PMC-EF2a

(2.04.02)

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

RECIPIENT: Vulcan Power Company **STATE:** NV

PROJECT TITLE: Validation of Innovative Exploration Technologies at the Colado, Nevada, Geothermal Prospect

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	DE-EE0002849	GFO-10-373	GO2849

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.

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

Vulcan Power Company (Vulcan) would demonstrate the potential geothermal resource at Colado, Nevada. Vulcan would collect and interpret data from geophysical works, drill 3 core holes, and follow with testing and evaluation. The BLM Humboldt River Field Office processed geophysical applications (Notice of Intents) with a categorical exclusion. The project would be divided into three Phases with multiple tasks. The following tasks are Categorical Excludable since the tasks include obtaining permits, and research the geothermal resource.

Phase I – Resource Evaluation
Task 1) Exploration Program Design: Design remote sensing radiation detection, surface mapping using aerial photography, 2-meter thermal surveys, self-potential (SP), gravity, magnetotellurics, and 2-D seismic reflection for implementation at the Colado geothermal prospect.
Task 2) Conduct Exploration Surveys: Remote Sensing Radiation Detection Survey, Surface Mapping Using Aerial Photographs, 2-meter Thermal Surveys, State-of-the-Art Geophysical Surveys,
Task 3) Analysis and Validation of Innovative Exploration Technologies: Analyze and validate the Innovative Exploration Technologies.

Phase II and III (except Task 6) are not Categorical Excludable since the geothermal coring locations have not been identified and therefore cannot be analyzed at this time.
Phase II – Drilling
Task 4.0) Three Geothermal Core Hole Drilling

Phase III – Testing, Analysis and Reporting
Task 5.0 – Testing of Geothermal Core Holes
Task 6.0 – Project Management and Reporting

According to Vulcan, safety protocols are in place for instruments, geophysical work, chemicals, and waste monitored by a Health and Safety officer that meet or exceed state and federal requirements.

At this time, the drilling locations of the geothermal core holes have not been identified, and therefore cannot be analyzed. Therefore, Phase II and III are not authorized (except Task 6). Phase II and III would be analyzed once the locations of the geothermal core holes are identified and submitted to the DOE.
Condition of Approval: Allowable: Phase I and Task 6; Prohibited: Phase II and III (except Task 6). This proposal comprises research, data analysis, and onsite characterization actions to promote the research and development of geothermal resources; therefore this project is categorized as CX A9 and B3.1.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:
Phase II and III (except Task 6)
This restriction does not preclude you from:
Phase I and Task 6
If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

EF2A written by Christopher Carusona II

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 5/11/10
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