PMC-EF2a
(2.01.02)

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

RECIPIENT: Walker Wellington, LLC **STATE:** ME

PROJECT TITLE : W4e Hydropower Turbine Generator System Validation

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000486	EE0005425	GFO-0005425-001	0

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:

B3.6 Small-scale research and development, laboratory operations, and pilot projects
Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rational for determination:

DOE is proposing to provide federal funding to Walker Wellington, LLC to conduct laboratory research and development activities that advance the W4e hydroturbine. DOE funding would be used to test modifications applied to an existing W4e hydroturbine generator.

Hydraulic turbine testing would be conducted at Alden Research Laboratory, Inc. (Alden) located at 30 Shrewsbury Street, Holden, Massachusetts 01520. Alden would conduct hydraulic performance testing to measure the amount of power generated at flow rates ranging between 5 to 70 cubic feet per second (cfs) with head conditions from 0 to 20 feet. Testing would be performed in Alden's Closed Loop Facility. The hydroturbine would be installed in the test loop and water would be circulated by a 150 horsepower centrifugal pump. City water would be used to fill the supply tanks.

Alden has completed an R&D questionnaire addressing the protocols for laboratory safety, risk management, chemical handling and waste disposal. Alden complies with standard laboratory safety procedures. Labs are inspected by staff and safety personnel. Internally, the department is monitored by Alden's Safety Coordinator and Safety Committee. Externally, Alden's safety protocols are reviewed by Alden's insurance provider, AIM. Alden has all applicable permits in place to conduct research on site including a National Pollutant Discharge Elimination System (NPDES) permit number MA0028801.

Based on this information, DOE has determined the work outlined is consistent with activities identified in categorical exclusion B3.6 (small-scale research and development, laboratory operations and pilot projects).

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

Cristina Tyler 1.30.2012

DOE Funding: $93,000
Total Project Cost: $116,250

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 2/10/2012
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