

PMC-ND

(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**

**RECIPIENT:**Newtok Village Council**STATE:** AK**PROJECT
TITLE:** Mertarvik Heat Recovery Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001847	DE-IE0000103	GFO-0000103-001	

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, analysis, and dissemination Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

B5.1 Actions to conserve energy or water (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to Newtok Village Council (Newtok) to design and install a heat recovery system that would transport heat from a proposed power plant at Mertarvik Village, a community currently in development, to four other buildings within the community. The system would work by transferring heat from the generator cooling loops in the power plant via a pipe running 850 linear feet to the Mertarvik Evacuation Center (MEC), a Modular Washeteria, Construction Bunkhouses, and a Construction Washeteria. The proposed project would also include various small-scale energy efficiency renovations to the Construction Bunkhouses and Construction Washeteria.

The proposed project would form part of a larger effort to relocate the Village of Newtok, in Alaska, from its existing area to the new community of Mertarvik, due to ongoing, persistent coastal erosion in Newtok. The other projects that form part of this larger effort are separate from this DOE funded project and are being carried out by other entities. Accordingly, they represent unconnected actions, as they would not be dependent on the heat recovery project for completion. These projects would all be carried out regardless of the status of the heat recovery project.

Mertarvik is located approximately nine (9) miles away from the Village of Newtok. The buildings which would be connected to the heat recovery system would include both existing structures (i.e. the Construction Bunkhouses), structures currently under development (i.e. the MEC and Power Plant), and a proposed structure (i.e. the Modular Washeteria). All facilities and land where the heat recovery pipeline loop would be installed are owned by Newtok Village.

Proposed project activities would include the development of project specifications, materials procurement, the installation of generators and a heat recovery unit at the power plant building, the removal of electric heaters from the construction bunkhouses, installation of baseboard heating, installation/connection of heat recovery system piping, and the installation of fuel meters for energy consumption monitoring. Additionally, a number of energy efficiency renovations would be made to the Construction Bunkhouses, including the installation of makeup air and carbon monoxide detectors, the installation of a mechanical ventilation system, the replacement of the existing electric baseboard heating with a forced air heating system, the installation of foam board insulation to the walls and floor, the replacement of the roof with a vented roof with improved insulation, and the replacement of the windows with double paned operable windows. Energy efficiency renovations would also be made to the Construction Washeteria including the installation of makeup air and carbon monoxide detectors, the installation of a vapor retarder, the installation of foam board to walls, and the installation of insulation to the crawlspace, emergency exit and garage door.

Installation of the heat recovery system would be completed by a qualified contractor, to be selected by Newtok. Long-term fuel consumption monitoring would also be conducted by the Alaska Native Tribal Health Consortium (ANTHC) to verify energy savings.

Installation of the heat recovery pipeline loop would require excavation of about 850 linear feet of trenches between the connected buildings. Excavation would be approximately 8 feet wide and 4 feet deep. Both the supply and return pipelines (loop) would be placed in a single (1) trench. The total excavated area would be approximately 6,800 square feet, with approximately 1007 cubic yards of excavated material. Topsoil, including vegetation, would be segregated to preserve the seed bank. The excavated material would be used to backfill the trenches. The topsoil would be placed on top of the trench and the excavated areas would be reseeded immediately following installation of the heat recovery system.

Archaeological surveys have been conducted previously. Based on the assessments of these surveys the project site was shown to be in an area that would not impact any known cultural resources. However, if Newtok or other project participants encounter cultural or archaeological artifacts during ground disturbing activities, all activities must immediately cease in the vicinity of the discovery and Newtok must notify the DOE Project Officer of the discovery. The activities in the vicinity of the discovery must cease until an evaluation of the discovery is completed by the appropriate officials and the DOE Contracting Officer provides written authorization to resume the activities. If Newtok seeks to reroute the affected work, Newtok must first obtain written authorization from the DOE Contracting Officer. With the information from the previously completed archaeological surveys, locating the trenching within the currently developed or disturbed land, small scale and footprint of project activities, and the aforementioned stop-work requirement, DOE does not anticipate any impacts to archaeological or cultural resources as a result of the proposed project.

All project activities would be carried out by qualified personnel and access to the project site would be limited to project staff members. Newtok would ensure that all required permits and certifications are obtained prior to commencement of project activities. A landfill is expected to be constructed and operational by August, 2019. Accordingly, it is anticipated that any waste generated by the project would be disposed of in the landfill. Should any waste be produced prior to completion of the landfill, it would be stored in a connex until it can be disposed of in the landfill

Any health and safety risks associated with the project would be mitigated through the use of proper protective equipment, monitoring and inspections, and adherence to industry-standard health and safety measures. All pipeline connections would also be tested for leaks prior to the completion of installation. All project activities would adhere to relevant local, State and Federal health, safety, and environmental regulations.

The U.S. Fish and Wildlife Service's (USFWS) Endangered Species database indicates that the Spectacled Eider can be found in the project area. This coastal duck species is classified as Threatened. However, USFWS' database notes that the project area is outside of the species' critical habitat. Because all project work will be conducted in areas already disturbed by human activities, it is not expected that the project would have an adverse effect on the species or individuals within the species. Consequently, DOE has determined that there would be no effect on ESA-listed species expected to result from this project.

Based on the review of the proposal, DOE has determined the proposal fits within the class of action(s) and the integral elements of Appendix B to Subpart D of 10 CFR 1021 outlined in the DOE categorical exclusion(s) selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) related to the proposal that may affect the significance of the environmental effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. This proposal 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 the Recipient intends to make changes to the scope or objective of this project, the Recipient is required to contact the Project Officer, identified in Block 15 of the Assistance Agreement before proceeding. The Recipient must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. If the Recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of a final NEPA decision, the Recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:

If Newtok or other project participants encounter cultural or archaeological artifacts during ground disturbing activities, all activities must immediately cease in the vicinity of the discovery and Newtok must notify the DOE Project Officer of the discovery. The activities in the vicinity of the discovery must cease until an evaluation of the discovery is completed by the appropriate officials and the DOE Contracting Officer provides written authorization to resume the activities. If Newtok seeks to reroute the affected work, Newtok must first obtain written authorization from the DOE Contracting Officer.

Note to Specialist :

Office of Indian Energy Policy and Programs
This NEPA determination requires a tailored NEPA provision.
Review completed by Jonathan Hartman on 10/15/2018

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Casey Strickland

NEPA Compliance Officer

Date: 10/22/2018

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: _____