Finding of No Historic Properties Affected

For the

Issuance of an Interim Policy Lease to Florida Atlantic University, Southeast National Marine Renewable Energy Center For the

Installation of an Offshore Data Collection and Technology Testing Facility on the Outer Continental Shelf

Finding

Bureau of Ocean Energy Management (BOEM) has made a Finding of No Historic Properties Affected for this undertaking. To the extent that historic properties are identified within the Area of Potential Effect (APE) through the surveys that will be required by the lease before a project plan for construction is submitted, BOEM will require the lessee to relocate project activities so as to fully avoid any historic properties.

Documentation in Support of the Finding

I. Description of the Undertaking

Project Background

Subsection 8(p)(1)(C) of the Outer Continental Shelf Lands Act (43 USC 1337(p)(1)(C)), which was added by section 388 of the Energy Policy Act of 2005 (EPAct), gave the Secretary of the Interior the authority to issue leases, easements, and rights-of-way on the Outer Continental Shelf (OCS) for alternative energy activities. This authority has been delegated to the Bureau of Ocean Energy Management (BOEM). In a Request for Information and Nominations published on November 6, 2007, in the Federal Register (72 FR 62673), BOEM (then called the Minerals Management Service and subsequently the Bureau of Ocean Energy Management, Regulation and Enforcement), announced that it had established an Interim Policy under which it would issue limited leases authorizing alternative energy resource assessment, data collection, and technology testing activities on the OCS, and that it was accepting nominations for limited leases to conduct such activities. Limited leases issued under the Interim Policy for energy resource assessment data collection and technology testing activities have a term of five years and do not authorize the production or transmission of energy on a commercial scale.

Florida Atlantic University (FAU) Southeast National Marine Renewable Energy Center (SNMREC) submitted an application for an Interim Policy lease on June 11, 2010. At that time FAU requested BOEM Bahamas lease Block 7055. On February 10, 2011, FAU submitted an addendum to the original application requesting Bahamas lease blocks 7003, 7053 and 7054 instead. On August 23, 2011, FAU

submitted a final application that included all revisions and information requests required by BOEM.

BOEM has determined that the issuance of an Interim Policy lease for offshore data collection and technology testing constitutes an undertaking under Section 106 of the National Historic Preservation Act (16 USC § 470f), and its implementing regulations (36 CFR Part 800). This document outlines BOEM's compliance with Section 106 and documents the agency's Finding of No Historic Properties Affected (Finding) for the proposed undertaking under section 800.4 (d)(1). BOEM has prepared this documentation in support of the Finding following the standards outlined at section 800.11(d).

This Finding and supporting documentation is being provided to the Florida State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP). The Finding and supporting documentation will be made available for public inspection prior to BOEM approving the undertaking. The U.S. Army Corps of Engineers (ACOE) is a co-consulting agency and has jurisdictional interest due to their permitting authority of bottom-founded structures on the OCS (33 USC 403). BOEM is also considering FAU SNMREC's application pursuant to the National Environmental Policy Act (NEPA) (42 USC § 4321 et seq.), through an environmental assessment (EA).

Project Location and Description

The proposed lease includes three OCS blocks located approximately nine to 15 nautical miles offshore Fort Lauderdale, Florida (Figure 1). The three blocks are located on the Atlantic OCS in the Official Protraction Diagram NG 17–06 numbered 7003, 7053, and 7054. Water depths within the proposed lease area range from 262 meters (m) (approximately 859 feet (ft)) in Block 7053 to 366m (approximately 1,201 ft) in the southern half of Block 7054.

This proposed lease would grant the proposed lessee, FAU SNMREC, the right, subject to the terms and conditions of the lease, to install offshore data collection and technology testing facilities on the leasehold. FAU SNMREC proposes to deploy a system that includes a single-anchor mooring with a mooring and telemetry buoy (MTB) that is similar in design to the Navy Oceanographic Meteorological Automatic Device (NOMAD) weather buoys (Figure 2). A total of three MTBs will be installed at various locations throughout the leasehold for the purpose of testing equipment designed to use the Florida current to generate electricity. The initial MTB that is installed may be relocated three to four times during the lease term and FAU SNMREC intends to deploy two additional MTBs at a later time during the lease period, each of which may be relocated two to three times during the lease term. This will result in up to three total technology testing buoys operating on the lease hold at a total of 10-13 different locations over the lease term. The proposed undertaking does not include cabling or connection to shore-based facilities.

