PMC-EF2a

(2.04.02)

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

RECIPIENT: Electric Power Research Institute **STATE:** CA

PROJECT TITLE : A First Assessment of U.S. In-stream Hydrokinetic Energy Resources Since the 1986 NYU Study

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000069	DE-EE0002662	GFO-10-124	GO0

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 (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

A11 Technical advice and planning assistance to international, national, state, and local organizations.

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

The Electric Power Research Institute will use federal funds to perform surveying and data collection to determine the hydro-kinetic potential for remote rivers and streams in Alaska. The surveying will consist of installing small monitors along the shores to measure height change/frequency, water flow, and Doppler radar measurements to determine depths of the riverbeds. This information will be collected as part of an assessment for hydro-power feasibility in remote locations. All information gathered will be shared with both NREL and USGS, in an effort to upgrade GIS data for potential future siting assessments.

This project will also include data collections from a list of both existing U.S waterways and aqueduct canals across the United States. The effort to collect and compile existing data from a number of locations will be used to categorize and evaluate hydro-electric potential for the various canals outlined within the SOPO. The teams will compile and manipulate existing data previously collected from the various authorities that have the documented values needed to determine hydro-kinetic potentials (including but not limited to USGS data). The team may have to perform a limited amount of site visits to conduct digital elevation surveying and laser altimetry measurements (highly accurate surveying). The teams will then use this information to accumulate a data pool which will then be linked, shared, and uploaded to a GIS service that is compatible with NRELs current database.

The compilation and review of the data collected will be used to generate reports that will address the various concerns commonly encountered during hydro-power production. The concerns to be addressed within the reports include: deployment area, turbine spacing, vertical clearance, environmental impact, and power conversion efficiency. All activities related to this project involve information gathering, data manipulation, monitoring, reporting, and minimal on-site monitoring all of which are temporary in nature and do not pose a significant environmental impact. It has therefore been determined that this project is Categorically Excluded under A9 "Information Gathering", A11 "Technical Advice" and B3.1 "Environmental and Site Characterization".

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/23/10

NEPA Compliance Officer

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: _____ Date: _____

Field Office Manager