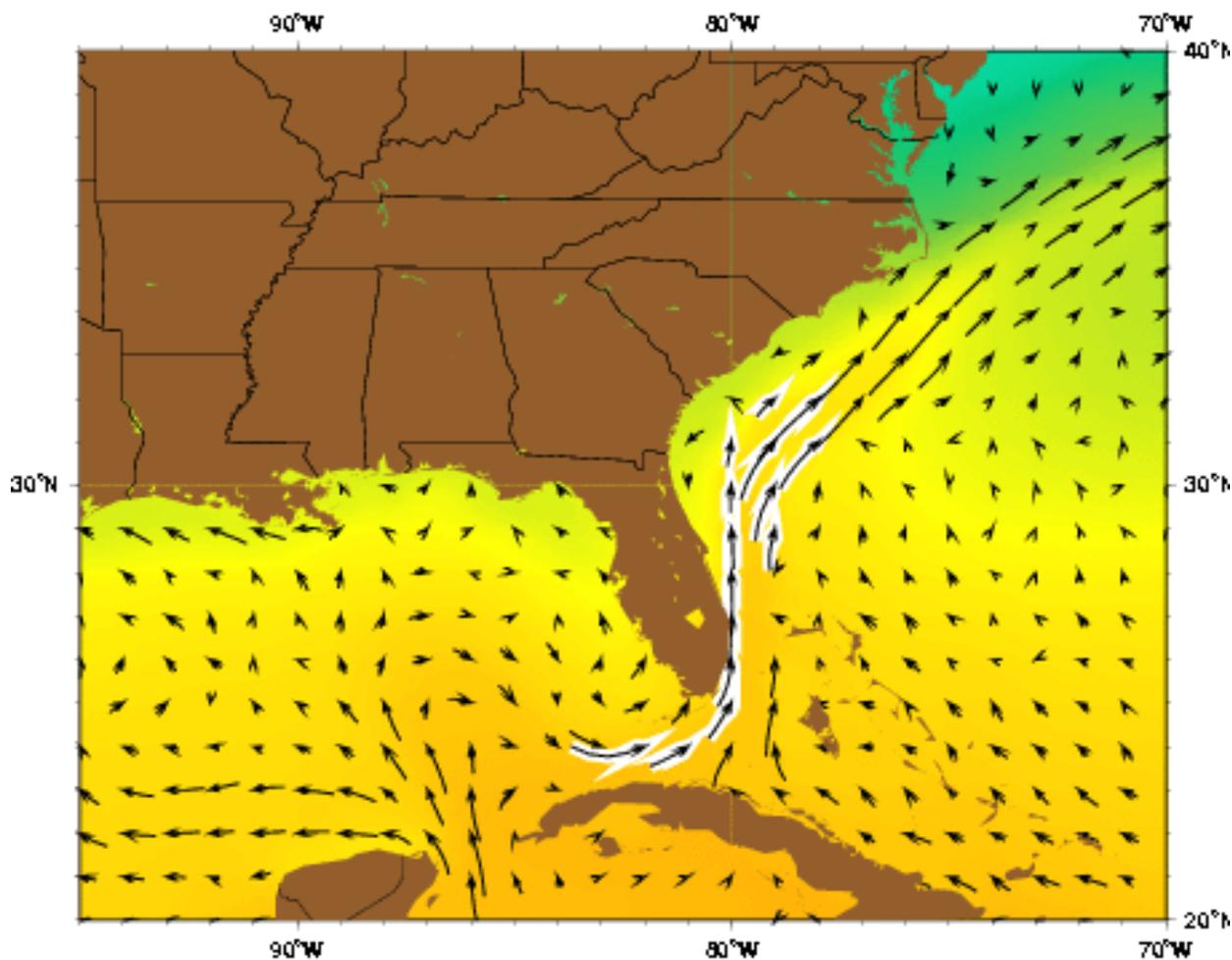


FIGURE 1.3.2-6 Offshore Wave Energy Potential (Source: Modified from Krogstad and Barstow 1999)



**FIGURE 1.3.2-7 Location of the Florida Current (Source: Gyory et al. 2006)**

To facilitate the analysis of the proposed action, the potential impacts of the individual alternative energy technologies (i.e., wind, wave energy, and ocean current) are assessed in Chapter 5, and the potential impacts of alternate use of existing structures on the OCS are discussed in Chapter 6. This information is used in the analysis of the overall impact of the proposed action (establishing the Alternative Energy and Alternate Use Program) in Chapter 7.

