PMC-EF2a

(2.06.02)

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

RECIPIENT: Louisiana Tank, Inc. **STATE:** LA

PROJECT TITLE: Recovery Act: Demonstrating The Commercial Feasibility Of Geopressured-Geothermal Power Development At The Sweet Lake Field, Cameron Parish, Louisiana

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	DE-EE0002855	GFO-10-256	GO2855

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:

Louisiana Tank, Inc. would use ARRA funding through DOE for the following project areas: completion of engineering design for a geothermal power plant, power plant related capital purchases, and installation and reporting costs (economic performance and operating characteristics). This project would be performed in two phases. The NEPA determination focuses on the tasks for Phase 1 of this project which consists of well testing, data analysis and assessment, and plant design and Phase 2 - Task 5.0 (Project Management and Reporting).

PHASE 1

Task 1.0 Well Testing and Reservoir Assessment

This task consists of production and injection well tests; analysis of the tests; development of conceptual and numerical models of the reservoir; and quantification of the reservoir characteristics, using log, core, PVT and flow test data from the new well as well as an extensive database available for other wells in this field, and optimization and forecasting of well and reservoir performance.

All activities would be performed in an area not located in a wetlands area and found outside the state coastal zone. An email correspondence from the USDA Natural Resources Conservation Service assessed that the soil of the location property "is not listed on the Hydric Soils list (wetland soils)" for the activity site. The location is within the existing Sweet Lake Oil and Gas Field. Mitigation measures are in place to deal with any toxic and /or other hazardous wastes through a Hazardous Waste program. The recipient also stated that "no liquid effluent will be generated during analysis."

Task 2.0 Plant Design

Based on the results from Task 1.0, surface technology and the power plant would be designed to optimize electricity production from heat energy in brine, dissolved methane gas, waste heat recovery from the gas plant, and kinetic energy in the brine.

Since the final plant design has not been determined, Phase 2 (Tasks 3, 4, and 6) cannot be analyzed at this time. A NEPA determination for these tasks in Phase 2 of the project would be too early to determine but would need to be made prior to Louisiana Tank, Inc. beginning any construction. (Go-no go decision point: Upon completion of Phase 1, a go/no-go determination would be made before proceeding to Phase 2. If the decision is a 'go', Louisiana Tank could proceed to Phase 2 upon consent from DOE. If the decision is a 'no-go', the Phase 1 report would act as the final report for the project.)

PHASE 2

Task 3.0 Plant Construction

To construct all surface facilities and power plants and to commence power generation.

Task 4.0 Project Assessment

To assess the technical and economic aspects of performance of the constructed system, and direct and indirect job creation from the project. Reporting of production rates and electricity generation and determination of commercial feasibility of geopressured-geothermal resources production will be made.

Task 5.0 Project Management and Reporting
Reports and other deliverables will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein. Non-proprietary project data will be provided to the National Geothermal Data System under contract with the U.S. DOE.
Task 6.0 Technology Transfer and Commercialization
Successful development of this power plant operating on geopressured-geothermal resources will substantially reduce the cost of follow-on projects and will add diversity to the local electric power supply system. The methods and technologies utilized in this demonstration project will be transferred to other areas of the Gulf Coast and spur the growth of this renewable resource by serving as an example of the commercial viability of geopressured-geothermal resources across the region.

Condition of Approval: Allowable: Phase 1 Task 1.0 and 2.0; Phase 2 Task 5.0 "Project Management and Reporting"
Prohibited: Phase 2, Task 3.0 - Plant Construction, Task 4.0 - Project Assessment, and Task 6.0 - Technology Transfer and Commercialization.
Based upon the information provided, the Phase 1 activities and Phase 2 - Task 5.0 are categorically excluded under CX A9 "information gathering techniques," and CX B3.1 "Site characterization/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 3.0 "Plant Construction", Task 4 "Project Assessment", Task 6 "Technology Transfer and Commercialization"
This restriction does not preclude you from:
Phase 1, Task 1.0 and 2.0; Phase 2, Task 5 "Project Management and Reporting"
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 :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/1/10
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