PMC-EF2a

(2.04.02)

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

RECIPIENT: Pyramid Lake Paiute Tribe **STATE:** NY

PROJECT TITLE : Recovery Act: Comprehensive Evaluation of the Geothermal Resource Potential within the Pyramid Lake Paiute Reservation

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000-109	DE-EE0002842	GFO-0002842-004	GO2842

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, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
B3.1 Site characterization and environmental monitoring	Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) 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). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

Rational for determination:

Pyramid Lake Paiute Tribe (PLPT) would characterize a geothermal reservoir using novel technologies and would then integrate this information into a numerical model to help determine the viability of future geothermal production at the Astor Pass site within the Pyramid Lake Paiute Reservation. The project includes exploration, drilling, well testing, and analysis.

Permitting, shallow temperature survey, seismic data collection, modeling, analysis, and reporting found in Phase I (all tasks) of this project were previously approved by GFO-10-336 on May 5, 2010. Slim hole drilling and borehole geophysical activities found in Phase II (Tasks 6A, 7A, and 8A) were previously approved by GFO-0002842-002 on November 1, 2010. Production-sized resource confirmation well activities in Phase II (Tasks 6B, 7B, and 8B) and well testing and analysis in Phase III were approved by GFO-0002842-003 on December 21, 2010.

The geothermal resource temperatures encountered in the Astor Pass wells (APS-2 & AP-3) were lower than anticipated and possibly below temperatures required for electrical generation. The project originally proposed to continue resource and reservoir modeling activities in the Astor Pass area during Phase III. DOE requested that PLPT redirect a portion of their Phase III funds to reduce continued emphasis on Phase III resource assessment at Astor pass and expand exploration in other areas of PLPT lands. PLPT and their project team re-scoped their Phase III tasks to include the following exploration activities that were subsequently added in Phase III as Task 12 (previous SOPO Task 12 has now become Task 13) and therefore another NEPA determination was required. This NEPA determination is specific to Task 12. All other tasks remain approved by previous NEPA determinations.

12. Evaluation of Pyramid Lake Paiute Reservation (PLPR) Geothermal Resource Potential – PLPT and UNR would determine the geothermal resource potential of areas outside of the Astor Pass exploration area.
A. Shallow temperature surveys and soil sampling program
B. Preparation of a digital geologic map of the PLPR
C. New geologic mapping of the northeastern Pyramid Lake area
D. Selection of sites that may contain hidden geothermal systems
E. Slip and dilation tendency analysis for PLPR
F. Reprocessing of COCORP reflection line (existing seismic and geophysical surveys)
G. Preliminary geothermal potential map
H. Temperature Gradient Wells – based on the previous activities, 5 or 6 shallow wells would be targeted.

Since the locations of the temperature gradient wells have not been identified, Subtask 12H cannot be analyzed at this time. Drilling locations must be defined and any required surveys completed before a NEPA determination for this subtask can be made.
Condition of Approval: Allowable – Task 12 (Subtasks A through G); Prohibited – Task 12 (Subtask H).
Based upon the information provided, Task 12 (Subtasks A through G) are categorically excluded from further NEPA review under CX A9 "Information gathering, analysis, and dissemination", and CX B3.1 "Site characterization and environmental monitoring."

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:
Task 12 (Subtask H)
This restriction does not preclude you from:
Task 12 (Subtasks A through G)
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 prepared by Casey Strickland

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/26/2010
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