#### **1.4 PUBLIC COMMENTS ON THE DRAFT EIS**

A Notice of Availability (NOA) of the draft programmatic EIS was published in the *Federal Register* on March 21, 2007 (72 FR 13307). The NOA provided information on how to obtain copies of the draft programmatic EIS and how to submit comments on the draft document. Comments, submitted in letter form through the mail, on-line through the Internet at the MMS's website for the EIS, or in person at a public hearing, were accepted for 60 days following publication of the NOA.

Public hearings were held at nine locations across the United States in April and May 2007. Hearings were held in Washington, DC (April 16), Long Branch, New Jersey (April 24), Melville, New York (April 25), Newton, Massachusetts (April 26), Houston, Texas (May 1), San Francisco, California (May 1), Portland, Oregon (May 2), Miami Springs, Florida (May 2), and Charleston, South Carolina (May 3).

Nearly 200 individuals, organizations, and government agencies provided comments on the draft programmatic EIS. Some used more than one method to submit comments. Nearly 90 comment documents were received from individuals. In addition, comments were received from 6 Federal agencies, 22 State agencies, 4 local government organizations, and more than 60 other organizations, including environmental groups, interest groups, and industry. Comment documents were received from 27 States and the District of Columbia.

Many comments agreed with the proposed action and other aspects of proposed alternative energy development on the OCS. Changes suggested by other comments on the draft EIS have been incorporated in the final programmatic EIS. Detailed information on the comments and the MMS's responses is provided in Appendix B. The following bullets summarize several major issues raised in the comments.

- As a programmatic EIS, the document assessed broad, generic impacts, which caused many commentors to have concerns with the adequacy of the analyses under NEPA for activities to occur. However, development activities will not be allowed without follow-on NEPA analyses that may tier off of this EIS. Such further review could be accomplished through an EIS or environmental assessment, which would include regional or more site-specific analyses.
- Criticism was expressed about the absence of a detailed description of the Alternative Energy and Alternate Use regulatory framework. Initially, the MMS planned to publish in the *Federal Register* a Notice of Proposed Rulemaking for the Alternative Energy and Alternate Use Program at approximately the same time that it published the draft programmatic EIS. However, the MMS has since determined that there is significant benefit in completing the programmatic EIS so that it can further inform the agency as it completes its proposed rule. Accordingly, this programmatic EIS will assist MMS efforts to complete the proposed rule for alternative energy and alternate use activities on the OCS. The MMS will prepare a separate NEPA analysis in support of the proposed rule. This final programmatic EIS has been modified slightly from the draft EIS to reflect this change.
- The cumulative impacts section in the draft EIS was considered by some to be weak (to have not considered fully multiple uses on the OCS). The cumulative impact section in this final EIS has been expanded to discuss more fully the potential cumulative impacts from OCS activities. However, more-specific scenario development is premature and highly speculative given the nascent state of alternative energy development on the OCS. Offshore development could be unintentionally hindered by inaccurate speculation. The cumulative

impacts for a given location will be more fully analyzed when further NEPA analyses are conducted for site-specific projects.

- The programmatic EIS intentionally did not suggest particular areas for or exclude areas from alternative energy development on the OCS, which was a disappointment to some commentors. Some areas, such as national parks and wildlife refuges, are already excluded from development by paragraph 8(p)(10) of the OCSLA (Section 388(a) of the EAct of 2005). The MMS will decide, once a site-specific analysis has been performed, whether or not a given project is suitable given its location and other supporting project information.
- Issues were raised about data availability and collection, including monitoring efforts at project locations. The MMS recognizes a need to establish monitoring criteria to ensure that the necessary information is collected (during site characterization, facility testing, operation, and decommissioning) without being overly prescriptive and adding an undue financial burden to alternative energy project developers. Based on currently available data and the analyses performed for the EIS, best management practices have been added as a mitigation measure to guide development.

Based on currently available data and the analyses performed for the EIS, BMPs have been identified as a mitigation measure to development. Other common issues identified in the comments on the draft programmatic EIS are addressed in Appendix B. Examples include the benefits of alternative energy technology, clarification of stakeholder roles, site characterization and facility decommissioning considerations, and potential areas for additional study.

