PMC-ND

(1.08.09.13)

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



RECIPIENT: HRF - Massachusetts Institute of Technology

STATE: CO

PROJECT TITLE Hydro Research Foundation University Research Awards

Funding Opportunity Announcement Number

DE-EE0006506

Procurement Instrument Number NEPA Control Number CID Number GEO-0006506-204 GO6506

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:

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data A9 analysis (including, but not limited to, computer modeling), document preparation (including, but not limited Information to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information gathering, analysis, and dissemination (including, but not limited to, document publication and distribution, and classroom training dissemination and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

A11 Technical

advice and Technical advice and planning assistance to international, national, state, and local organizations assistance to organizations

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Hydro Research Foundation (HRF) to award grants to individual research projects through its University Research Awards Program to support innovative research related to conventional or pumped-storage hydropower, stimulate interest among students and universities in this research arena, and provide students with a foundation for productive careers related to the hydropower industry.

DOE completed a previous NEPA review (GFO-0002668-002 CX A9, A11 3/23/2015) that included development of a Hydro Fellowship Program that would competitively award grants for hydropower-related, graduate-level research projects for one- to two-year periods of study. This NEPA determination applies to activities associated with one of the projects which has been selected to receive a grant award from the HRF.

The awardee at the Massachusetts Institute of Technology (MIT) would use HRF grant funding provided by the DOE to investigate two areas: (1) the coordinated control of multiple small hydropower resources to improve the stability and capacity of the national grid; and (2) the utilization of small hydropower within solar-hydro microgrids expanded for isolated areas, where expensive batteries are currently the only means of storing energy. Proposed activities undertaken towards this goal would include coding and data analysis using computational software and a visit to Kigali and Musanze, Rwanda for the purpose of data collection. Contacts in the hydropower industry there would be leveraged to gain the most up-to-date data on solar and hydro facilities in the area. The proposed project would be limited exclusively to intellectual, academic, or analytical activities and would use no physical materials beyond basic office supplies and software.

Based on review of the project information and the above analysis, DOE has determined the activities associated with the proposed project would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is consistent with actions contained in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination" and A11 "Technical advice and assistance to organizations" is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

U.S. DOE: Office of Energy Efficiency and Renewable Energy - Environmental Questionnaire

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 :

Water Power Program

This NEPA Determination does not require a tailored NEPA provision. NEPA review completed by Rebecca McCord, 06/03/16

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

Referenceally Signed By: Kristin Kerwin	Sint	mK	Date:	6/7/2
NEPA Compliance Officer	000	- V		

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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 Ma	anager's Signature:
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Date:

Field Office Manager

COE completed a printices MEPA indepriGPO-0002666-002 CX A6; A11 3/20/2015) that induced development of a Hypero Palloweing Program that would compatitively event grants for hyperophysic-valated, graduate-level research projects for one- to two-year periods of audy, This NEPA determination applies to activities associated with one of the projects which has blain estacted to resolve a grant sward from the HRF.

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MOREY PROPERTY

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OF has made a final MEFA determination for this award.