PMC-ND (1.08.09.13)

U.S. DEPARTMENT OF ENERGY OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY NEPA DETERMINATION



RECIPIENT: GeothermEx

STATE: CA

PROJECT TITLE: Mining and Analysis of Surface-Collected Geothermal Drilling Data

Funding Opportunity Announcement NumberProcurement Instrument NumberNEPA Control NumberCID NumberDE-FOA-0001880DE-EE0008792GFO-0008792-001

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

A9 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 information informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

A11 Technical advice and	
assistance to	Technical advice and planning assistance to international, national, state, and local organizations.
organizations	

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to GeothermEx to compile and evaluate real-time drilling data (collected by Schlumberger and non-Schlumberger systems) from up to 50 geothermal wells to assess the causes of drilling inefficiencies, particularly those that affect Rate of Penetration (ROP).

The proposed project would involve the use of an advanced software system to analyze data and develop new algorithms to identify the main operational problems in geothermal drilling, their root causes, and correlations with physical and operational parameters. No drill sites would be developed or modified by the project for the purposes of collecting new data and/or testing the results of desktop analyses. The proposed technical scope of work is limited exclusively to intellectual, academic, or analytical activities. All work would be conducted at the Recipient's offices in San Francisco, CA. No physical materials beyond basic office supplies and computers would be required for the proposed activities.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Geothermal Technologies Office This NEPA determination does not require a tailored NEPA Provision. NEPA review completed by Whitney Doss, 08/06/2019

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit

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requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

NEPA Compliance Officer

Date: 8/6/2019

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review not required

□ Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature:

Field Office Manager

Date: