PMC-EF2a

(2.06.02)

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

RECIPIENT: Nevada State Office of Energy **STATE:** NV

PROJECT TITLE : Renewable Energy and Energy Efficiency Revolving Loan Program - Clan Alpine Ranch Hydro Generation Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000084	GFO-0000084-015	EE84

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 Nevada State Office of Energy is proposing to pass through $212,142 in DOE SEP funding to Clan Alpine Ranch in the form of a revolving loan to install a 75kW hydro generation plant that would utilize irrigation water flowing through an existing manmade pipeline/penstock.

The project would involve installing a small pelton wheel Hydro Turbine Generator into the penstock pipeline. The hydro turbine would receive drainage water from Cherry Creek which has historically produced sufficient irrigation flows for the area. Cherry Creek has an existing 10" drainage pipeline/penstock in-place that will deliver water to the turbine. Water would be interrupted for approximately 15 feet and then returned to the pipeline after it passes through the turbine and continue on its way downstream. The recipient anticipates utilizing an estimated 10 cubic feet per second of water flow to produce electrical power.

The turbine and associated power house building (which will house the controls, shut-off valves, etc) would be affixed to a concrete pad measuring approximately 20 feet by 20 feet. Land disturbance would be approximately a 25' by 25' square for dirt leveling for the concrete pad installation. Due to the small building footprint and utilization of existing dirt roads, it is estimated that there would be a very minimal wildlife impact during and after construction and no endangered species are found in the general vicinity of the project site. The land has been previously disturbed by agricultural uses and it is not considered Unique or Prime farmland as protected by the USDA.

Clan Alpine Ranch has also applied for a Water Right use modification permit through the Nevada State Engineer's Office to allow for energy production. They currently own the water rights at this location and since no water will be reduced in the pipeline, no downstream users would be impacted.

Power produced by this project would be connected via intertie to power lines running parallel with the pipeline. No extension of power lines would be necessary for this project.

Per the recipient, this hydro power plant would produce some noise; however the turbine and generator would be in an enclosure for protection and noise mitigation. They anticipate that noise production would be less than 65 db at a 100' distance.

DOE has determined that impacts to the natural and human environments are expected to be negligible and that this project is consistent with actions covered under DOE CX B5.1 (Actions to conserve energy and a small-scale conservation and renewable energy research and development and pilot project) and therefore is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

Laura Margason 9/19/2011

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/19/11

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