PMC-EF2a

(2.04.02)

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

RECIPIENT: Governor's Energy Office **STATE:** CO

PROJECT TITLE : COLORADO SEP ARRA - Geothermal Direct-Use Power Grant - City of Salida

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000082	GFO-0000082-006	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:

A11 Technical advice and planning assistance to international, national, state, and local organizations.

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.

Rational for determination:

The City of Salida is proposing to use $49,500 in SEP funding to complete the first stage of a three stage geothermal development project. The first stage will consist of thermal gradient studies at Poncha Springs Hot Springs including: assembling available geologic and geophysical data; surface mapping of geological structures, springs and seeps; creating a GIS base map; and drilling thermal gradient holes.

Stage two will not use SEP funding and will consist of deep drilling to prove a sustainable reservoir at depth. Stage three will not use SEP funding and will consist of production and reinjection drilling leading to the construction and operation of a geothermal power plant.

There will be six thermal gradient boreholes drilled to different depths depending on prior measurements. The test boreholes will be drilled on the city-owned Poncha Hot Springs property and potentially private property. The owners of both have given written approval to use the land for the proposed project. The boreholes will be capped and locked. Ground disturbance will not exceed 10,000 sq. ft. The proposed well locations are adjacent to the existing county road and no new access roads will be necessary. The proposed project has been reviewed by the Colorado Division of Wildlife (CDOW) Area Manager and was determined to have "minimal, if any, long-term negative effects to wildlife." per the attached letter. DOE has reviewed and concurs with the CDOW determination.

Non-consumptive, exploratory and monitoring well permits will be obtained from the Colorado Division of Water Resources. The permits will allow the boreholes to be maintained by the City of Salida as open observatory holes that can be re-measured for temperature gradients and water table over time.

The City of Salida has submitted a Consultation Checklist to the Colorado SHPO. SHPO has determined that there are no listed or eligible properties for the National Register of Historic Places within the Area of Potential Effects (letter attached). The area of potential effect of the proposed project is limited to the six (6) proposed thermal gradient well sites. These sites are immediately adjacent to existing County Roads and are not in the vicinity of any potentially historic properties. There will be no lasting visual effects of the drilling as the wells will be capped with no improvements at the end of this project. There are no buildings or archeological sites within the APE. Adverse effects to cultural resources are not expected as a result of the proposed project.

The proposed project is consistent with activities outlined in A9 "information gathering", A11 "technical advice" and B5.1 "actions to conserve energy"' therefore, it is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a completed by Logan Sholar

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 2/8/11

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