## **1.5 RELATIONSHIP OF THE MMS'S PROPOSED ACTION TO OTHER MMS PROGRAMS, POLICIES, AND PLANS**

The MMS's primary responsibilities fall under two major programs: the Offshore Minerals Management Program manages the mineral and other energy resources on the OCS in an environmentally sound and safe manner, and the Minerals Revenue Management Program provides timely collection, verification, and distribution of mineral revenues from Federal and Indian lands. Oversight of alternative energy projects on the OCS fits well with the MMS's mission.

Oil and natural gas are the principal mineral resources on the OCS. Approximately 23% of the domestic natural gas production and 30% of the domestic oil production originate from the OCS. Also, significant amounts of both oil and gas are believed to exist in undiscovered fields under the OCS. The MMS leases portions of Federal offshore lands for the exploration, development, and extraction of these resources periodically.

Aside from oil and gas, the only other significant mineral resources currently extracted from the OCS are sand and gravel used for coastline restoration projects. Between 1995 and

2006, more than 18 million m<sup>3</sup> (23 million yd<sup>3</sup>) of OCS sand was provided to restore more than 145 km (90 mi) of the nation's coastline.

In its efforts to promote environmentally sound decisions, the MMS devotes significant funding to environmental studies on the effects of OCS activities on marine, coastal, and human environments. The MMS's Environmental Studies Program is tasked with gathering and synthesizing the relevant environmental and social and economic science information. This information comes from sources such as research and compliance monitoring. The MMS's familiarity with the offshore environment obtained from past studies, ongoing research, and oversight of exploration, development, and operation activities provides a firm foundation for managing alternative energy applications on the OCS.

## **1.6 READER'S GUIDE TO THE USE OF THIS DOCUMENT**

As provided in the EPO Act of 2005, the USDOJ has been authorized to issue leases, easements, and rights-of-way for the alternative energy activities on the OCS as well as for alternate uses of previously or currently used structures on the OCS. This programmatic EIS presents those alternative energy resources under consideration for anticipated development within the next 5 to 7 years, information on the general locations where those alternative energy projects might be located, and generic environmental and socioeconomic impacts resulting from alternative energy project development, construction, operation, and ultimate decommissioning. In addition, the alternate use of existing platforms is also explored, including potential impacts to the environment. This programmatic EIS has been prepared to support establishment of the MMS Alternative Energy and Alternate Use Program and to further inform the MMS should it prepare a proposed rule for issuing leases, easements, and rights-of-way for such activities on the OCS. By preparing this programmatic EIS at this preliminary stage in the establishment of the Alternative Energy and Alternate Use Program, the MMS is acting consistently with CEQ provisions for applying NEPA early in the decision-making process (40 CFR 1501.2).

After public review and comment, the MMS published this final EIS and will publish a Record of Decision (ROD) that identifies the EIS alternative selected. If, following this NEPA analysis, the MMS decides to establish the Alternative Energy and Alternate Use Program and continue toward issuing the proposed rule, additional NEPA analyses will be performed to support rulemaking, as well as for any specific alternative energy development projects on the OCS. These subsequent NEPA analyses may tier off, where appropriate, the generic analysis provided in this final programmatic EIS.

As a general overview for this EIS, information on the alternative energy technologies under consideration can be found in Chapter 3. A description of the OCS areas considered for development is provided in Chapters 1 and 4. Potential impacts from alternative energy resource development activities (including technology testing, site characterization, construction, operation, and decommissioning activities) are given in Chapter 5. Alternate use of existing platforms and related potential impacts are discussed in Chapter 6. Discussion of the regulations governing this process and the alternatives considered can be found in Chapters 1, 2, and 7 and

in Appendix A. Public comments on the draft programmatic EIS and MMS responses are given in Appendix B.

This programmatic EIS is organized in four volumes. The following descriptions are provided to assist the reader in locating and understanding the various components of this analysis.