Area of Potential Effects

As defined at 30 CFR § 800.16(d), the APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

As FAU SNMREC is proposing to conduct site-specific activities and will not be utilizing the entirety of the three OCS lease blocks for the proposed undertaking, BOEM has determined, in consultation with the Florida SHPO, that the APE for the undertaking is defined as the depth and breadth of the seabed that could potentially be impacted by the proposed undertaking. FAU SNMREC proposes to use a single drag-embedment anchor to moor each of the individual MTBs. Taking into account anchor line drag at each mooring, BOEM considers the potentially impacted seabed to encompass approximately a 150-meter (492-ft) radius around each of the various anchoring locations for the MTBs.

Based on the distance from shore and the manner in which the equipment is going to be deployed (i.e., from a vessel), BOEM has concluded that the equipment will be indistinguishable from lighted vessel traffic and has not defined as part of the APE onshore areas from which the data collection and technology testing facility would be visible.

Consultation

BOEM initiated consultation with the Florida SHPO via a letter dated June 3, 2011, (Appendix A) and requested information regarding historic properties within the APE.

The Florida SHPO indicated, in letter dated June 21, 2011, (Appendix B), that: A review of the information in the Florida Master Site File indicates that there is evidence of shipwrecks in waters offshore of Fort Lauderdale. However, because of the project location and/or nature, it is considered unlikely that historic properties will be affected. Therefore, it is the opinion of this office that the proposed project will have no effect on historic properties listed, or eligible for listing in the *National Register of Historic Places*, or otherwise of historical or archaeological value.

In its June 3, 2011 letter to the Florida SHPO, BOEM asked the SHPO to identify parties, tribes, or members of the public that they believed should be included in consultation. No additional parties were recommended by the Florida SHPO in their June 21, 2011 response letter.

BOEM's May 24, 2011 Federal Register Notice of Intent to Prepare an Environmental Assessment (76 FR 30184-5), invited agencies, state and local governments, and tribes to participate in the NEPA process and solicited their comments and information along with that of the public. BOEM received one comment concerning cultural resources from the Florida Department of Environmental Protection. This comment states that the proposed lease area has a moderate to high probability for containing archaeological sites, requests that remote sensing surveys are conducted to identify historic properties prior to any project activities taking place, and requests that BOEM consult with the Florida SHPO.

BOEM was not contacted by any tribes regarding the Notice of Intent. Based on the location of the project area, which is within a region of the OCS that is not considered to have any potential for the presence of landforms that were subareal at any point during the Last Glacial Maximum (LGM), BOEM has determined that there are no historic properties present to which tribes may attach religious or cultural significance.

BOEM will resume consultation in the future as a result of new information or postreview discoveries that would be affected.

II. Description of the Steps Taken to Identify Historic Properties

BOEM has reviewed existing and available information regarding historic properties that may be present within the OCS lease blocks associated with this undertaking. These sources include information from the Florida Division of Historical Resources Master Site File and information gathered by BOEM for an updated study of archaeological resource potential on the Atlantic OCS that compiles information on historic shipwrecks and models the potential for pre-European contact sites based on reconstruction of past landscapes, human settlement patterns, and site formation and preservation conditions (USDOI, BOEM, 2011).

To date, no site-specific archaeological identification surveys have been conducted, and no cultural resources have been identified, within OCS lease blocks 7003, 7053, and 7054. However, based on available information, the lease blocks are located in a region that is considered to have the potential to contain historic period archaeological resources in the form of shipwrecks. The diverse maritime history of Florida is represented in known shipwrecks located offshore the southern Atlantic coast of Florida, ranging from 17th century Spanish vessels to early 20th century recreational vessels. Based on the location of the proposed lease blocks in proximity to historic shipping routes, and because it has been demonstrated that archaeological sites have been identified in this general region and in similar settings, there is the potential for the presence of historic period cultural resources within the OCS lease blocks associated with the proposed undertaking.

