PMC-EF2a
(2.04.02)

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

**RECIPIENT:** Oklahoma Municipal Power Authority **STATE:** OK

**PROJECT TITLE :** OKLAHOMA SEP ARRA - OMPA OCP Large System Rebate Request H

| Funding Opportunity Announcement Number | Procurement Instrument Number | NEPA Control Number | CID Number |
|---|---|---|---|
| DE-FOA-0000052 | DE-EE0000133 | GFO-0000133-032 | 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:

**B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

This NEPA determination will apply to the four individual projects as described below:

The Oklahoma Department of Commerce (ODC) is proposing to fund the Oklahoma Comfort Program (OCP) through their sub-grantee the Oklahoma Municipal Power Authority (OMPA). Pawhuska High School has been awarded $30,180 through the OCP and is proposing to use the funding to help cover the cost of installing a ground source heat pump system that will serve the heating and cooling needs for a new home. The areas in which the geothermal well fields will be placed are mowed, grassy areas that were previously disturbed due to construction of the high school facilities. All disturbed areas will be re-sodded. The area surrounding the proposed project site location is fully developed residential. There are not expected to be any adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources as a result of the proposed project as these resources are not present at the project site.

The Oklahoma Department of Commerce (ODC) is proposing to fund the Oklahoma Comfort Program (OCP) through their sub-grantee the Oklahoma Municipal Power Authority (OMPA). Powermax has been awarded $18,000 through the OCP and is proposing to use the funding to help cover the cost of installing a ground source heat pump system that will serve the heating and cooling needs for his residence. The geothermal well fields will be placed in mowed, grassy areas directly adjacent to the existing structure which is in proximity to the Fairview Municipal Airport. The area surrounding the project site location is actively cultivated farmland. There are not expected to be any adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources as a result of the proposed project as these resources are not present at the project site.

The Oklahoma Department of Commerce (ODC) is proposing to fund the Oklahoma Comfort Program (OCP) through their sub-grantee the Oklahoma Municipal Power Authority (OMPA). Michael Hartwig has been awarded $11,000 through the OCP and is proposing to use the funding to help cover the cost of installing a ground source heat pump system that will serve the heating and cooling needs for his residence. The geothermal well field will be placed in the yard of the residence which is currently a mowed lawn. The area surrounding the project site location is residential and actively cultivated farmland. There are not expected to be any adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources as a result of the proposed project as these resources are not present at the project site.

The Oklahoma Department of Commerce (ODC) is proposing to fund the Oklahoma Comfort Program (OCP) through their sub-grantee the Oklahoma Municipal Power Authority (OMPA). Larry Martin has been awarded $6,000 through the OCP and is proposing to use the funding to help cover the cost of installing a ground source heat pump system that will serve the heating and cooling needs for his residence. The geothermal well field will be placed in the yard of

the residence which is currently a mowed lawn. The area surrounding the project site location is residential and actively cultivated farmland. There are not expected to be any adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources as a result of the proposed project as these resources are not present at the project site.

The state certified and licensed driller will follow IGSHPA and NGWA regulations during installation. The system will use HDPE piping that is heat fused and all wells will be fully grouted with a thermally enhanced bentonite grout. The refrigerant used in the system will be a non-toxic, food grade propylene glycol and water mixture. All loops will be pressure tested before and after installation.

Areas containing karst topography and related federally listed species in Oklahoma have been identified, and the proposed projects will not occur in proximity to those resources; therefore, there will not be any adverse effects to those resources as a result of the proposed ground source heat pump projects.

As required by the OK SEO, installation of ground source heat pumps cannot commence at any proposed OCP installation site until State Historical Preservation Office (SHPO) approval has been received. OMPA must submit information about all prospective GHP installation sites to the Oklahoma State Energy Office (SEO) for review by SHPO. Under a Programmatic Agreement with SHPO, OK SEO can approve sites with buildings that are less than 45 years old. For buildings 45 years old or older, SEO must submit details to SHPO for review.

After a thorough review of the information submitted for the proposed projects, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed projects will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorically Excluded B5.1 "actions to conserve energy," from further NEPA review.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a completed by Logan Sholar

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: _____ Date: 12/22/10

NEPA Compliance Officer

**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