

PMC-EP2a

(20102)

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



RECIPIENT: TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

STATE: TX

PROJECT TITLE : ARRA SEP CITY OF JONESTOWN WIND PROJECT Phase II

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE0000116	GFO-0000116-021	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:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

Project Description – The City of Jonestown, Travis County, proposes to install up to twenty-five 20-kw turbines within their city. The vertical axis turbines would be about 23 feet tall and 25 feet wide. They would be positioned above the tree line, at a total height of about 60 feet. They would be anchored to a small concrete foundation and stabilized with about eight guy wires. Each turbine would be fenced.

Potential Environmental Impacts:

Land Use – The small turbines will have no effects on adjacent land use. The turbines will be installed on vacant land or on industrial/governmental properties (e.g., waste water treatment plants, fire stations) where the turbines will be compatible with existing land uses. No “areas having a special designation” (per 10 CFR 1021, subpart D, App B) or prime farmland would be affected.

Protected Species – Ten federally protected threatened and endangered species may occur in Travis County. Six are cave-dwelling invertebrates that would not be affected. One is a salamander that would not be affected as it only occurs in a series of springs in Austin, more than 15 miles from Jonestown. The other three are birds (golden-cheeked warbler, black-capped vireo, and whooping crane). Whooping cranes probably would not be affected because cranes migrating through the area would be flying at much higher altitudes than the 60-foot-tall turbines. The City has communicated with the U.S. Fish and Wildlife Service about this project and has received a letter from that agency (dated Nov 10, 2010) stating that the project would not affect Federally protected species if one proposed site (Herber West) is not used. The City has informed the FWS that they will not use that site.

Two additional birds, the bald eagle and peregrine falcon, are classified as threatened by Texas. Those species would not be affected by the operation of the small turbines in an urban environment.

Other Biological Resources – The turbine would be installed in an urban environment and would result in little or no habitat loss. Operation of the turbines could result in a small number of mortalities of birds and bats. The most likely birds to be killed are the common species in this urban environment. The vertical axis, helix-shaped turbines probably are much less of a risk to birds and bats than the typical turbines having vertically oriented blades. The FWS suggested that the use of guy wires be avoided or minimized, and if that is not possible, to add visual deterrents to increase the visibility of the wires to birds.

Cultural Resources – According to the “Questionnaire response for the City of Jonestown” (March 29, 2010), installation of the turbines would require little or no excavations or surface disturbances; thus, the project would not affect buried archeological resources. According to the Texas Historic Commission online Historic Site Atlas, there are

no registered historic properties in Jonestown. The turbine would have minimal indirect adverse effects on any eligible historic properties because the turbine would be about 60 feet tall and thus would not be visible from long distances.

Wetlands – According to aerial photographs and site photographs of the turbine locations, no wetlands will be affected by the project. The City has received a letter from the Corps of Engineers confirming that the project will not require actions to comply with Section 404 of the Clean Water Act.

Floodplains – According to the FEMA flood insurance maps for Travis and Burnet Counties, none of the proposed wind turbine locations are within 100 year floodplains.

Other Surface water and groundwater resources – Installation of the turbines would require little or no excavations or other surface disturbing activities and surface and groundwater resources would not be affected.

Coastal Zone Consistency Review – Jonestown is not within the area managed by the Texas coastal management program.

Noise – The turbines will be located on vacant land or in industrial/government-use areas and the turbines will not result in noise impacts.

Aesthetics impacts – The 60-foot-tall turbines would not be visible for long distances. However, the large number of turbines to be installed may cause some individuals in the area to consider the turbine an intrusion on the visual landscape.

Shadow flicker – Because the vertical axis turbines have a somewhat solid helix shape they will not cast flickering shadows.

Hazardous substances and wastes – Installation of the turbines would require little or no excavations or other surface disturbing activities and would not affect contaminated soils or result in the generation of hazardous wastes.

Health and Safety – The small turbines would not present a safety hazard.

Aviation – The City of Jonestown has received determinations of no hazard to air navigation from the FAA for all sites.

Conclusion – The City of Jonestown proposal involves the development of an energy-efficient industrial practice. The project would meet the conditions that are integral elements of the classes of actions for that and similar categories (10 CFR 1021, Subpt. D, App. B), and would have minimal impacts on the environment. The project therefore can be categorically excluded under category B5.1A CX. Stipulations should be added to the grant award prohibiting the City from installing any turbines on the Heber West site, and suggesting that the use of guy wires be avoided if possible, and if they cannot, that visual deterrents be added to make the wires more visible to birds.

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:

Avoid installing any turbines on the Heber West site to avoid potential impacts to threatened and endangered species.

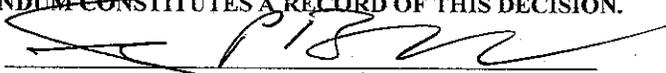
Avoid or minimize the use of guy wires. If guy wires must be used, visual deterrents should be added to make the wires more visible to birds.

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



Date:

11/29/10