The location of the proposed project in water depths in excess of 260m (853 ft) places the project within a region that is considered to have no potential for the presence of landforms that were subareal at any point during the LGM (c. 20,000 years before present) (US DOI BOEM 2011:133). Because these lease blocks have not been exposed as dry land during the LGM, there is considered to be no potential for the presence of cultural resources associated with Native American occupation or habitation within the proposed action area.

Because of the uncertainty in the location of future anchor locations, the lease will require the lessee to undertake further site-specific identification of historic properties before undertaking any activity on the lease that could affect such resources. A lease stipulation will also be added to establish the process for determining whether archaeological resources are present within areas of seafloor-disturbing activities associated with the proposed undertaking, and to outline measures that will be required of the lessee in order to avoid any impacts to cultural resources.

After the lease is issued, the lessee may not commence installation activities until a project plan is submitted to, and reviewed by, BOEM. As part of preparing the project plan, the lessee will be required to conduct an archaeological identification survey providing full coverage of all areas of proposed seafloor-disturbing activities associated with the undertaking. BOEM anticipates this survey may take the form of a side scan sonar survey or an remotely operated vehicles (ROV) survey using an ROV equipped with sector-scanning sonar technology and digital recording capabilities to investigate each location where bottom-disturbing activities are proposed.

For this undertaking, BOEM will consider all potential historic properties identified during the lessee's surveys as potentially eligible for inclusion on the National Register of Historic Places. If BOEM's review of the lessee's survey results indicates that a potential archaeological resource may be present, BOEM will specify a minimum avoidance buffer around the resource and require the lessee to relocate the proposed seafloor disturbing activity a sufficient distance in order to avoid any impacts to cultural resources.

The lease will also include a "chance finds" clause describing the procedures the lessee must follow if an unanticipated archaeological resource is discovered while conducting any activity related to the proposed undertaking.

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

This finding is based on the review conducted by BOEM of existing and available information and the conclusions drawn from this information. The surveys and mandatory avoidance measures that will be included in the lease will ensure that the proposed undertaking will not affect historic properties.

REFERENCES

U.S. Department of the Interior, Bureau of Ocean Energy Management (BOEM). 2011. Draft- Prehistoric Site Potential and Historic Shipwrecks on the Atlantic Outer Continental Shelf. Pacific OCS Region, Camarillo, California. Pending publication (Accessed December 2011).

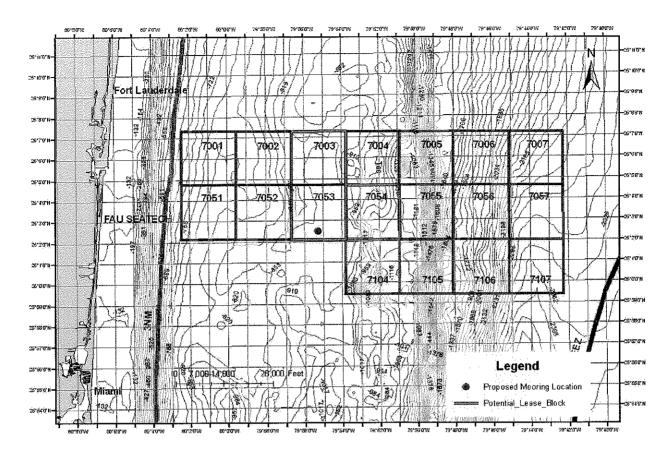


Figure 1: Location of the proposed lease area

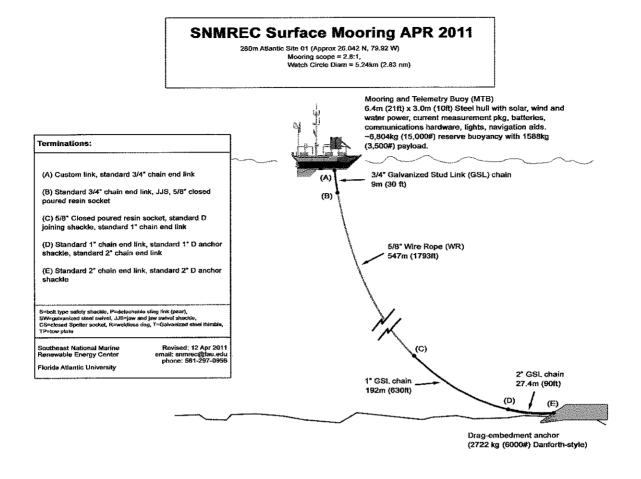


Figure 2: Proposed configuration of the data collection and technology testing buoy.

