

PMC-EF2a

(2.04.02)

**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 - Kingston Creek Hydro Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-EE-0000084	DE-EE-0000084		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.
- B1.15** Siting, construction (or modification), and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; employee health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (including security posts); fire protection; and similar support purposes, but excluding facilities for waste storage activities, except as provided in other parts of this appendix.

Rational for determination:

The Nevada State Office of Energy will provide \$380,000 in Recovery Act funds to Young Brothers Ranch to install a 175KW hydropower plant at the ranch. The ranch is located in Lander County, Kingston, NV at T16R14 Sec 31 SWNE.

The power plant will be constructed near the current outlet of an existing irrigation pipeline. The project site is zoned residential/commercial and open space, and is on private property. The property rights are being sought by Young Brothers Ranch. The NV Energy power line used for the inter-tie is adjacent to the proposed Hydro Power House.

The DOE has reviewed the application and note the following environmental issues associated with this action:

- Air Quality – DOE has determined that the construction of the powerhouse and inter-tie with Nevada Energy are not likely to cause a significant impact on air quality due to the nature of the work and the small area of land to be affected.
- Water Quality – The project will take advantage of existing water rights. DOE finds that the proposed project will not consume water, impact the quality or flow of the water, or affect down stream users.
- Ground Disturbance – The powerhouse containing the turbine and generator will set on an 18ft x 18ft concrete pad within a 25ft x 25ft area that has been previously disturbed. The Nevada Energy power line is located within 50ft of the proposed power plant and will connect to the generator via underground conduit. Less than 0.01 acres of land will be disturbed.
- Visual - The turbine and generator will be housed in an 18ft x 18ft powerhouse that will be placed on a previously graded area. The surrounding area is light residential and rural. The powerhouse will be constructed to aesthetically blend in with the surrounding area. The work and operation of the powerhouse will use existing roads on private property. DOE finds that the location of the powerhouse will not have adverse visual effects.
- Noise - The turbine generator emits approximately 70 to 95 dB depending upon power level. The building will be made of reinforced, solid concrete blocks. The concrete block wall is projected to reduce the noise level by 40 to 50dB

within 50 feet of the building. The water will return to the creek after exiting the turbine. Sound studies will be conducted after operation of the powerhouse commences. The company is prepared to further dampen noise from the powerhouse operations if the study warrants the need. As appropriate measures and mitigation efforts are in place to deal with local noise impacts, DOE has determined that the noise generated from the powerhouse is not likely to have a significant adverse effect.

- **Threatened and Endangered Species** – The powerhouse is being constructed on private land that has been previously disturbed. DOE believes the small area to be affected is not likely to have a significant impact on threatened and endangered species.

- **Cultural Resources** – No modifications to any buildings will occur and all ground disturbances will occur in a previously disturbed area. DOE has determined that there no adverse effects to cultural resources are likely.

- **Permits** – A Water Right Use Modification is required by the State Engineer's Office, Division of Water Resources, Department of Conservation and Natural Resources. The applicant has filed for the permit.

In view of the information provided by the State and recipient, DOE has been determined that the project will not have a significant impact to human health and/or environment. Based on the information provided, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1 and B1.15.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:

1) provide the DOE project officer with a copy of the water use permit from the NV Engineer's Office, Division of Water Resources, Department of Conservation and Natural Resources.

2) provide evidence of property ownership.

Note to Specialist :

According to the project officer, funding for this project is #380,000. Absent a significant change in the scope of this effort, a change in funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

NEPA Compliance Officer

Date: 8/2/10

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: _____