PMC-EF2a

(2/04/02)

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



RECIPIENT: City of Whitefish

STATE: MT

PROJECT TITLE:

Whitefish In-line Hydro-electric Project

Funding Opportunity Announcement Number DE-FOA-0000013

Procurement Instrument Number NEPA Control Number CID Number

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:

The City of Whitefish, Montana proposes to use \$200,000 of EECBG funding to replace an existing, non-functional hyrdo-electric turbine with a new hyrdo-electric turbine, generator, and control system. The entire turbine replacement, generator and control system will occur within the existing City of Whitefish Water Treatment Plant site; existing pipelines/penstock will be used as well and improvements will be made to the in-line water screen system. No alterations to the existing building footprint will be required.

The proposed renovation and upgrade for the Whitefish In-line Hydro-Electric system involves installing a new Canyon Hydro single nozzle pelton turbine operating at 900 rpm that will drive a 260 kW nameplate induction generator to produce approximately 1,200,000 kWH of energy per year with a 30-40 year service life. All required infrastructure permits and environmental permits are already in place and in good condition.

Potential environmental impacts of the project and associated actions include:

- Air quality All of Whitefish's planning jurisdiction is non-attainment for PM10; no additional air emissions are anticipated for this project and therefore it will not have any beneficial or detrimental effects on air quality.
- Vegetation and Wildlife Resources none, all activities will be done within an existing structure and have no affect on existing vegetation or wildlife resources.
- Traffic There is potential for minor construction traffic during the installation/removal process, however, the increased traffic will be minimal and only occur during the day for approximately 4.5 month, and is not anticipated to negatively affect existing levels of traffic.
- Water Quality The existing building is located adjacent to a 9 million gallon reservoir which has intakes from 1st, 2nd, and 3rd Creeks and serves as the City's water supply. The hydro-electric system will use process water from existing intakes, pipelines, and penstock for energy generation. No increase to water intake will occur once the turbine is installed, power will be generated only from the current volume of water intake for municipal consumption purposes.
- Solid Waste Dumpsters will be used for the collection of any construction related debris and garbage pickup is handled by an independent contractor. Any reusable parts of the old turbine system will be given to the City of Phillipsburg, MT for use with their existing hyro-electric system which is the same model. Any reusable construction materials will be donated to the Habitat for Humanity construction materials re-use site.

The proposed hydro-power system will offset the City of Whitefish's existing electrical power consumption and generate in excess of \$70,000 per year at current electrical rates in new revenue for the City which will reduce the City's overall power expenses. Based on the above information this project is categorically excluded from further NEPA review under CX number 5.1, Actions to Conserve Energy.

Insert the following language in the award:	
Note to Specialist:	
None Given.	
SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.	morphism R6.1 Actions to consider
NEPA Compliance Officer Signature:  NEPA Compliance Officer	Date: 7/1/10
FIELD OFFICE MANAGER DETERMINATION	
☐ Field Office Manager review required	
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASO	N:
<ul> <li>□ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue the Manager's attention.</li> <li>□ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's rev</li> <li>BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:</li> </ul>	
Field Office Manager's Signature:	Date:
Field Office Manager	