

PMC-EF2a

(2.04.02)

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



RECIPIENT: Missouri DNR, Division of Energy

STATE: MO

PROJECT TITLE : Western Missouri Correctional center

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-EE-0000131	EE0000131	GFO-0000131-023	EE131

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:

DOE is proposing to provide \$650,075 in SEP ARRA funding to the Missouri Department of Corrections to perform an energy efficiency retrofit at the Western Missouri Correctional Center (WMCC) and the Crossroads Correctional Center (CRCC) located adjacent to one another at 1115 E Pence Rd, Cameron, MO 64429.

Currently, both the WMCC and the CRCC operate independently. Both plants have a total capacity of 1,550 BHP (two, 400 BHP and one, 750 BHP). DOE funding would be used to purchase and install equipment, which would tie the two primary heating hot water loops of the two plants together and utilize only the boilers at CRCC to provide the primary loop heating. The WMCC secondary loop would be disconnected. The CRCC boilers would be used because they were purchased ten years after the boilers at WMCC.

At the CRCC boiler plant, the following equipment would be installed:

- A primary booster pump
- A Variable Frequency Drive (VFD) to the primary booster pump
- BAS control panel and periphery devices

The new piping would be insulated and jacketed with a molded fibrous glass complying with the requirements of ASTM C 547. The insulation would be rated for operation from -20°F to 850°F and the outside piping would have a metal jacketing with 0.016 inch minimum stainless steel wrap with a moisture barrier. The insulation would have a thermal conductivity of 0.449 BTU in / (hr ft² °F).

The proposed piping between the WMCC and the CRCC boiler plants would require 3,200 feet (1,600 linear feet) of eight-inch supply and return pipe. The two pipes would be hung on approximately eighty, galvanized metal pipe stanchions (stands) spaced twenty feet apart. For each stanchions, eight-foot holes (twelve-inches in diameter) would be dug, filled with concrete and reinforced with steel. Total ground disturbance would be 160 square-feet (2 square-feet per stanchion). The pipes would hang six feet above ground to allow a lawn mower to pass underneath. The piping route to connect both boiler plants would follow the perimeter service road, which circles the two correction facilities. The new supply and return lines would connect into existing lines.

No hazardous waste streams are anticipated. All excavation would utilize silt barriers where required to mitigate soil migration. Construction waste would be minimized per the states construction guidelines. Any recyclable material would be recycled.

The WMCC and the CRCC are located one mile north-east of Cameron, Missouri. The facilities are surrounded by

agricultural land. The proposed project is not anticipated to affect wetlands, floodplains and threatened and endangered species, as they are not known to occur at the proposed site.

In a letter dated June 21, 2011, the Missouri State Historic Preservation Office (SHPO) determined there would be "no historic properties affected" by the proposed project.

An air permit would not be required for the proposed project because there would be an overall reduction in air emissions, as the boilers at the WMCC would no longer be utilized.

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 (actions to conserve energy).

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Cristina Tyler 7.29.2011

DOE Funding: \$650,075
Total Project Cost: \$650,075

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____


NEPA Compliance Officer

Date: _____

7/29/11

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: _____