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# (2.04.02)

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



**RECIPIENT:**Metropolitan Development and Housing Agency

STATE: TN

PROJECT TITLE : Geothermal Technologies Program Ground Source Heat Pump

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-FOA-EE0000116

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:

MDHA will replace the existing electric heating systems in two of its housing properties, I.W. Gernett and Edgefield Manor, with ground source heat pump systems. In addition to the GSHP installation, MDHA will be adding new water heaters that will interact with the GSHP to take advantage of the de-superheater feature. MDHA will work with their energy advisor and longstanding partner, Siemens Industry, in the design and management of this project. Siemens provides technical assistance, design, and project management for all of MDHA's energy projects. MDHA will work with Nashville Electric Service (NES) to install sub metering at each property prior to installation of the GHPs. Sub metering will allow for establishing a pre-retrofit energy use baseline to compare with post-retrofit data. Oak Ridge National Laboratory will provide technical assistance in designing and implementing the data collection and analysis program and reporting results. There are three phases for the proposed project. Information gathered from Phase 1 will be used to review the environmental impact of Phase 2 - Installation and Commissioning of Equipment and Systems, and Phase 3; therefore this determination will only apply to Phase 1.

#### Phase 1 includes the following activities:

Task 1.1: Sub metering of Properties – MDHA will work with NES to install a sub meter on each property to allow discreet metering of the buildings to be retrofitted with GHPs. Currently only one meter monitors electricity usage.
Task 1.2: Perform Utility Analysis – After one year of sub metering, an analysis of the electricity usage of each property will be performed in order to create a utility baseline for each property. This data will be used for measurement and verifications as well as data analysis for future reports created by ORNL.

Phase 1 of the proposed project is considered information gathering involving the installation of sub meters on existing meters and monitoring of electricity usage of existing buildings which have been determined to present no significant impact to human health and/or environment; therefore it can be categorically excluded under CX A9 "information gathering" from further NEPA review.

#### 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.

https://www.eere-pmc.energy.gov/NEPA/Nepa\_ef2a.aspx?Key=6904

Prohibited actions include: Phase 2 "Installation and Commissioning of Equipment"

Any Demolition, Construction, and/or Installation related to the proposed project.

This restriction does not preclude you from: Phase 1 "Feasibility Study and Engineering Design"

All other actions which involve 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).

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:

NEPA Compliance Officer

Date: 3/23/10

#### 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:

#### Field Office Manager

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