- Chapter 1, *Introduction*, presents the purpose and need for this EIS, the scope of the analysis including what technologies and what portions of the OCS are considered, and the legal framework within which this EIS was produced.
- Chapter 2, *Proposed Action and Alternatives*, describes the potential actions that could be taken should alternative energy technologies be developed on the OCS.
- Chapter 3, *Overview of the Potential Alternative Energy Technologies on the OCS*, summarizes potential alternative energy technologies available and screens out unlikely candidates; it also describes the general operating principle for each alternative energy technology considered, current development status, and the necessary site characteristics.
- Chapter 4, *Affected Environment*, describes the OCS areas that may be suitable for alternative energy development. Descriptions are presented by coastal region (Atlantic, Gulf of Mexico, and Pacific) and include each area's current use, physical characteristics (e.g., geology, oceanography, meteorology), marine biota and habitats, and socioeconomic characteristics.
- Chapter 5, *Potential Impacts of Alternative Energy Development on the OCS and Analysis of Potential Mitigation Measures*, presents the environmental and socioeconomic impacts for each alternative energy technology in terms of technology testing, site characterization, construction, operation, and decommissioning.
- Chapter 6, *Alternate Uses of Existing Oil and Natural Gas Platforms on the OCS*, summarizes the characteristics of oil and gas platforms on the OCS likely to be retired from their current use; it also discusses potential uses for these retired platforms and presents the environmental and socioeconomic impacts for each alternate use (alternate uses considered are alternative energy projects, aquaculture, and research and monitoring).
- Chapter 7, *Analysis of the Proposed Action and Its Alternatives*, compares the estimated environmental impacts of alternative energy project activities on the OCS with other options either not employing their use or substituting other energy resources (e.g., coal- or gas-fired generation).

- Chapter 8, *Consultation and Coordination*, lists the activities involved in the preparation of the programmatic EIS, including public scoping, comments on the EIS, coordination among MMS offices, and interactions with other Federal agencies.
- Chapter 9, *References*, provides references cited in Chapters 1 through 8.
- Chapter 10, *List of Preparers*, lists individuals involved in the preparation of the programmatic EIS.
- Chapter 11, *Glossary*, provides definitions of terms used in the EIS.
- Chapter 12, *Index*, provides page numbers for key terms.
- Appendix A, *Section 388 of the Energy Policy Act of 2005, Public Law 109-58*, presents the law delegating discretionary authority to USDOJ for the regulation of alternative energy and alternate use project activities on the OCS.
- Appendix B, *Public Comments on the Draft Programmatic Environmental Impact Statement with Responses*, contains the public comments received on the draft programmatic EIS submitted in person at public hearings, via the Internet, or via mail. Included are the MMS responses to the comments.
- Appendix C is the *Contractor Disclosure Statement*.

## 1.7 OCS REGULATORY FRAMEWORK

Several Federal laws establish specific consultation and coordination processes with Federal, State, and local agencies (i.e., Coastal Zone Management Act, Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, National Marine Sanctuaries Act, and the Marine Mammal Protection Act). In 2005, Section 388 of the EPAct of 2005, P.L. 109-58, expanded the USDOJ's authority to issue leases, easements, and rights-of-way on the OCS for activities that produce or support the production, transportation, or transmission of energy from sources other than oil and gas and for activities that use, for energy-related or other authorized marine-related purposes, facilities currently or previously used for activities authorized under the OCSLA.

In implementing its responsibilities under the OCSLA, the MMS must consult with numerous Federal departments and agencies that have authority to govern and maintain ocean resources pursuant to other Federal laws. Among these Federal entities are the U.S. Coast Guard (USCG), U.S. Environmental Protection Agency (USEPA), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and NOAA. Table 1.7-1 identifies major Federal laws that are relevant to alternative energy development and alternate uses of existing oil and natural gas platforms on the OCS. For each legal authority, Table 1.7-1 lists the responsible Federal entities and briefly summarizes pertinent provisions of the law.

In addition to coordinating with Federal Government entities, the MMS must coordinate and consult with any State governor or local government executives that may be affected by a particular lease, easement, or right-of-way granted under this new authority [43 USC 1337(p)(7), added by Section 388 of the Energy Policy Act]. This requirement extends to any potentially affected State. However, conclusions about whether a particular State is potentially affected by specific Federal agency activities or projects can be made only on a case-by-case basis. Hence, for general planning and consultation purposes, those States that are partially bounded by coastal waters adjacent to one of the OCS regions (Atlantic, Gulf of Mexico, and Pacific) are identified in Table 1.7-2. Each identified State has developed and implemented a federally approved coastal management program (CMP) pursuant to the Coastal Zone Management Act (CZMA; 16 USC 1451 et seq.). Agencies responsible for State CMPs are listed in Table 1.7-2. The boundaries of each State's coastal zone are available on the Internet at <http://coastalmanagement.noaa.gov/mystate/docs/StateCZBoundaries.pdf>.

The CZMA establishes a voluntary partnership between the Federal Government and coastal States. If a State elects to participate, it must develop and implement a CMP pursuant to Federal requirements, which are administered by NOAA. Each State CMP must describe: the coastal zone uses subject to the management program; State authorities and enforceable policies within the management program; boundaries of the State's coastal zone; organization of the management program; and related State coastal management concerns.

Federal actions that have reasonably foreseeable effects on any land or water use or natural resources within the coastal zone of a State that has a federally approved CMP must be consistent with the enforceable policies of the State's CMP to the maximum extent practicable. Consistency reviews are performed in accordance with the Coastal Zone Management Act Federal Consistency Regulations, located in 15 CFR Part 930. Nonfederal actions requiring the approval of a Federal agency (e.g., issuance of a lease, easement, or right-of-way) also must be fully consistent with the enforceable policies of a State's Coastal Management Plan.

The CZMA gives the States an important role in managing uses in waters off their coastlines in addition to their authorities on state-owned submerged lands. The MMS Regional Offices will work directly with the State CZM lead agency in reviewing specific activities and projects that are subject to regulation under the proposed action covered by this programmatic EIS and that have reasonably foreseeable effects on a coastal use or resource of a State.

**TABLE 1.7-1 Federal Legal Authorities Relevant to Activities on the OCS**

Responsible Federal Agency/Agencies	Statute/Executive Order	Summary of Pertinent Provisions
MMS	Outer Continental Shelf Lands Act (OCSLA), as amended by the Energy Policy Act of 2005 (43 USC 1337)	<p>Authorizes the Secretary of the Interior to issue a lease, easement, or right-of-way on the OCS for activities that are not otherwise authorized by the OCSLA, or other applicable law, if those activities:</p> <ul style="list-style-type: none"> <li>• Produce or support production, transportation, or transmission of energy from sources other than oil and gas; or</li> <li>• Use, for energy-related purposes or other authorized marine-related purposes, facilities currently or previously used for activities authorized under the OCSLA, 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.</li> </ul>
Council on Environmental Quality (CEQ)	National Environmental Policy Act of 1969, as amended (NEPA) (42 USC 4321 et seq.)	Requires Federal agencies to prepare an EIS to evaluate the potential environmental impacts of any proposed major Federal action that would significantly affect the quality of the human environment, and to consider alternatives to such proposed actions.
U.S. Fish and Wildlife Service (USFWS); National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS)	Endangered Species Act of 1973, as amended (16 USC 1531 et seq.)	Requires Federal agencies to consult with the USFWS and the NMFS to ensure that proposed Federal actions are not likely to jeopardize the continued existence of any species listed at the Federal level as endangered or threatened, or result in the destruction or adverse modification of critical habitat designated for such species.
USFWS (walruses; sea and marine otters; polar bears; manatees and dugongs); NMFS (seals, sea lions, whales, dolphins, and porpoises)	Marine Mammal Protection Act of 1972, as amended (16 USC 1361-1407)	Prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States.
NMFS	Magnuson-Stevens Fishery Conservation and Management Act (also known as the Fishery Conservation and Management Act of 1976, as amended by the Sustainable Fisheries Act) (16 USC 1801 et seq.)	Requires Federal agencies to consult with the NMFS on proposed Federal actions that may adversely affect Essential Fish Habitats that are necessary for spawning, breeding, feeding, or growth to maturity of the fish species in managed conservation zones.

TABLE 1.7-1 (Cont.)

Responsible Federal Agency/Agencies	Statute/Executive Order	Summary of Pertinent Provisions
U.S. Environmental Protection Agency (USEPA); U.S. Army Corps of Engineers (USACE); NOAA	Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA), as amended (33 USC 1401 et seq.)	Prohibits, with certain exceptions, the dumping or transportation for dumping of materials, including, but not limited to, dredged material, solid waste, garbage, sewage, sewage sludge, chemicals, biological and laboratory waste, wrecked or discarded equipment, rock, sand, excavation debris, and other waste into ocean waters without a permit from the USEPA. In the case of ocean dumping of dredged material, the USACE is given permitting authority.
NOAA	National Marine Sanctuaries Act (NMSA) (16 USC 1431 et seq.)	Prohibits the destruction, loss of, or injury to, any sanctuary resource managed under the law or permit and requires Federal agency consultation on Federal agency actions, internal or external to national marine sanctuaries, that are likely to destroy, injure, or cause the loss of any sanctuary resource.
USFWS	Migratory Bird Treaty Act of 1918, as amended (16 USC 703–712); Executive Order 13186, “Responsibilities of Federal Agencies to Protect Migratory Birds” (January 10, 2001)	Requires that Federal agencies taking actions likely to negatively affect migratory bird populations enter into Memoranda of Understanding with the USFWS, which, among other things, ensure that environmental reviews mandated by NEPA evaluate the effects of agency actions on migratory birds, with emphasis on species of concern.
NOAA’s Office of Ocean and Coastal Resource Management (NOAA OCRM)	Coastal Zone Management Act of 1972, as amended (16 USC 1451 et seq.)	Specifies that coastal States may protect coastal resources and manage coastal development. A State with a coastal zone management program approved by NOAA OCRM can deny or restrict development off its coast, if the reasonably foreseeable effects of such development would be inconsistent with the State’s coastal zone management program.
USEPA; MMS	Clean Air Act, as amended (CAA) (42 USC 7401 et seq.)	Prohibits Federal agencies from providing financial assistance for, or issuing a license or other approval to, any activity that does not conform to an applicable, approved implementation plan for achieving and maintaining the National Ambient Air Quality Standards (NAAQS).  Requires USEPA (or an authorized State agency) to issue a permit before construction of any new major stationary source or major modification of a stationary source of air pollution. The permit—called a Prevention of Significant Deterioration (PSD) permit for stationary sources located in areas that comply with NAAQS and a Nonattainment Area Permit in

**TABLE 1.7-1 (Cont.)**

Responsible Federal Agency/Agencies	Statute/Executive Order	Summary of Pertinent Provisions
USEPA; MMS (Cont.)		<p>areas that do not comply with NAAQS—must control emissions in the manner prescribed by USEPA regulations to either prevent significant deterioration of air quality (in attainment areas), or contribute to reducing ambient air pollution in accordance with an approved implementation plan (in nonattainment areas).</p> <p>Requires the owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process to submit a Risk Management Plan to USEPA.</p> <p>In the western portion of the Gulf of Mexico, MMS has authority pursuant to the OCSLA for clean air regulations.</p>
USEPA; U.S. Coast Guard (USCG); MMS	Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 (CWA), Section 311, as amended (33 USC 1321); Executive Order 12777, “Implementation of Section 311 of the Federal Water Pollution Control Act of October 18, 1972, as Amended, and the Oil Pollution Act of 1990”	<p>Prohibits discharges of oil or hazardous substances into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the OCSLA, or which may affect natural resources belonging to the U.S.</p> <p>Authorizes USEPA and the USCG to establish programs for preventing and containing discharges of oil and hazardous substances from non-transportation-related facilities and transportation-related facilities, respectively.</p> <p>Directs the Secretary of the Interior (MMS) to establish requirements for preventing and containing discharges of oil and hazardous substances from offshore facilities, including associated pipelines, other than deepwater ports.</p>
USEPA	CWA, Sections 402 and 403, as amended (33 USC 1342 and 1343)	Requires a National Pollutant Discharge Elimination System (NPDES) permit from USEPA (or an authorized State) before discharging any pollutant into territorial waters, the contiguous zone, or the ocean from an industrial point source, a publicly owned treatment works, or a point source composed entirely of storm water.
USACE; USEPA	CWA, Section 404, as amended (33 USC 1344)	Requires a permit from the USACE before discharging dredged or fill material into waters of the United States, including wetlands.

**TABLE 1.7-1 (Cont.)**

Responsible Federal Agency/Agencies	Statute/Executive Order	Summary of Pertinent Provisions
USCG	Ports and Waterways Safety Act, as amended (33 USC 1221 et seq.)	Authorizes the USCG to implement, in waters subject to the jurisdiction of the U.S., measures for controlling or supervising vessel traffic or for protecting navigation and the marine environment. Such measures may include but are not limited to: reporting and operating requirements, surveillance and communications systems, routing systems, and fairways.
USACE	Rivers and Harbors Appropriation Act of 1899 (33 USC 401 et seq.)	Section 10 (33 USC 403) delegates to the USACE the authority to review and regulate certain structures and work that are located in or that affect navigable waters of the U.S. The OCSLA extends the jurisdiction of the USACE, under Section 10 to the seaward limit of Federal jurisdiction.
USEPA	Resource Conservation and Recovery Act, as amended by the Hazardous and Solid Waste Amendments of 1984 (RCRA) (42 USC 6901 et seq.)	Requires waste generators to determine whether they generate hazardous waste, and if so, to determine how much hazardous waste they generate and notify the responsible regulatory agency.  Requires hazardous waste treatment, storage, and disposal facilities (TSDFs) to demonstrate in their permit applications that design and operating standards established by the USEPA (or an authorized State) will be met.  Requires hazardous waste TSDFs to obtain permits.
National Park Service (NPS); Advisory Council on Historic Preservation; State or Tribal Historic Preservation Officer	National Historic Preservation Act of 1966, as amended (16 USC 470-470t); Archaeological and Historical Preservation Act of 1974 (16 USC 469-469c-2)	Requires each Federal agency to consult with the Advisory Council on Historic Preservation and the State or Tribal Historic Preservation Officer before allowing a federally licensed activity to proceed in an area where cultural or historic resources might be located; authorizes Interior Secretary to undertake salvage of archaeological data that may be lost due to a Federal project.
NPS; Advisory Council on Historic Preservation; State or Tribal Historic Preservation Officer	American Indian Religious Freedom Act of 1978 (42 USC 1996); Executive Order 13007, "Indian Sacred Sites" (May 24, 1996)	Requires Federal agencies to facilitate Native American access to and ceremonial use of sacred sites on Federal lands, to promote greater protection for the physical integrity of such sites, and to maintain the confidentiality of such sites, where appropriate.
Federal Aviation Administration (FAA)	Federal Aviation Act of 1958 (49 USC 44718); 14 CFR 77	Requires that, when construction, alteration, establishment, or expansion of a structure is proposed, adequate public notice be given to the FAA as necessary to promote safety in air commerce and the efficient use and preservation of the navigable airspace.

**TABLE 1.7-2 Agencies Responsible for Coastal Zone Management Plans in States Bounded by Coastal Waters Adjacent to OCS Regions**

State	Agency Responsible for Coastal Management Program	Federal Consistency Contact <sup>a</sup>
<i>Atlantic Region</i>		
Connecticut	Connecticut Department of Environmental Protection, Office of Long Island Sound Programs	Office of Long Island Sound Programs Department of Environmental Protection 79 Elm Street, 3rd Floor Hartford, CT 06106-5127 860-424-3034; Fax: 860-424-4054
Delaware	Department of Natural Resources and Environmental Control (DNREC)	Delaware Coastal Programs Dept. of Natural Resources & Envtl. Control 89 Kings Highway Dover, DE 19901 302-739-9283; Fax: 302-739-2048
Florida (East Coast)	Florida Department of Environmental Protection (lead agency)	Florida Coastal Management Program Department of Environmental Protection 3900 Commonwealth Boulevard Douglas Building, Mail Station 47 Tallahassee, FL 32399-3000 850-245-2177; Fax: 850-245-2189
Georgia	Georgia Department of Natural Resources, Coastal Resources Division (lead agency)	Coastal Zone Management Program Department of Natural Resources One Conservation Way, Suite 300 Brunswick, GA 31520-8687 912-264-7218; Fax: 912-262-3143
Maine	Maine State Planning Office (lead agency)	State Planning Office State House Station #38 184 State Street Augusta, ME 04333 207-287-1496; Fax: 207-287-8059
Maryland	Maryland Department of Natural Resources (lead agency)	Department of the Environment 2500 Broening Highway Baltimore, MD 21224 410-631-8093; Fax: 410-631-4894
Massachusetts	Executive Office of Environmental Affairs, Office of Coastal Zone Management (lead agency)	Office of Coastal Zone Management Executive Office of Environmental Affairs 251 Causeway Street, Suite 900 Boston, MA 02114 617-626-1219; Fax: 617-626-1240
New Hampshire	New Hampshire Department of Environmental Services (lead agency)	New Hampshire Coastal Program Department of Environmental Services 50 International Drive, Suite 200 Pease International Tradeport Portsmouth, NH 03801 603-559-1500; Fax: 603-559-1510

**TABLE 1.7-2 (Cont.)**

State	Agency Responsible for Coastal Management Program	Federal Consistency Contact <sup>a</sup>
New Jersey	New Jersey Department of Environmental Protection (lead agency); New Jersey Meadowlands Commission	Land Use Regulation Program Department of Environmental Protection PO Box 439 Trenton, NJ 08625 609-633-2201; Fax: 609-292-8115
New York	New York Department of State (DOS), Division of Coastal Resources (lead agency)	Division of Coastal Resources and Waterfront Revitalization Department of State 41 State Street Albany, NY 12231-0001 518-474-5290, Fax: 518-473-2464
North Carolina	Department of Environment and Natural Resources, Division of Coastal Management (lead agency)	Division of Coastal Management Department of Environment and Natural Resources 400 Commerce Avenue Morehead City, NC 28557-3421 252-808-2808; Fax: 252-247-3330
Rhode Island	Coastal Resources Management Council (CRMC) (oversees Rhode Island's Coastal Program, which includes planning, policy, permitting, enforcement, and coordination responsibilities as well as issue identification and policy development for all uses affecting the coastal zone—including Federal activities through the Federal consistency process)	Coastal Resources Management Council Stedman Office Building 4808 Tower Hill Rd. Wakefield, RI 02879-1900 401-783-3370; Fax: 401-783-3767
South Carolina	South Carolina Department of Health and Environmental Control	Regulatory Programs Office of Ocean and Coastal Resource Management Dept. of Health and Environmental Control 1362 McMillan Avenue, Suite 400 Charleston, SC 29405-2029 843-747-4323, x126; Fax: 843-744-5847
Virginia	Department of Environmental Quality (lead agency)	Department of Environmental Quality 629 E. Main Street Richmond, VA 23219 804-698-4325; Fax: 804-698-4319
<b><i>Gulf of Mexico Region</i></b>		
Alabama	Alabama Department of Conservation and Natural Resources (planning activities); Alabama Department of Environmental Management, Coastal Section (permitting, monitoring, and enforcement activities associated with the Coastal Area Management Plan)	Coastal Programs Office Department of Environmental Management 4171 Commanders Drive Mobile, AL 36615 251-432-6533; Fax: 251-432-6598

**TABLE 1.7-2 (Cont.)**

State	Agency Responsible for Coastal Management Program	Federal Consistency Contact <sup>a</sup>
Florida (West Coast)	Florida Department of Environmental Protection (lead agency)	Florida Coastal Management Program Department of Environmental Protection 3900 Commonwealth Boulevard Douglas Building, Mail Station 47 Tallahassee, FL 32399-3000 850-245-2177; Fax: 850-245-2189
Louisiana	Louisiana Department of Natural Resources, Coastal Management Division (CMD)	Department of Natural Resources PO Box 44487 617 North 3rd St., Suite 1048 Baton Rouge, LA 70808-4487 225-342-5052; Fax: 225-242-3458
Mississippi	Department of Marine Resources (DMR), Office of Ecology (lead agency)	Mississippi Coastal Program Department of Marine Resources 1141 Bayview Avenue, Suite 101 Biloxi, MS 39530 228-374-5000, x5238; Fax: 228-374-5008
Texas	Texas General Land Office (lead agency)	Coastal Division, General Land Office Stephen F. Austin Bldg. 1700 No. Congress Street Austin, TX 78701 512-463-9212; Fax: 512-475-0680
<b><i>Pacific Region</i></b>		
California	California Coastal Commission (development along the California coast except for San Francisco Bay); San Francisco Bay Conservation and Development Commission (development along the San Francisco Bay); California Coastal Conservancy (purchases, protects, restores, and enhances coastal resources, and provides access to the shore)	Federal Consistency Manager California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219 415-904-5289; Fax: 415-904-5400
Oregon	Oregon Department of Land Conservation and Development (lead agency)	Ocean and Coastal Program Dept. of Land Conservation & Development 635 Capitol St., NE, Room 150 Salem, OR 97301 503-373-0050, x260; Fax: 503-378-5518
Washington	Washington State Department of Ecology (lead agency)	Shorelands & Env'tl. Assistance Program Department of Ecology PO Box 47600 Olympia, WA 98504-7600 360-407-6068; Fax: 360-407-6902

<sup>a</sup> Source: NOAA (2007c). Specific contact names are available from the NOAA website.

