

PMC-EF2a

(2.0+02)

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



RECIPIENT: University of Utah

STATE: UT

PROJECT TITLE : Fracture Network and Fluid Flow Imaging for EGS Applications from Multi-Dimensional Electrical Resistivity Structure

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-PS36-09GO99018	DE-EE0002750	GFO-10-232	GO2750

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.

Rational for determination:

The University of Utah is proposing a project to advance three-dimensional (3-D) MT imaging by developing the capability to include topographic variations into the models through deformable finite element (FE) or finite difference (FD) meshes. The intention is to improve and advance individual or combinations of non-invasive exploration technologies for resolving geothermal resources that lack surface manifestations.

Project tasks include the following:

- * Loki-3D Algorithm Recon
- * Current FD completion, initial Cove Fort inversion
- * Loki-3D Electric Fields, FD deformable mesh
- * Inversion Parameter Sensitivities
- * Inverse Integration
- * SMP Inverse Parallelization
- * Project Management and Reporting

This project involves information gathering only; therefore a CX A9 will apply.

NEPA PROVISION

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date:

3/10/10

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: _____ Date: _____
 Field Office Manager

Working/Proposed/Announcement Number: _____
 NEPA Control Number: EIS-2000-180
 GPO-10-232

Based on my review of the information supporting the proposed action, as NEPA Compliance Officer (authorized under DOE Order 401.1A), I have made the following determination:

CK, EA, EIS APPENDIX AND NUMBER:

As information gathering (including but not limited to desktop survey, interviews, public data analysis (including complex modeling), document processing (such as conceptual design or feasibility studies, analytical energy study and demand studies), and dissemination (including but not limited to document mailing, publication, and distribution, and classroom training and informational programs), but not including the dissemination of environmental monitoring

technology for resolving geospatial resources that lack surface manifestations. The intention is to improve and advance individual or combinations of non-invasive exploration capability to include geospatial variations into the models through delineate finite element (FE) or finite difference (FD) meshes. The intention is to propose a project to enhance three-dimensional (3-D) MT imaging by developing and

- * Project tasks include the following:
- * 3D-2D algorithm Refactor
- * Custom FD compiler, Initial Code Port rewrite
- * 3D-2D Electric Fields, FD delineate mesh
- * Inverse Parameter Sensitivity
- * Inverse Migration
- * SMP Inverse Facilitation
- * Project Management and Reporting

The project involves information gathering only; therefore a CX AS will apply.

NEPA Compliance Officer Signature: _____
 Date: _____

None Given

Date: 3/10/10

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required

DO NOT REQUEST THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON: