U.S. DOE: Office of Energy Efficiency and Renewable Energy - Environmental Question ... Page 1 of 3

# PMC-ND U.S. DEPARTMENT OF ENERGY (1.08.09.13) OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY NEPA DETERMINATION



#### STATE: AK

PROJECT Akutan Geothermal Project

**Funding Opportunity Announcement Number** 

Procurement Instrument Number DE-EE0000329 NEPA Control Number GFO-0000329-002 GO329

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 smallscale 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.

### Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the City of Akutan for a project working toward identifying a geothermal resource capable of generating electricity for the City of Akutan, Alaska. This award (DE-EE0000329) was transferred from the City of Unalaska to the City of Akutan as an award novation. A previous NEPA Determination (GFO-09-160) was completed in 2009 for project activities completed when the award was with the City of Unalaska (these activities are now listed in the uploaded SOPO as Phase 1A). A NEPA Determination (GFO-0000329-001) was completed for Phase 1B activities on November 13, 2014. There was a Go/No Go/Redirect decision point after Phase 1B that was passed so this NEPA Determination is for the remaining project activities in Phase 2 and Phase 3.

Phase IB resulted in the selection of a target location for drilling of an exploratory confirmation well on Native-owned land in the Hot Springs Bay Valley on Akutan Island. The proposed drilling would require the construction of temporary drilling site improvements, to include a drilling pad, sump, staging/storage areas, a 16-person work camp, and a fluid containment/settling pond. These improvements would be confined to less than five acres of non-wetland property, with a minimal relief of less than three feet, and would be isolated from flowing streams and hot springs in the area. A slim-hole, core drilling rig would be used to drill a single well to a depth of 1,500 feet. All equipment, materials, supplies, and personnel would be transported to and from the drilling site by helicopter. After drilling, the well would be

flow tested for the collection of flow and temperature data, geochemical samples and further characterization of the geothermal resource. After testing, all equipment, materials, supplies, camp facilities, and personnel would be demobilized, and the drilling site would be restored, as required by permits and applicable regulations. All disturbed areas would be re-leveled and vegetated after testing. Drilling and well testing are expected to be completed within 30-45 days of project mobilization. Handling of all waste (non-hazardous) generated by the project activities and site and drilling safety procedures would be conducted in compliance with all local, state, and federal requirements. Permits would be obtained from the appropriate State of Alaska agencies prior to beginning work. No other resources of concern beyond those discussed below were found during the NEPA review. See the uploaded documentation and the EQ1 for more detailed information regarded the project activities.

There are no threatened or endangered species located at the project site. There are two listed species (Stellar's sea lion and northern sea otter) in the area during the spring, summer and fall that would be at least 0.6 miles away from the project site. The project site would not be visible from the water surface near the beach due to the beach berm and distance of the project site from the shoreline. The project site is within designated critical habitat for Steller's sea lion and the northern sea otter but the activity at the project site would not be audible or visible to sea lions at the major haulouts or rookeries or sea otters along the coastline and would have no effect on critical habitat. Noise from the project (drilling, generators, and helicopter traffic) might be detectable from Hot Springs Bay, but this would be limited by wind direction and sea conditions (i.e. noise level of surf pounding the shoreline) and would be less than noise in nearby Akutan Harbor where the village and the largest shore-based seafood processing facility in the U.S. are located. Listed species of waterfowl (Steller's eider) over-winter in the area in marine waters but are not present in the region during the spring, summer, or fall when project activities would occur. A variety of migratory birds might pass through the general project area but the project site is not likely nesting habitat for migratory birds. Bald eagles are common throughout the Aleutian Islands, but there are no known nesting sites within 200 meters the project area and the terrain within about 0.5 miles of the project site is not the type typically used by nesting eagles in the Aleutians. Based on this analysis, DOE has determined that the proposed project activities would have "no effect" to special status species or designated critical habitat.

The Alaska State Historic Preservation Officer concurred with DOE's determination of "no historic properties affected" on May 20, 2015. The project site is adjacent to wetlands but there would be no discharge/fill into the wetlands so no impacts are anticipated. Hot Springs Bay Valley is adjacent to lands that are part of the Alaska Maritime National Wildlife Refuge, but no part of the project site in within the refuge.

Based on review of the project information, DOE has determined that the remaining project activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that these activities are consistent with actions contained in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination," and B3.1 "Site characterization and environmental monitoring," and are 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:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Insert the following language in the award:

You are required to:

The recipient must submit copies of all State of Alaska permits required for drilling, testing, and abandonment operations to the DOE Project Officer.

NEPA Compliance Officer

Note to Specialist :

This NEPA Determination does require a tailored NEPA provision. Geothermal Technologies Office Casey Strickland 06/02/15

## SIGNATURE OF THIS MEMORANDUM CONSȚITUȚEȘ A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

| https://www.eere-pmc.energy.gov/GONEPA/ND Form.aspx?key=20644 | https://www.eere- | pmc.energy.g | gov/GONEPA | /ND Form.as | spx?key=20644 |
|---|-------------------|--------------|------------|-------------|---------------|
|---|-------------------|--------------|------------|-------------|---------------|

Date: