PMC-EF2a

(2/04/02)

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

RECIPIENT: Standing Rock Sioux Tribe **STATE:** SD

PROJECT TITLE : Feasibility Study Supporting Wind Development on the Standing Rock Sioux Tribe Indian Reservation

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-000424	DE-EE0005630	GFO-0005630-001	

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, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
B3.1 Site characterization and environmental monitoring	Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) 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). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.
B1.19 Microwave, meteorological, and radio towers	Siting, construction, modification, operation, and removal of microwave, radio communication, and meteorological towers and associated facilities, provided that the towers and associated facilities would not be in a governmentally designated scenic area (see B(4)(iv) of this appendix) unless otherwise authorized by the appropriate governmental entity.

Rational for determination:

DOE is proposing to provide federal funding to assist the Standing Rock Sioux Tribe (SRST) in developing wind energy on the SRST reservation. DOE funding would be used for purchasing and installation of two 60-meter meteorological (met) towers to assist in developing the wind resources on the SRST reservation. The proposed project would include information gathering, met tower installation, research, data gathering, reporting, technical advice and assistance.

The proposed met towers would be transported via commercial vehicle on existing roads and/or established two-track roads avoiding floodplains and wetlands to an area with a 2.3-mile diameter that measures from 101° 42' 25.1" W, 45° 43' 4.1" N (~8 miles southeast of McLaughlin, SD). This location is predominantly agricultural (cultivated and grazing) with scattered rural residential structures.

The design of each 60-meter tower is a single tubular galvanized steel pole tower with a diameter up to 10". The tower sections are assembled on the ground and tilted up with a gin-pole device. The met tower would have a 7.7" x 7.7" metal base anchored to the ground using four 5' rebar driven into the ground at opposing angles. No foundation is

constructed. The met towers would be installed with weather measuring devices (anemometers, weather vanes, temperature/humidity sensors) to be used for data collection for a period of 12 months. Upon conclusion of data collection, the information would be modeled to determine the wind potential and the results would be compiled in a report with recommendations on commercial development of the wind resource.

The met tower anchoring system utilizes site specific anchor systems that do not require concrete or pile or other permanent foundations. Anchoring systems vary by ground conditions which can range from farmland to gravel to rock. The anchoring system that would be used is a screw-in (helical) system that uses anchors with a 6" (150 mm) to 8" (203 mm) helix diameter base. Screw-in anchors are installed by hand, using a cross bar to screw them into the earth like a corkscrew 60" deep (1.524 m). On each side (four sides) of the met tower, three anchors are installed for guy wire support. At each anchor, two guy wires attach to the meteorological tower at different levels (totaling 24 guy wires). The guy wires would have bird diverters to deter avian species.

Upon review of the U.S. Fish and Wildlife Service Critical Habitat Mapper for the proposed site, the Threatened and Endangered (T&E) species known to be in the area include:
- Whooping Crane
- Black-footed ferret
- Piping T. plover
- Least E. Tern interior pop.
- Gray Wolf

The met towers would not be placed in critical habitat for any of the species listed above. The likelihood of gray wolf presence at the met tower sites are very low because of the existing human activity and lack of natural habitat.

Migrating birds including bald and golden eagles are also known to be in the area. To prevent migrating birds colliding with the guy wires, the met towers would have bird diverters installed on the guy wires. Bird diverters are intended to increase the visibility of guy wires and are effective in reducing fatal avail collisions. On July 19, 2012, the DOE made a determination that the proposed project may affect but is not likely to adversely affect any listed, or candidate, T&E species or their habitat. On July 20, 2012, the USFWS concurred with the DOE determination.

This proposed project was reviewed by the SRST Tribal Historical Preservation Office. In correspondence dated August 24, 2012, the Tribal Historical Preservation Office documented that "no historical properties were found, and no historic properties of significance to the tribe will be impacted," and made a "finding of No Historic Properties affected" by this project. Based on this information, DOE concludes there will be no impacts to sensitive resources including cultural resources.

This project is composed of information gathering, analysis, construction and operation of meteorological towers, and site characterization; therefore the DOE has categorized this project into Categorical Exclusions A9, B1.19, and B3.1

Budget for Project: $430,355 (DOE); $0 (cost share)

Conditions of Approval: Where applicable, the Standing Rock Sioux Tribe (SRST) and their contractors will cooperate with the Bureau of Indian Affairs (BIA) when installing met towers and equipment and that the SRST and their contractors will acquire any necessary permissions from private land owners prior to engaging in activities.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Insert the following language in the award:

You are required to:
Where applicable, the Standing Rock Sioux Tribe (SRST) and their contractors will cooperate with the Bureau of Indian Affairs (BIA) when installing met towers and equipment and that the SRST and their contractors will acquire any necessary permissions from private land owners prior to engaging in activities.

Note to Specialist :

EF2A by Christopher Carusona II

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Electronically Signed By: Lori Gray / Lori Gray Date: 8/29/2012

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