PMC-EF2a

(2.04.02)

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

RECIPIENT: TX STATE ENERGY CONSERVATION OFFICE **STATE:** TX

PROJECT TITLE : HIGHLAND ISD

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000116	GFO-0000116-030	EE116

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:

B5.18 Wind turbines
The installation, modification, operation, and removal of a small number (generally not more than 2) of commercially available wind turbines, with a total height generally less than 200 feet (measured from the ground to the maximum height of blade rotation) that (1) are located within a previously disturbed or developed area; (2) are located more than 10 nautical miles (about 11.5 miles) from an airport or aviation navigation aid; (3) are located more than 1.5 nautical miles (about 1.7 miles) from National Weather Service or Federal Aviation Administration Doppler weather radar; (4) would not have the potential to cause significant impacts on bird or bat populations; and (5) are sited or designed such that the project would not have the potential to cause significant impacts to persons (such as from shadow flicker and other visual effects, and noise). Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices. Covered actions include only those related to wind turbines to be installed on land.

Rational for determination:

The U.S. Department of Energy (DOE) provided funding to the Texas State Energy Conservation Office (SECO) under the DOE's American Recovery and Reinvestment Act of 2009 State Energy Program (SEP). SECO selected Highlands Independent School District (School) to receive $734,047 in SEP funding (total project cost - $1,129,616).

The School would use federal funding to partially fund the purchase and installation of three (3) 20 kW Enertech 44A wind turbines on three separate 100-foot lattice towers (height of ~ 121') at the Highlands ISD School complex, located at 6625 FM 608, Roscoe Texas 79545 (proposed project).

The proposed project and associated actions have the potential to impact the following resource areas:

Land Use and Ground Disturbance: The relatively small size of these wind turbines means that ground disturbing activities would be minor and are as follows: The proposed location is on the property of the School's complex. The School campus is in rural county, with the School located on the far west of the property. There is some School housing to the southwest, a track and field area to the north, and open ranch land to the south and east. The proposed turbines would be constructed approximately 325-340 feet apart to the east of the buildings, at the south end of the athletic track. The 3 proposed turbines would make a reverse 'L' shape pattern (See "Highland - NEPA Questionnaire Response.pdf" for additional siting location). The foundations would be pier-drilled to ~ 21 ft, with a 6 inch triangle concrete top cap between three piers. During construction, ~ 294 sq ft would be excavated for each turbine foundation and ~ 417 sq ft would be trenched for wires, with a total ground of ~ 711 sq ft for each turbine. Once constructed, the remaining footprint would be ~ 294 sq ft of permanently committed land (life of the project). The existing roads are sufficient for construction/delivery traffic and no new roads would be constructed. Because of the relatively minor ground disturbance required for the proposed project, DOE does not anticipate any adverse impacts related to ground disturbance.

Utilities: The proposed turbines have 3-phase, 480 VAC induction generators and would be directly connected to the grid via under-ground electrical wiring. It is anticipated that School would utilize all power generated by the turbines and any excess generated would be sold to a local utility company via a net metering agreement. It is estimated that the turbines could produce ~ 525,600 kWh of electricity per year. DOE has determined that the proposed project would have a small, beneficial impact on electric consumption at the School and a negligible impact to electricity use and production outside of the School.

Visual and Aesthetics: The proposed turbines would be on cement foundations and there are no occupied structures nearby. The School is located in a rural community with residential areas to the South and West, and open farmland to North and East. Due to the distance from occupied structures and the height of the proposed turbines, DOE has

determined that impacts related to "shadow-flicker" would be negligible. After reviewing the existing conditions at the proposed project location and the current use in the vicinity, DOE has determined that the proposed project would have minor impacts to visual resources and aesthetics.

Noise: The Enertech 44A Turbines have relatively low noise levels and based on the distance from occupied structures, baseline conditions, and attenuation, DOE has determined the proposed project would have a negligible impact on noise levels.

Biological Resources: The School has received a 'No Impact' letter from the U.S. Fish and Wildlife Department; therefore, DOE has determined the proposed project would not impact listed or eligible species in the area.

Historic and Cultural Resources: The Texas State Historic Preservation Officer determined the proposed project would have no impact on listed or eligible historic/cultural resources in the project vicinity. Based on this and the previous disturbance at the proposed project location, DOE has determined the proposed project would not adversely impact historic or cultural resources. Should unanticipated discoveries be made during construction, the School would immediately cease construction and contact the Texas State Historic Preservation Officer for guidance.

Permits and consultations: The U.S. Army Corps of Engineers determined the proposed project locations are not subject to their jurisdiction under Section 10 of the Rivers and Harbor Act as well as Section 404 of the Clean Water Act (See "Corps of Engineers Reply). The school contacted FAA and requested "No Hazard" determinations for the proposed turbines. However, using the FAA's "Notice Criteria" tool and based on the distance from the nearest airport (8.71 miles), the proposed turbines do not exceed the notice criteria. However, if FAA responds to the school's letter and determines anything other than "No Impact" the school will consult with FAA and provide SECO and DOE with the results of that consultation. Other than permits required for construction of the proposed turbines, the School does not anticipate needing additional permits for operation.

Based on review of project information and the above analysis, DOE has determined that the proposed project does not have a significant individual or cumulative impact to the human environment. The proposed project consists of 3 turbines, which would be ~121' tall and due to the location on previously disturbed land; distance from the closest airport and not exceeding FAA's notice criteria; lack of potential to impact bird and bat populations; and lack of impacts related to cultural/historical resources, shadow flicker, visual resources, and noise - DOE has determined the proposed project is consistent with the actions contained in DOE categorical exclusion B5.18 "wind turbines" and is categorically excluded from further NEPA review under CX B5.18.

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.

Note to Specialist :

DOE funding - $734,047
EF2a prepared by Melissa Rossiter

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 12/13/2011
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.