

PMC-EF2a

(20402)

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



RECIPIENT: NREL

STATE: CO

PROJECT TITLE : NREL- Bangladesh Meteorological Instrumentation Installation; NREL Tracking No. 13-011

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-13-011	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:

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.)
--	--

Rational for determination:

A14 Approval of Technical Exchange Arrangements

Approval of technical exchange arrangements for information, data, or personnel with other countries or international organizations (including, but not limited to, assistance in identifying and analyzing another country's energy resources, needs and options).

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) proposes a project in support of United States Agency for International Development (USAID)'s Bangladesh Mission in conducting a national wind energy assessment of the People's Republic of Bangladesh (Bangladesh).

PROPOSED ACTION

NREL would conduct a national wind resource assessment that would include in-situ measurements and computer modeling. Data would be gathered over a period of two years across a wide geographic area, including coastal and inland regions of the country of Bangladesh. This data would be used to validate the national wind resource model, and published in an open and freely available format. Procurement and installation by the selected subcontractor would occur only upon written authorization from NREL. The scope of work to be performed by the selected subcontractor has been uploaded to the PMC.

Phase I

Under Phase I of the project, NREL would solicit and select a qualified subcontractor to help implement the procurement, installation, maintenance, and decommissioning of the wind resource assessment equipment specified under Phase II and as specified per the uploaded scope of work. NREL and the selected subcontractor would work with USAID, People's Republic of Bangladesh, and other applicable parties in the identification of potential wind resource monitoring sites. This would include coordination, meetings, analysis of existing data sets, site visits, etc.

Phase II

Phase II of the proposed project would entail the procurement, installation, maintenance, and de-commissioning of four tilt-up meteorological (met) towers, instrumentation of one existing tower, two remote sensing units, and data collection equipment per the uploaded scope of work. The proposed guyed lattice met towers would be 85 meters (m) high, and include instrumentation such as anemometers, directional wind vanes, temperature sensors, barometric pressure sensors, pyranometers, and data loggers with GSM or satellite modems with two years of communication service. Each met tower would also be equipped with a PV panel for battery power, as well as a lightning rod. Met towers would be anchored per met tower manufacturer requirements, and the outer guy wires at each anchor point would be marked with yellow guy guards. Each met tower and remote sensing unit would be protected by security or

perimeter fencing. Met towers would be installed on sites specified by NREL, following a site visit and kickoff meeting, expected to occur in May, 2013.

The two remote sensing units would be installed at locations specified by NREL, and after one year of data collection, relocated and re-commissioned at additional locations to be determined by NREL. During the two year monitoring period, the subcontractor would provide detailed field notes to NREL regarding work performed and respective results related to installation, routine inspections and preventative maintenance, at least annually. Upon notification from NREL, the subcontractor would initiate decommissioning. All equipment would be returned to an NREL designee within Bangladesh.

While the subcontractor would be responsible for any repairs, NREL would be notified before any repairs would be initiated. The subcontractor would also be responsible for procuring all required permits for the installation of the met tower and equipment, and arranging for access to the installation sites with NREL and its in-country liaison. The Subcontractor would ensure that the tower installation site and immediate access roads would be returned to their original condition both after the sensors and equipment are installed and after the sensors and equipment are decommissioned.

Upon completion of the collection of data for a period of two years, NREL would use the data to develop and validate a national wind resource model for Bangladesh, and provide this data to USAID and Bangladesh.

At the current time, no potential installation sites have been identified and the potential environmental impacts of the wind resource monitoring equipment cannot be analyzed. Therefore, a subsequent NEPA determination for the Phase II activities will occur after the potential monitoring site locations have been identified.

PREVIOUS NEPA DETERMINATIONS / OTHER AGENCIES' ENVIRONMENTAL REVIEWS

USAID is funding this proposed project with funds from the U.S. Department of State. In accordance with USAID environmental procedures codified in Title 22 Code of Federal Regulations (CFR) Part 216, USAID completed an Initial Environmental Examination (IEE)(IEE No. E3-13-19) dated April 1, 2013, which has been uploaded to the PMC. The IEE allows USAID to authorize funds and actions for activities captured in Phase I above, but defers subsequent funding and authorization until further environmental impacts analysis can be performed once potential wind resource monitoring sites are identified by NREL and the selected subcontractor. USAID will complete another IEE in conjunction with DOE's subsequent NEPA review once proposed monitoring sites are identified and environmental impacts can be analyzed for Phase II activities.

NEPA DETERMINATION

Pursuant with 10 CFR 1021.102(b), DOE's NEPA implementing regulations do not technically apply to DOE or NREL actions having environmental effects outside the United States, its territories or possessions. DOE or NREL actions having environmental effects outside the United States are subject to Executive Order 12114, Environmental Effects Abroad of Major Federal Actions and DOE guidelines implementing EO 12114 (46 FR 1007). However based upon the USAID Initial Environmental Examination and the information above, DOE has determination that this proposed action would be consistent with the actions contained in DOE categorical exclusion A9 "Information Gathering, Analysis, and Dissemination" and A14 "Approval of Technical Exchange Arrangements."

This action is exempt from further review under EO 12114 per Section 5.1.1 (Actions not having a significant effect on the environment outside the US) of the DOE EO 12114 implementing guidelines, as well as Section 6.1 and Appendix B.3 (Classes of actions which DOE has determined do not have significant environmental impacts requiring review under these guidelines):

Appendix B, No. 3 - Approval of arrangements to assist other countries in identifying and analyzing their energy resources, needs, and options.

A subsequent NEPA determination for the Phase II activities will occur after the proposed potential wind resource monitoring sites are identified.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

DOE does not authorize any activities captured under Phase II, including but not limited to physical site preparation and

modification, or the installation or operation of meteorological towers, instruments, remote sensing units, data collection equipment, and support infrastructure until the environmental impacts of the proposed project on the specific sites can be analyzed in a subsequent NEPA determination.

This restriction does not preclude you from:

NREL/DOE is authorized to proceed with Phase I of the proposed project including the procurement of the subcontractor, coordination with the subcontractor, USAID, the People's Republic of Bangladesh, and other parties, site visits, existing data analysis, etc., to support the selection of potential monitoring sites for the wind energy assessment.

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

EF2a prepared by Rob Smith on 4/24/2013

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

Electronically
Signed By: Lori Gray

NEPA Compliance Officer

Date: 4/26/2013

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: _____