PMC-EF2a

(2.04.02)

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



RECIPIENT: IL Department of Commerce & Economic Opportunity

STATE: IL

PROJECT TITLE:

University of Illinois at Chicago Geothermal Closed Loop Bldg. 613

Funding Opportunity Announcement Number DE-FOA-0000052

Procurement Instrument Number

NEPA Control Number CID Number

GFO-10-496

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:

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.

Rational for determination:

The State of Illinois will provide \$146,000 in Recovery Act funds to the University of Illinois, Chicago to purchase and install water-source heat pumps to supply heating and cooling to 41 classrooms. The work will be conducted in Douglas Hall, 705 S. Morgan, Chicago, IL 60607-7133.

The project will provide one water source heat pump unit (ranging in size from 1-5 tons) for each thermal zone and one 54-ton central outdoor makeup air unitized heat pump. The pumps are to be ceiling-mounted over the aisles between the central hallway and the classrooms. The units will each have a compressor and capacity controls and will have ducted supply and return. An existing vertical geothermal field will provide the heat source and/or heat sink for the heat pumps. A heat exchanger, connected to central plant utilities, will be provided for supplementary heating of the water loop as a backup to the geothermal field. Heat pump driven make-up air unit, to be located on the roof, will be installed to provide minimum code-required outside air to the heat pumps. Other than mounting the make-up air unit on the roof of the building, the work will be confined to inside Douglas Hall.

In view of the information provided by the State and recipient, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1.

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:

Provide the DOE Project Officer with evidence of consultation with the State Historical Preservation Office (SHPO) and approval from SHPO for the work to be conducted at Douglas Hall. The University is to provide the State and DOE project officer with a waste management plan for the material to be removed from the classrooms.

Note to Specialist:

According to the project officer, funding for this project is \$146,000. Absent a significant change in the scope of this

Field Office Manager