

PMC-EF2a

(20x02)

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

**RECIPIENT:**Oski Energy, LLC**STATE:** NV

PROJECT TITLE : Recovery Act: Advanced Seismic Data Analysis Program ('Hot Pot Project') – Alytical Techniques of Coherency First Data Processing and Full Waveform Inversion Velocity Model and Validation by Drilling Wells

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	DE-EE0002839	GFO-0002839-002	GO2839

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:

Oski Energy, LLC (OEL) would improve geothermal well target selection and reduce drilling risk through the application of an innovative and advanced method for interpreting seismic survey data to locate deep geothermal structures. Once the seismic data is analyzed, two moderate depth slim-hole wells and a resource confirmation well would be drilled and tested.

Phase 1 (all tasks) and Phase 3 (tasks 3.2 and 3.3) were previously approved by GFO-10-223 on August 5, 2010. Phase 1 included seismic surveys and data processing that were used to target two slim-hole well drill locations. Now that those drill locations are known, a site specific analysis can be done for those locations. No laboratory work is anticipated for the project.

This NEPA determination is for Phase 2 (tasks 2.1 and 2.2) only. Once data has been analyzed from the slim-hole wells a resource confirmation well would be targeted based on that data, therefore another NEPA analysis will be required once the resource confirmation well has been located and a site specific analysis can occur for Phase 2 (task 2.3) and Phase 3 (task 3.1).

Phase 2 – Validation of Innovative Exploration Techniques

2.1 Slim Hole Well Drilling Program – two slim holes would be drilled and completed on private lands located in

northern Nevada along Interstate 80 near the Valmy Power Plant.
2.2 Resource Confirmation Well Target Selection – based on results of task 2.1.

The area where project activities would occur is often described as "checkerboard" because generally each section of land alternates between private and public land ownership. The seismic surveys completed in Phase 1 occurred on public lands and was permitted by the Bureau of Land Management (BLM) Winnemucca District Office but the data analysis led to drill locations being targeted on private lands in the area. Biological surveys and tribal consultations completed by the BLM for the recent seismic surveys indicated there were no threatened, endangered, special status species, or areas of tribal concern in the area. Because those surveys encompassed the area where the drilling would occur DOE has determined that there would be no effect to those resources as a result of slim-hole drilling activities. There are no floodplains, wetlands, or prime farmlands in the project area.

Cultural surveys were completed for both drill locations. The Area of Potential Effect was limited to the drill pads themselves because drill locations would be accessed by existing roads and trails. No cultural resources were found during the surveys. The Nevada State Historic Preservation Officer (SHPO) concurred with a determination of no historic properties affected in a letter dated September 14, 2012. DOE consulted the National Park Service (NPS) because project work is occurring within the vicinity of the California National Trail. The NPS concurred with a determination of no effect to the national historic trail in an email dated September 25, 2012.

Funds associated with remaining project activities:
Phase 2: \$3,625,744 (DOE); \$3,625,743 (cost share)
Phase 3: \$112,365 (DOE); \$112,366 (cost share)

Based upon the information provided, Phase 2 (tasks 2.1 and 2.2) are categorically excluded 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:

Phase 2 (task 2.3)

Phase 3 (task 3.1)

This restriction does not preclude you from:

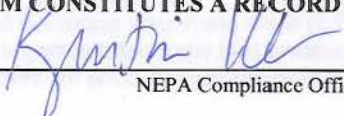
Phase 2 (tasks 2.1 and 2.2)

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: 
NEPA Compliance Officer

Date: 11/29/2012

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