Appendix A: Correspondence from BOEM to the FL SHPO dated June 3, 2011.



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT

Washington, DC 20240

JUN \$ 2011

Mr. Scott M. Stroh III, SHPO Division of Historical Resources Department of State 500 South Bronough Street, Room 305 Tallahassee, Florida 32399-0250

Dear Mr. Stroh:

On November 6, 2007, the U.S. Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), announced an interim policy for authorizing the issuance of leases for the installation of offshore data collection and technology testing facilities on the Outer Continental Sheff (OCS) (72 FR 62673). A lease application has been submitted pursuant to the interim policy.

On June 11, 2010, Florida Atlantic University's (FAU) Southeast National Marine Renewable Energy Center (SNMREC) submitted an application to lease three OCS blocks. These three blocks are located on the Atlantic OCS in the Official Protraction Diagram NG 17-06 numbered 7003, 7053, and 7054, approximately nine to 15 nautical miles offshore of Fort Lauderdale, Florida, under its original nomination submitted on November 8, 2007. The proposed lease area covers approximately twenty-seven square nautical miles and ranges from a depth of 262 meters (m) in Block 7053 to 366 m in the southern half of Block 7054. This project application was amended on February 10, 2011, and describes data collection and technology testing activities to be conducted on the proposed lease under a 5-year lease term. FAU SNMREC has an existing multi-beam survey available for Blocks 7053 and 7054. Specific anchor location(s) are expected to be surveyed in greater detail utilizing high-resolution remote sensing equipment to assist in documenting potential historic archaeological resources; the depth of the project area precludes any consideration of prehistoric archaeological resources. BOEMRE's current Geological, Geophysical, Hazards and Archaeological Guidelines are available for your review at our web site (http://www.boemre.gov/offshore/RenewableEnergy/PDFs/GGARCH4-11-2011.pdf).

FAU SNMREC intends to initially deploy a single-anchor mooring, with a mooring and telemetry buoy (MTB) (similar to the Navy Oceanographic Meteorological Automatic Device (NOMAD) weather buoys) for the purpose of testing, for limited periods, equipment designed to use the Florida Current to generate electricity on the proposed leasehold. As illustrated in the attached mooring schematic, the applicant proposes to use a 6,000-lb Danforth-style anchor to moor the MTB. According to the project description, the applicant will deploy the anchor within 70 m of the proposed anchor location an

estimates that the anchor line drag will be approximately 80 m radius from the anchor. According to these estimates, BOEMRE proposes to establish the Area of Potential Effect (APE) for the project as a circle of 170-m radius around each proposed anchoring location. BOEMRE would consider deployment of additional single-point mooring anchors of the same class and design to evaluate effects of multiple systems arranged as arrays on the current (wake effects) and to increase testing flexibility and capability for simultaneous device deployment. Up to three additional moorings will be initially considered. Additional locations within the requested block area could also be considered, survey work will be used to establish additional candidate sites for mooring locations. Because of the nature of the project and uncertainty of the future anchor locations, archaeological remote-sensing surveys may occur in a phased manner, but will be required prior to BOEMRE's approval of bottom-disturbing activities related to this project.

BOEMRB intends to prepare an Environmental Assessment (EA) for the purpose of considering the environmental consequences associated with issuing an interim policy lease to FAU SNMREC, which will include impacts that may result from the installation of an MTB, deployment of small-scale ocean current devices, and operations of a deployment vessel on the potential leasehold. The Notice of Intent to Prepare an EA, published in the Federal Register on May 24, 2011 (FR Doc No: 2011-12724) is enclosed.

