

PMC-EF2a

(20402)

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



RECIPIENT:Hattenburg Dilley & Linnell

STATE: AK

PROJECT TITLE : Methodologies for Reservoir Characterization Using Fluid Inclusion Gas Chemistry

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000522	DE-EE0005519	GFO-0005519-001	5519

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.)

B3.6 Small-scale research and development, laboratory operations, and pilot projects

Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rational for determination:

Hattenburg Dilley & Linnell (HDL) would utilize DOE and cost share funds to evaluate geothermal fluid processes that contribute to the differences in the observed chemical signatures within and between fields as recorded by fluid inclusion gas chemistry; and to develop methodologies for interpreting fluid inclusion gas data in terms of the chemical, thermal and hydrological properties of geothermal reservoirs. Laboratory work would be conducted at Fluid Inclusion Technologies, Inc. in Broken Arrow, Oklahoma.

Prior to initiating Phase 2 activities, there would be a go/no-go decision point after which DOE would determine whether or not the project would move forward into Phase 2 activities.

Phase 1

1. Compilation of geologic, geochemical and permeability data
2. Collection and analysis of additional samples – all samples used for analysis would come from the Energy and Geoscience Institute Warehouse of pre-collected samples
3. Geochemical Modeling

Phase 2

4. Geologic Interpretation of Fluid Inclusion Data from Geothermal Environments
5. Data Integration
6. Development of Interpretational Methodologies
7. Project Management & Reporting

There is no fieldwork associated with project activities.

According to the R&D laboratory questionnaire, no permits are needed for project activities. There would be no liquid effluents, air pollutants, or toxic wastes produced from this work during project activities.

Project Budget: \$331,174 (DOE) \$82,872 (cost share)

This project is comprised of information gathering, analysis, and dissemination; and laboratory operations; therefore the DOE has categorized this into Categorical Exclusions A9 and B3.6.

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.

Note to Specialist :

EF2a prepared by Casey Strickland

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: *Kymon Lee* NEPA Compliance Officer Date: 12/7/2014

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

PMC-EF2a
(2.04.02)

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



RECIPIENT: Virginia Electric and Power Company

STATE: VA

PROJECT TITLE : Integrated Optimization and Cost Analysis of an Innovative Offshore Wind Plant Design for Shallow and Transitional Water Depths

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000415	DE-EE0005485	GFO-0005485-001	0

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.)

Rational for determination:

DOE proposes to provide funding to Virginia Electric and Power Company to conduct cost of energy analyses for offshore wind project cost reduction innovations. The project goal is to model a 25 percent decrease in the levelized cost of energy (LCOE). Innovation areas that would be modeled to determine LCOE reductions include turbine, foundation and installation, and electrical systems. Information on site specific conditions from at least two dozen offshore locations would be obtained from existing data sources for use in computer models.

This research is comprised of desktop and computer modeling activities only. As such, CX A9 applies.

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.

Note to Specialist :

John DuWaldt 11-29-2011

DOE Funding: \$350,000
Cost Share: \$194,979
Total Funding: \$544,979

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____
NEPA Compliance Officer

Date: 12/7/2011

FIELD OFFICE MANAGER DETERMINATION