

PMC-EF2a

(2010)

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



RECIPIENT: Pyramid Lake Paiute Tribe

STATE: NV

PROJECT TITLE : Ph2 - Resource Confirmation Well - 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-0002842-003	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 (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:
- 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:

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.

Phase I (all tasks) of this project was previously approved by GFO-10-336 on May 5, 2010 with a CX A9 and B3.1. Phase 1 consisted of permitting, shallow temperature survey, seismic data collection, modeling, analysis, and reporting. 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. This NEPA determination is specific to the production-sized resource confirmation well activities in Phase II (Tasks 6B, 7B, and 8B) and well testing and analysis in Phase III.

Phase II – Drilling

6. Drilling – two wells are planned, a slim-hole (APS 2) and a production-sized resource confirmation well (AP 3).

- A. Slim hole (APS 2) would be drilled
- B. Resource confirmation well (AP 3) would be drilled

7. Borehole Geophysics

- A. Slim hole geophysics and testing
- B. Resource confirmation well geophysics and testing

8. Phase II Reporting

- A. Slim hole reporting
- B. Resource confirmation well reporting

Phase III – Well Testing and Analysis

- 9. Well Testing and Geochemical Analysis
- 10. Three-dimensional Geologic Framework Model
- 11. Three-dimensional Reservoir Model
- 12. Phase III Reporting

Reports and other deliverables would be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.

The Bureau of Indian Affairs (BIA) is the surface management agency for the project. PLPT is the owner of both the surface and the subsurface. Prior to Phase I work, seismic surveys and drilling were previously completed in this area under a BIA CX in 2005 and 2006. Three previous cultural resource surveys were completed in the area in 2005 and 2006 and a new cultural survey was completed on the proposed drill pads, road, reserve pit and berm area in September 2010. No cultural resources were found during any of the cultural surveys. The BIA approved a CX and amendment to Drilling Permit #INEV 187 for the drilling of the slim-hole well on October 8, 2010.

An Environmental Assessment (EA) was prepared by the BIA to analyze the drilling of the production-sized resource confirmation well and associated activities. BIA signed a Finding of No Significant Impact (FONSI) on November 18, 2010 and approved the modification to Drilling Permit #INEV 187 on November 22, 2010.

Tasks identified in the Statement of Project Objectives (SOPO) submitted to the DOE were compared to what was analyzed in the EA completed by the BIA to determine if those tasks were adequately addressed in the EA. Potential surface disturbing activities identified in the SOPO (resource confirmation well drilling and testing) were specifically analyzed in the EA as part of the Proposed Action and all mitigation measures described in the EA and re-stated in the BIA FONSI will be implemented for the project, therefore the DOE is in agreement with BIA's FONSI.

Based upon the information provided, resource confirmation well activities found in Phase II (Tasks 6B, 7B, and 8B) and Phase III (all tasks) are categorically excluded under CX A9 "Information gathering/data analysis/document preparation/dissemination", CX B3.1 "Site characterization/environmental monitoring", and CX B5.1 "Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency".

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a prepared by Casey Strickland

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date:

12/21/10

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:

Date