Although bottom-disturbing activities on the OCS have the potential to affect historic properties, BOEMRE feels that the archaeological and geophysical surveys that the lessee would undertake (in part, to identify these resources on the seafloor in the first instance) would likely assist to avoid or minimize effects of the proposed undertaking on historic properties. Nevertheless, BOEMRE is initiating this formal Section 106 consultation pursuant to 36 CPR 800.2(c)(1) to ensure that a wide range of views and information is taken into consideration as early in the decision-making process as possible.

Although the proposed undertaking is situated in Federal waters; BOEMRE is requesting the views of the State Historic Preservation Officer (SHPO) and your office on further actions to identify the APE and any historic properties that may be affected by the proposed project, as required by 36 CFR 800.4. BOEMRE acknowledges that a SHPO may possess knowledge or special expertise regarding historic properties within the proposed project area. In addition, BOEMRE is requesting any information you may have regarding other parties, tribes, or members of the public you believe should be included in the consultation process as per 36 CFR 800.3(f).

Please find enclosed the necessary documentation regarding the proposed project area for the Federal undertaking, per 36 CFR 800.11. BOEMRE is acting as the lead Federal agency fulfilling the collective Federal responsibilities under 36 CFR 800.2(a)(2), while the U.S. Army Corps of Engineers and the U.S. Department of Energy will act as co-consulting agencies. The U.S. Army Corps of Engineers has jurisdiction due to their permitting authority of bottom-founded structures on the OCS (33 U.S.C. 403).

The U.S. Department of Energy (DOE) has jurisdiction due to Congressionally Directed funding granted through DOE to FAU SNMREC who is proposing to use the funding for the construction and off-shore deployment of the testing facilities.

BOEMRE invites comments regarding any other concerns that the proposed undertaking may raise. Should you have any questions about this undertaking you may me at (703) 787-1748 or Brian_Jordan@BOEMRE.gov. Correspondence may also be sent to Dr. Jordan at the following address:

Department of the Interior
Bureau of Ocean Energy Management, Regulation
and Enforcement (BOEMRE)
Branch of Environmental Assessment
381 Elden Street, MS-4042
Herndon, VA 20170-4817

Thank you in advance for your timely response and cooperation. I look forward to receiving your response within 30 days of receipt of this submittal in accordance with 36 CFR 800.3(c)(4).

Brian Jordan, Ph.D.

Federal Preservation Officer Headquarters Archaeologist

Enclosures:

Notice of Intent Map of Proposed Project Area Proposed Mooring Schematic

cc: Dr. Barbara Mattick, Bureau of Historic Preservation
Ms. Laura Kammerer, Bureau of Historic Preservation





FLORIDA DEPARTMENT OF STATE Kurt S. Browning Secretary of State DIVISION OF HISTORICAL RESOURCES

June 21, 2011

Brian Jordan, Ph.D.
Federal Preservation Officer
Department of the Interior
Bureau of Ocean Energy Management,
Bureau of Enforcement
Branch of Environmental Assessment
381 Eiden Street, MS-4042
Hemdon, VA 20170-4817

Re:

USDOI - Bureau of Ocean Energy Management, Regulation and Enforcement Florida Atlantic University - Lease Three OCS Blocks offshore Fort Lauderdale DHR Project File No. 2011-2364; 2011-2182

Dear Dr. Jordan.

The review of the above referenced document was carried out in accordance with the provisions of Florida's Coastal Zone Management Act and Chapter 267: the Historical Resources Act (Florida Statutes), as well as Section 106 of the National Historic Preservation Act of 1966 (Public Law 102-575), as amended in 1992, and 36 C.F.R., Part 800: Protection of Historic Properties. The State Historic Preservation Officer is to advise and assist federal agencies or their designees when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce a project's effect on them.

A review of the information in the Florida Master Site File indicates that there is evidence of shipwrecks in waters offshore of Fort Lauderdale. However, because of the project location and/or nature, it is considered unlikely that historic properties will be affected. Therefore, it is the opinion of this office that the proposed project will have no effect on historic properties listed, or eligible for listing in the National Register of Historic Places, or otherwise of historical or archaeological value.

If you have any questions concerning our comments, please do not hesitate to confect Susan Harp at 850.245.6333. Thank you for your interest in protecting Florida's historic resources.

Sincerely

Laura A. Kammerer

Deputy State Historic Preservation Officer

Laura a. Kammuer

For Review and Compliance

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