

PMC-EF2a

(20102)

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



RECIPIENT: Flathead Electric Cooperative

STATE: MT

PROJECT TITLE : Facility HVAC System Conversion to Ground Source Heat Pump

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-EE0000116	DE-EE0002816	GFO-10-162	GO2816

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 proposed project activity will include the conversion from approximately 350 kW of electric resistance heating to an 80 ton ground source heat pump system. The proposed ground source heat pump system will include (4) 20 Ton units to be utilized for space and ventilation air heating. Current loads include space heating and ventilation of FEC's main warehouse, fleet vehicle garage, and testing facilities. The upgrade will also provide increased indoor air quality with heat recovery ventilation.

The proposed system will utilize a modular component design that allows for easy installation and future expandability. The design will take advantage of the region's shallow aquifer resource, typically less than 50 feet, to create an open loop ground water system with water to water heat pumps. They will provide 140° F water to several unit heaters containing water coils sized for the lower water temperature. Additionally, the heat recovery ventilators will utilize the hot water to "temper" outdoor air ventilation. Although the heat pump modules can provide both heating and cooling, the space requires heating only.

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 Phase 3; therefore this determination will only apply to Phase 1.

The tasks to be performed for Phase 1 - Feasibility Study and Engineering Design (Conceptual Only), include:

Task 1.0 Devise Approach;
Task 2.0 Perform Feasibility Study;
Task 3.0 Assessment of Approach Replicability;
Task 4.0 Engineering Design by an experienced A/E firm
Task 5.0 Acquire Regulatory & Environmental Permitting – such as required building permits and DEQ water rights permits. The building site has existing well permits that have all been obtained without issue. All Phase 1 activities will be data collection, report writing, modeling, design, and permitting tasks.

Phase 1 of the project involves information gathering, document preparation and system design (must be conceptual design, excludes final design) only, and does not present any 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.

Prohibited actions include:

Phase 2 "Installation and Commissioning of Equipment" (Including Final Design)

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" (Applies to conceptual design only)

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).

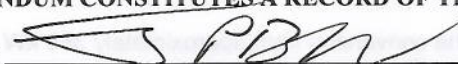
If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

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

Date:
