



PMC-EF2a

(2.04.02)

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



RECIPIENT: Ball State University

STATE: IN

PROJECT TITLE : BSU Ground Source Geothermal District Heating and Cooling System

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-EE0000116	DE-EE0002806	GFO-10-299	2806

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.
- B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.
- B2.2** Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment).

Rational for determination:

Ball State University (BSU) will use DOE ARRA funding to finance and purchase:

- 1.) Purchase two 2500 ton heat pump chillers for installation internally to the North District Energy Station.
- 2.) BSU will convert the existing mechanical equipment for 16 to 20 buildings to utilize the hot and chilled water produced by the geothermal system. This task is limited to the internal retrofits to these buildings. DOE funding will NOT be used for external retrofits of piping or any connections made to and from the District Energy Station to any of the buildings.
- 3.) Data collection and monitoring, BSU will purchase all meters, instrumentation, and software associated with the collection and processing of the data to be gathered from the geothermal system.
- 4.) BSU will generate reports and other deliverables (paper studies) associated with the geothermal system.
- 5.) The engineering and design fees associated with Phase 1's internal retrofits, two chiller units, and monitoring equipment. Conceptual Design and Feasibility Studies are allowable tasks under this determination. However, no final design work can be expensed with federal funds.

The purchasing of equipment and internal retrofits to existing structures does not pose a significant impact to the environment. BSU has resubmitted a Statement of Project Objectives (SOPO), to specifically address how DOE funding would be used. The federal funding portion of this project is a very small percentage of the total project (~5%). The \$10 million proposed project's cost share (DOE's \$5 million to BSU's 50% cost share of \$5 million) initially appeared to be an arbitrary subset of the total project, the total project is expected to range from \$93.3 million. BSU refined their scope for DOE's management and reporting requirements. DOE has determined that our action to fund this project has not influenced BSU's decision-making nor has it influence the project design or execution in any way. BSU received their Post Selection Letter for negotiation on 11/02/09, six months after they commenced work on the project (May, 2009). It is clear that this project was to proceed as designed with or without DOE's action to provide funding. The DOE NEPA scope of review is therefore limited to the \$10 million dollar SOPO and cost share re-submitted to DOE on (5/6/10).

BSU has committed to DOE that all state and local building permits will be obtained for all applicable activities. DOE has determined the purchasing of equipment and internal retrofits to be perform in existing structures does not pose a significant impact to the environment.

DOE has determined that federal funds provided to BSU will not have a significant impact to the human health and/or environment. This portion of the project that will use cost shared federal funds is hereby Categorically Excluded under B5.1 "Actions to Conserve Energy", B2.2 "Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment)", and A9 "Information Gathering".

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:

Prior to the expenditure of Federal funds the recipient has the affirmative responsibility to ensure that it has a waste management plan addressing waste generated by their proposed actions. The plan will describe the disposal of any sanitary or hazardous waste, e.g. construction and demolition debris, old piping, roofing materials, discarded equipment, debris, packaging materials, asbestos, etc. generated as a result of the proposed project. The recipient must ensure that it will comply with all federal, state and local regulations for waste disposal.

Note to Specialist :

NEPA review conducted by John Jediny

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:

  
NEPA Compliance Officer

Date:

5/12/10

**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:

\_\_\_\_\_  
Field Office Manager

Date:

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