

PMC-EF2a

(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION



RECIPIENT: US Marine Corps

STATE: SC

PROJECT TITLE : Parris Island Wind Resource Assessment; NREL Tracking No. 10-032

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
		NREL-10-032	GO10337

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

- A9** Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B3.1** Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

This project is for the installation and operation of a meteorological (met) tower on the US Marine Corps (USMC), Marine Corps Recruit Depot (MCRD), Parris Island, County of Beaufort, State of South Carolina. The proposed met tower location is on the southern part of the island in a grassy intersection of the runways of the former Page Field. The approximate coordinates of the proposed met tower are 32.3224°N 80.6764°W. A NREL contractor would install a 60-meter tall meteorological (met) tower and supported by guy wires. Data collected from the met tower anemometers, vanes and temperature sensors would be used to provide a feasibility study for wind potential at the site for a period of 12 months to 18 months.

This met site proposal would be on pre-disturbed surface located at the former Page Field, which is not an active airfield safety zone. Site access would be provided by existing roads. The met tower would be assembled onsite then lifted via a truck-mounted gin pole and winch. The tower would be positioned on a 4' x 4' steel base plate, and anchored with 5 sets of guy wires and anchors. Based on local soil conditions, guy wires would be anchored by 24-inch plate anchors with an 8-foot anchor rod, and installed by a small excavator. Data would be collected for a one year period or greater, starting with met tower installation, and the met tower would be disassembled and returned to NREL at project completion. During the wind turbine feasibility study, NREL may choose to incorporate a SODAR (sonic detection and ranging) acoustic wind profiler unit at the met tower site to enhance the wind data collection capabilities for this project. If used at this site, the SODAR unit would not require clearing/grading, or trenching for electrical connections. There is no known adverse interaction between SODAR and wildlife. Research of the available literature has found that the acoustic frequencies used by bats for echolocation range from 14,000 to 200,000 Hz and are well above the operating frequency ranges of the SODAR.

A Categorical Exclusion (CX) determination by USMC was signed on February 16, 2010 by Colonel Henderson, USMC. The determination concluded that the project falls under a CX, and requires no further environmental review. The specific CX used was (18) Studies, data, and information gathering that involve no permanent physical change to the environment (e.g., topographic surveys, wetlands mapping, surveys for evaluating environmental damage, and engineering efforts to support environmental analyses). Additionally, the USMC provided a copy of their most recent environmental assessment: Final Environmental Assessment for U.S. Marine Corps – Grow the Force Actions at Marine Corps Recruit Depot, Parris Island, South Carolina, April 2009. While this proposed action was not analyzed as part of this environmental assessment, this document does provide useful information on the affected environment and the site.

An informal consult was conducted with the U.S. Fish and Wildlife Service per Section 7 of the Endangered Species Act, the Migratory Bird Treaty Act, and the Golden and Bald Eagle Protection Act. The consultation concluded with a not likely to adversely effect determination issued by USFWS on June 28, 2010 (FWS Log No. 2010-CPA-0216).

Potential impacts to migratory birds and eagles would be mitigated by bird diverters on the guy wires, flashing strobe lights, the temporary nature of this structure, and post-construction monitoring. Any subsequent wind turbine installation would require additional consultation with USFWS. The met tower would be 196 ft (60m). The site is about 6.5 miles from the Hilton Head and Beaufort airports. In general, towers below 200 ft are not required by FAA to be lighted. However, in an email sent June 23, 2010 from Richard Pierce, Energy Manager, Parris Island to Sarah Meyer, DNV Renewables, it was requested that two lights (one for redundancy in case the first one malfunctions) be installed on the tower, because of possible helicopter evacuation of injured recruits from the area. There would be no electrical power available at the met tower, so a solar powered light (Carmanah A-702) light would be used. This light would function per the suggested Best Management Practices in the US FWS Wind Turbine Guidelines recommendations to the Secretary of the Interior (March 4, 2010). While the proposed project site is within a coastal management zone, the South Carolina Department of Health and Environmental Control, Office of Ocean & Coastal Resource Management determined that the met tower would not require a Federal Consistency Determination due to the small area of disturbance. The site would not impact any wetland areas present on the island. Per the provided environmental assessment and the MCRD cultural resource management report, there are no cultural resources, historic structures or districts in the vicinity of the proposed site. This proposed project would not result in the utilization of hazardous materials, or generation of hazardous waste or air emissions.

Based on the information above and the USMC determination, this project's impacts to the human and natural environment can be deemed less than significant and this project would qualify for Categorical Exclusions A9 and B3.1(h).

NEPA PROVISION

Insert the following language in the award:

You are required to:

The USMC is required to install bird diverters on the met tower guy wires, conduct post-construction monitoring for avian impacts, and install flashing strobes on the met tower.

Note to Specialist :

EF2A created by Rob Smith on 08/04/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Lori Plummer *Lori Plummer* Date: 8/4/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager