PMC-EF2a
(2.0.0.02)

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 Request G

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE0000133	GFO-0000133-031	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 three 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). Mr. Don Fore has been awarded $7,000 through the OCP and is proposing to use the funding to help cover the cost of installing a ground source heat pump (GSHP) system that will serve the heating and cooling needs for his home residence. The area in which the geothermal well field will be placed will have been previously disturbed due to construction of the house. The GSHP will be installed in Mr. Fore's yard, which is a mowed lawn. Total ground disturbance will be less than 1/8 of an acre. The area surrounding the proposed project site is a developed residential neighborhood. 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). Mr. Kevin Murphy 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 home residence. The area in which the geothermal well field will be placed will have been previously disturbed due to construction of the house. The GSHP will be installed in Mr. Murphy's yard, which is a mowed lawn. Total ground disturbance will be less than 1/8 of an acre. The area surrounding the proposed project site is a developed residential neighborhood. 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). The Edmond Water Treatment Plan (EWTP) has been awarded $40,000 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 this facility. The geothermal well field will be placed on the EWTP property, which is zoned as an Industrial Area. The area surrounding the project site location is also zones as industrial. 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.

Project Information common to both residential sites:

Vertical boreholes six inches in diameter will be drilled and grouted with bentonite. The boreholes will be spaced a minimum of ten feet apart. Loops made of HDPE pipes will be inserted into the boreholes. Drilling and loop installation will be conducted by an IGSHPA certified installer. Manifolds will connect the loops to the heat pumps. Borehole locations, manifolds, and tie-ins to the homes are shown in the individual site drawings. A tracer wire will be installed to aid in locating the loops in the future. The soil conditions are sandstone. There are no aquifers within 450 feet of the surface. All the boreholes in both locations will be grouted with bentonite.

Project Information specific to the Edmond Water Treatment Plant

The GHP system will be 40 tons in total size. Ten tons of GHP will be installed in four existing buildings at the EWTP. In each building there will be 2 – two ton units and 2 – three ton units. The installation will comply with local, state and national criteria and regulations. Loop installation will be conducted by an IGSHPA certified installer. The soil conditions are sandstone. There are no impacts on surface water or aquifers. There will be no impact on water use in the plant and very negligible impacts on water temperature because the flow of water in the geothermal loop is about 0.5% of the total flow.

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 :

Completed by Bill Knapp

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 12/14/10

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