

PMC-ND

(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT: NREL

STATE: CO

PROJECT TITLE Alstom Turbine Decommissioning and Removal - Foundation & Underground Infrastructure Removal;
: NREL Tracking No. 18-009b

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-18-009b	GO28308

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:

DOE/EA 1914 (NREL NWTC)	Final Site-Wide Environmental Assessment of the Department of Energy's National Wind Technology Center at the National Renewable Energy Laboratory
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Rationale for determination:

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) and General Electric/Alstom Power, Inc. are proposing to decommission the Alstom Eco100 wind turbine located at site 4.1 at the National Wind Technology Center (NWTC) in Jefferson County, Colorado.

DOE and Alstom Power entered into a Cooperative Research and Development Agreement (CRADA) in 2010 to conduct certification testing on the company's 3-MW ECO 100 wind turbine and to validate models of Alstom's unique drivetrain concept. The turbine was installed at NREL's National Wind Technology Center (NWTC) in October 2010 and engineers began certification testing in 2011. A NEPA Determination to install and operate the turbine was signed in July 2010.

Research on the turbine has been completed and GE International (parent company of Alstom) has decided to remove it from the NWTC. Decommissioning would be completed in two phases. Phase 1 of decommissioning included removal of all aboveground components – this was completed in June, 2018. Phase 2 would involve removal of all belowground components, infrastructure, and reclamation of the site.

This NEPA review is for Phase 2 activities as described below:

Workers would remove the soil currently on top of the turbine's foundation to expose the concrete. The area of the foundation is approximately 75' in diameter and 16' deep. The concrete and rebar would then be removed using three front-end loaders each equipped with different tools (jackhammer, crusher, load bucket). The concrete would be broken into large chunks, crushed, and loaded onto a dump truck for transport off-site. Approximately 800 cubic yards of concrete and 137,000 pounds of rebar would be removed and recycled.

The underground infrastructure of electrical cables and data lines for the turbine would also be removed. These run from the turbine foundation to a vista switch at the junction of the Site 4.1 access road, approximately 6 ft x 6 ft x 900 ft. Removing the cables, conduit and associated infrastructure would result the excavation of approximately 1,300 cubic yards or less of soil. The road, data shed, and adjacent met tower would remain on site.

All areas would then be back filled with native soil that has been collected and retained for this purpose from other construction projects recently completed onsite. Up to 3,000 cubic yards of soil would be needed to backfill the foundation hole. The entire project area would then be reseeded with an approved native mixed grass seed.

NREL and GE are proposing to begin the foundation decommissioning in late June or early July. They anticipate that

project work would take three weeks, two of which would specifically be concrete demolition and removal.

Noise barriers would be erected during foundation demolition. The noise barriers would be made of fill dirt and the concrete as it is excavated from the site. This would be piled to the north of the project site to create a barrier that would reduce impacts of noise disturbance to NWTC employees conducting business in Building 251. If needed, fence barriers supporting wood/plastic/rubber woven into the chain link would be erected between dirt and debris piles to further decrease potential noise disturbance. Sound levels are expected to be 68 db or less at the main road across from building 251. Workers in the project area would be required to wear hearing protection per OSHA standards and the contractor's hearing protection program.

All demolition would be conducted under controlled conditions including wetting the foundation/concrete with water to reduce dust and silica dispersion.

Ground disturbing activities would be conducted in accordance with NREL Lab Level Procedure 6-1.29: Stormwater Pollution Prevention for Construction Activities and stormwater best management practices would remain in place following construction. The project area would be reclaimed and reseeded per NREL construction specifications. The size of the ground disturbance would be 0.84 – 0.95 acres, which is below the threshold requiring an EPA Construction General Permit.

The contractor would follow their internal programs as well as NREL's health and safety policies and procedures, including appropriate employee training, use of proper protective equipment, engineering controls, safety monitoring, safe work permits and internal assessments.

There are no known cultural resources, wetlands, floodplains, or prime farmlands at the NWTC, therefore this project would not adversely affect these resources. The site has designated critical habitat for the Preble's meadow jumping mouse at the southeast corner of the NWTC, however, the proposed activities would take place in the eastern edge of the site and would not affect this habitat.

Based on the review of the proposed activities, DOE has determined that this project falls into the scope of activities that were analyzed in DOE's 2014 Final Site-Wide Environmental Assessment of the NREL NWTC (DOE/EA-1914). A discussion of turbine decommissioning was incorporated into sections 3.4.3.2 of the proposed action and in 4.6 DOE and NREL Committed Measures. A Finding of No Significant Impact for DOE/EA-1914 was issued in May 2014. DOE has determined that this activity is bound by the environmental impact analysis contained in this EA and the respective FONSI, and no further NEPA review is required.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If the Recipient intends to make changes to the scope or objective of this project, the Recipient is required to contact the Project Officer, identified in Block 15 of the Assistance Agreement before proceeding. The Recipient must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. If the Recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of a final NEPA decision, the Recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

Completed by Laura Margason on June 20, 2018

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date: 6/21/2018

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: _____
Field Office Manager

Date: _____