PMC-EF2a

(2.04.02)

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

RECIPIENT: City of Klamath Falls, Oregon **STATE:** OR

PROJECT TITLE : Purchase & Installation of a Geothermal Power Plant Module, Heat Exchanger & Cooling Tower System to Generate Electricity Using Geothermal Water Resources

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	DE-EE0002857	GFO-10-359	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.

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.

B5.2 Modifications to oil, gas, and geothermal facility pump and piping configurations, manifolds, metering systems, and other instrumentation that would not change design process flow rates or affect permitted air emissions.

Rational for determination:

The objectives of the project are to develop, install, operate, and monitor a low-temperature geothermal energy production facility that would demonstrate the technical and economic feasiblity of utilization of the non-conventional resource for combined power and heat. The City of Klamath Falls currently operates a geothermal district heating system from a dedicated building in the downtown core area which is the proposed location for the low-temperature geothermal to electric power plant that would generate about 180 kW of net power. A cooling tower would be installed on the roof of the existing heat exchanger building.

Phase 1 would include an analysis of integration of the power plant with the existing heating system and would produce a Feasibility Report, engineering/design work, and the permits required to proceed to Phase 2. Phase 2 would procure, install, and commission the equipment. The power plant would be housed in a new 14' by 24' building in an existing paved parking area. Phase 3 would be operations of the facility and monitoring of economic, performance, and operating characteristics. A final report would include a validation of technical and economic assumptions and documentation of lessons learned.

The project is comprised of: information gathering, data analysis, document preparation and dissemination; a small-scale geothermal energy research and development or pilot project promoting energy efficiency that would include new construction in a commercial or industrial sector; and would be integrated into an existing geothermal facility piping system. Consistent with these proposed actions, DOE has categorized this proposal into Categorical Exclusions A9, B5.1, and B5.2.

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: _____ Date: 4/20/10
NEPA Compliance Officer

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