

PMC-EF2a

(20102)

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



RECIPIENT: Nevada State Office of Energy

STATE: NV

PROJECT TITLE : Renewable Energy and Energy Efficiency Revolving Loan Program - Andreola Farms, Inc.

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE-0000084	GFO-0000084-017	

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 Nevada State Office of Energy (NSOE) under the DOE's American Recovery and Reinvestment Act of 2009 State Energy Program (SEP). NSOE selected Andreola Farms, Inc. (Andreola) to receive \$450,000 in SEP funding (total project cost - \$3,402,000).

Andreola would use federal funding to partially fund the purchase and installation of eight (8) 100kW wind turbines at the Andreola's property - adjacent to State Highway 722 in Austin, NV (proposed project) (Assessors Parcel Numbers: #006-050-02, #006-050-04, #006-060-16, #006-060-17, #006-060-41, #006-060-48, #006-060-50, #006-060-51, #006-170-02, #006-170-08 and #006-180-03).

The wind turbines would be located on private ranch property that has been previously disturbed and was zoned Agricultural but has received a Special Use Permit from Lander County which changed the land designation to Power Generation. (See "Andreola Farms, Inc. - Special Use Permit for Land 12-23-2011.pdf"). All turbines would be mounted on 100 ft monopole towers and would be 132 ft tall at full blade height.

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

Land Use and Ground Disturbance:

The turbines would be located on both sides of Hwy 722 (five of the turbines would be located on the south/east side of the highway and three would be located on the north/west side of the highway). (See "Andreola Farms, Inc. - Aerial View #2 - 11-1-2011.pdf"). Each turbine would be on a 20' x 20' concrete pad. The total ground disturbance for all 8 wind turbine foundations and associated electrical wire trenching would be ~3,200 sq. ft., including the trenching for 480 VAC - 3 Phase electrical cabling for the switchgear equipment adjacent to each turbine. The switchgear would be connected to existing power poles on-site and sold to NV Energy. (See "2 - Andreola Wind Project - Turbine Plot Plan - 12-23-2011.pdf" and "7 - Wind Pump - Electrical Diagram - 12-23-2011.pdf"). All turbines are accessible by existing roads. 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 turbines switchgear would be connected to existing on-site power poles and would require minimal excavation. NV Energy would purchase the power generated. DOE has determined that the proposed project would have a negligible impact to the area's electricity use and production.

Visual and Aesthetics:

All wind turbines would be on cement foundations and there are no occupied structures nearby. There are existing

power poles and cell phone towers in the project area. 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 turbine locations 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 closest residence is > than 500 ft from a turbine. 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:

Consultation with the USFWS resulted in a list of measures the sub-recipient has agreed to follow to mitigate any potential impacts to biological resources in the project vicinity. (See – "USFWS Official Response - Andreola Farms 2-7-2012.pdf"). Because the recipient has agreed to follow USFWS's suggested measures, DOE has determined the proposed project is unlikely to adversely impact listed or eligible species in the area.

Historic and Cultural Resources:

The one of the turbines would be visible from the Historic Pony Express Trail. Due to the other prominent visual elements in the viewshed, the Nevada State Historic Preservation Office (SHPO) concurred with DOE's recommendation of no adverse effect. The National Park Service – National Trails Intermountain Region was informed of the proposed project and the SHPO's no adverse effect finding on February 22, 2012, and has not yet responded. The Reno-Sparks Indian Colony was contacted on February 22, 2012 in regards to the project and has not yet responded. The Washoe Tribe of Nevada and California was contacted on February 22, 2012 in regards to the project and has not yet responded. Should unanticipated discoveries be made during construction, the University would immediately cease construction and contact the Texas State Historic Preservation Officer for guidance.

Permits and consultations:

Because the turbine would not exceed 180 feet (55 meters), this project did not require consultation with the Federal Aviation Administration (FAA). The closest airport is in Austin, NV and is more than 5 miles from the project area. There are no Right-of-Way (ROW) permits required. Andreola has already obtained a "Special Use Permit" rezoning the land. Andreola does not anticipate needing additional permits.

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. Although the proposed project consists of 8 turbines, because each turbine is relatively small, would be located on previously disturbed land at least 5 miles from the nearest airport following USFWS's suggested measures, and would not cause impacts related to shadow flicker, visual resources, or 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.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:

Comply with the suggested measures in the USFWS letter, dated 2-7-12.

Note to Specialist :

DOE funding - \$450,000
EF2a prepared by Melissa Rossiter

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



NEPA Compliance Officer

Date:

3/27/2012

FIELD OFFICE MANAGER DETERMINATION