

PMC-EF2a

(2.04.02)

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



RECIPIENT: Geothermal Heat Pump Consortium

STATE: DC

PROJECT TITLE : Topic Area 3. National Certification Standard

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000116	DE-EE0002971	GFO-10-211	GO2971

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 Geothermal Heat Pump Consortium is proposing a project that will increase the deployment of geothermal heat pumps through new commercialization strategies that incorporate a national GHP certification standard. As noted above, this standard will address key barriers to rapid deployment of the GHP industry by addressing limited consumer knowledge and trust in GHP systems.

Project tasks include the following:

- \*Market Research on Personnel Certification Standards
- \* Data Collection and Analysis
- \* Investigation of Existing GHP Systems
- \* Update of State Regulations Governing Installation of GHP Systems
- \* Define Criteria, Structure and Components of the Standard
- \* Prototype Standard Development
- \* Finalize the GHP Industry Certification Standard
- \* 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

NEPA Compliance Officer: \_\_\_\_\_  
 Title: \_\_\_\_\_

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

EX. EA, EIS APPENDIX AND NUMBER: \_\_\_\_\_  
 Decision: \_\_\_\_\_

As information gathering (including, but not limited to, literature survey, inventory, audit, data analysis (including complex modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailing, publication, and distribution and discussion testing and informational programs), but not including site characterization or environmental monitoring.

The Department of Energy is proposing a project that will increase the deployment of geothermal heat pumps through new commercial strategies that incorporate a national GHP certification standard. As noted above, this standard will address key barriers to rapid deployment of the GHP industry by addressing limited consumer knowledge and trust in GHP systems.

- Project tasks include the following:
- \* Project Management and Reporting
  - \* Prepare the GHP Industry Certification Standard
  - \* Prototype Standard Development
  - \* Define Criteria, Structure and Components of the Standard
  - \* Update of State Regulations Governing Installation of GHP Systems
  - \* Investigation of Existing GHP Systems
  - \* Data Collection and Analysis
  - \* Market Research on Potential Certification Standards

The project involves information gathering only. Therefore, a CX AS will apply.

NEPA DIVISION: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 None Given

SIGNATURE OF THE MEMORANDUM COMPLETER A RECORD OF THE DECISION: \_\_\_\_\_  
 NEPA Compliance Officer: \_\_\_\_\_  
 Title: \_\_\_\_\_

FIELD OFFICE MANAGER DETERMINATION: \_\_\_\_\_  
 Field Office Manager review required

PMC-EF2a

(2.01.02)

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



RECIPIENT: University of Texas at Austin

STATE: TX

**PROJECT TITLE :** Analysis & Tools to Spur Increased Deployment of

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000116	DE-EE0002803	GFO-10-188	GO2803

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 Texas at Austin is proposing a project that will create "waste heat" rejection/recycling strategies for GHP systems that are technically and economically viable for various building applications and ground resource designs in heavily cooling-dominated climates like those found in the southwestern and western United States. At least three SHR system alternatives will be examined: (1) evaporative fluid/air coolers or pre-conditioners, which liberates thermal energy from the working fluid before it enters the ground loop/resource; (2) desuperheaters, which recycle some of the waste heat to preheat hot water; and (3) two-phase thermosyphons, which are passive refrigeration devices that transfer heat against gravity.

Project tasks include the following:

- \* Waste Heat" Rejection/Recycling Estimation
- \* Technical Performance Analysis & Modeling
- \* Life-Cycle Cost Analysis & Modeling
- \* Web-Based Decision-Support Tools Development

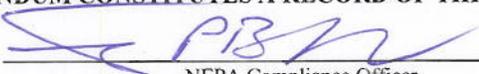
This project involves information gathering only; therefore a CX A9 will apply.

**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: 3/9/10**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

Fielding Opportunity Assessment Number: 02-EE002885 NEPA Central Number: 02-0-10-118  
02-0A-000116

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 481.1A), I have made the following determination:

CX EA FOR APPEALS AND NUMBER: \_\_\_\_\_

As information gathering (including but not limited to literature surveys, interviews, audits, data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analysis, energy supply and demand studies), and determination (including but not limited to document management, publication, and distribution) and classroom training and informational programs, but not including the development or environmental monitoring

Rational for determination:  
The University of Texas at Austin is proposing a project that will create "waste heat" (industrializing) strategies for CHP systems that are technically and economically viable for various building applications and ground sources designs in heavily cooling-dominated climates like those found in the southeastern and western United States. At least three CHP system alternatives will be examined: (1) evaporative (air/water) coolers or air-conditioners, which transfer thermal energy from the working fluid before it enters the ground loop/exchanger; (2) desuperheaters, which recycle some of the waste heat to preheat hot water; and (3) two-phase thermocycle, which are passive refrigeration devices that transfer heat against gravity.

Project tasks include the following:  
\* Waste Heat Refrigeration/Chilling Distribution  
\* Technical Performance Analysis & Modeling  
\* Life-Cycle Cost Analysis & Modeling  
\* Web-Based Decision-Support Tool Development

The project involves refrigeration gathering only; therefore a CX AB WB-02P.

NEPA PROVIDER:  
Name: \_\_\_\_\_  
Name: \_\_\_\_\_

SIGNATURE OF THE MEMORANDUM COMPLETES A PORTION OF THIS DECISION  
\_\_\_\_\_ Date: 3/10/10

FIELD OFFICE MANAGER DETERMINATION  
 Field Office Manager review required  
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON: