

PMC-EF2a

(2.04.02)

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



RECIPIENT: Advanced Energy Conversion, LLC

STATE: NY

PROJECT TITLE : Hydropower from Wastewater

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
N/A	DE-EE0000403	GFO-10-176	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:

- 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.
- B3.6** Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

## Rational for determination:

Advanced Energy Conversion, LLC will use congressionally directed funding through DOE to develop an integrated turbine/generator system that would be installed in effluent channels of wastewater treatment plants (WWTPs). This equipment will be designed to be installed into existing WWTPs and allow the plants to generate a portion of their own electricity. Work being conducted under this project is strictly research and development, no actual installation or demonstration will be done.

Prototype fabrication, assembly, and dry testing will take place at Advanced Energy Conversion facilities in Schenectady, NY. Wet testing of the prototype will take place at Alden Research Labs in Holden, MA. An R&D questionnaire has been filled out and submitted which addresses safety and waste stream protocols in place for the facilities.

This project comprises research gathering and conventional research and development activities in establish laboratory and manufacturing facilities; therefore a CX A9 and B3.6 will apply.

**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:

  
 \_\_\_\_\_  
 NEPA Compliance Officer

Date:

2/25/10

**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

*(Faint, mirrored text from the reverse side of the page is visible through the paper, including phrases like "Field Office Manager", "Date", and "Signature".)*