

PMC-EF2a

(2.04.02)

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



RECIPIENT: Energy Center of Wisconsin

STATE: WI

PROJECT TITLE : Hybrid Geothermal Heat Pump Systems Research

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000116	DE-EE0002944	GFO-10-135	GO2944

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.

Rational for determination:

Energy Center of Wisconsin (ECW) would demonstrate the potential benefits of hybrid geothermal heat pump systems (HyGSHP) by gathering data on existing systems throughout all seasons of the year and using it to refine and enhance tools for heating and cooling system designers and engineers (no construction would take place). The project would be divided into five tasks:

- Task 1.0 Collect Performance Data
- Task 2.0 Validate the HyGCHP Model
- Task 3.0 Improve the HyGCHP Model
- Task 4.0 Analyze the success of the hybrid approach for these buildings
- Task 5.0 Report to the mainstream design community

ECW claims no permits are needed and there would be no generation of air emissions and/or toxic/hazardous associated with this work.

This proposal comprises data analysis, and actions to promote the research and development of more efficient geothermal technologies; therefore this project is categorized as CX A9.

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: Kurtin Lee
NEPA Compliance Officer

Date: 1/26/2010

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

As information gathering (including but not limited to...)

Energy Center of Wisconsin (ECW) would demonstrate the potential benefits of hybrid geothermal heat pump systems (HyGHP) by generating data on existing systems throughout all seasons of the year and using it to refine and enhance loads for heating and cooling system design and engineers (no construction would take place). The project would be divided into five tasks:

- Task 1: Collect Performance Data
- Task 2: Validate the HyGHP Model
- Task 3: Improve the HyGHP Model
- Task 4: Analyze the success of the hybrid approach for these buildings
- Task 5: Report to the mainstream design community

ECW claims no permits are needed and there would be no generation of air emissions or other contaminants associated with this work.

This project compares data analysis and allows to promote the research and development of more efficient geothermal technologies, therefore this project is categorized as CEAB.

NEPA PROVISION
CCE for makes a final NEPA determination for the project.

Under the following language in the statute:

Not a species

Not a DWH

SIGNATURE OF THE FIELD OFFICE MANAGER CONSTITUTES A RECORD OF THIS DECISION.