

PMC-ND

(1.08.09.13)

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



RECIPIENT: NANA Regional Corporation

STATE: AK

PROJECT TITLE: Deployment of Clean Energy and Energy Efficiency Projects on Indian Lands - 2015

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0001390	DE-IE0000034	GFO-0000034-001	

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.)

**B5.16 Solar photovoltaic systems** The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

## Rationale for determination:

NANA Regional Corporation (NRC) would utilize DOE and cost share funds for a community scale solar deployment in the Northwest Arctic to lower electricity costs in the three Alaska Native Inupiat communities of Buckland (75 kW), Deering (50 kW), and Kotzebue (500 kW). Currently, each community operates its own diesel-based isolated micro-grid, along with wind turbines supplying supplemental power. Each solar photovoltaic (PV) installation would supplement the existing diesel and wind generation capacity at each community and would be tied into existing, permitted distribution and electrical facilities. Once installed, NRC would integrate the PV systems with each community's existing power generation facility, commission the system, and train local operators on the use of the system.

All three sites where PV arrays would be installed are fully permitted wind generation sites that have previously undergone environmental review for impacts to resources of concern related to the installed wind turbines, transmission lines, and access roads. Any modifications to existing permits would be received before initiating project activities. Installation of the PV arrays would be consistent with current land use and activities. All land owners support the proposal and have provided letters of commitment and support to NRC. The project is in receipt of Tribal Resolutions from all three Tribal groups supporting this project. All three sites were previously reviewed for impacts to historic properties and for each site the Alaska State Historic Preservation Office concurred with determinations of no historic properties affected. The US Fish and Wildlife Service (USFWS) lists three species as threatened under the Endangered Species Act that could occur at each location: spectacled eider, Stellar's eider, and polar bear. Discussion of threatened species for each site is found below. There are up to 14 species of migratory birds that could occur in the project areas but due to current human activity, existing use of each site, and nature of PV array installation and operation, no impacts to migratory birds are expected from project activities.

## Buckland

Approximately 0.26 acres of land would be used to install the PV arrays, which would be anchored with ballast foundations filled with local material and placed on the land surface. No ground disturbance is required for installation. Threatened eider species do not nest in this area and migration paths are to the west of the project location. Polar bears are not likely to occur on the upland area of the project location. Based on the above, DOE has determined there would be no effect to threatened species from project activities at the Buckland site.

### Deering

Approximately 0.16 acres of land would be used to install the PV arrays, which would be anchored to the ground with helical micro-pile foundations. The micro-piles are small diameter (3-5 inch) piles that are drilled into the ground to a depth of approximately 12-15 feet. This project site is in wetlands but all work would occur in winter in order to minimize impacts. There is currently a wetlands permit (GP 2007-541-M1) in place with the Army Corps of Engineers (ACOE) for the wind generation site, access road, and transmission line. This permit would need to be slightly modified to include the installation of the PV array but based on the size of the micro-pile foundations, no issues are anticipated with the modification. Threatened eider species do not nest in this area. Although low numbers of eiders may migrate through the project area, no impacts are expected from PV array installation and operation. Because the density of polar bears in the area is very low, encounters are expected to be rare, any behavioral effects to transient bears would be minor and temporary, there is a very low probability of polar bears denning in the area, and there is an encounter protocol in place to minimize potential impacts, any potential impacts from installation of the PV arrays would be insignificant. Based on the above, DOE has determined there would be no effect to threatened species from project activities at the Deering site.

### Kotzebue

Approximately 1.3 acres of land would be used to install the PV arrays, which would be anchored to the ground with helical micro-pile foundations the same size as those being used at the Deering site. This project site is in wetlands but all work would occur in winter in order to minimize impacts. There is currently a wetlands permit (POA-1997-322-M1) in place with the ACOE for wind turbines and access roads. This permit would need to be slightly modified to include the installation of the PV array but based on the size of the micro-pile foundations, no issues are anticipated with the modification. This is not a wetland action that would be subject to 10 CFR Part 1022 "Compliance with Floodplain and Wetland Environmental Review Requirements." Threatened eider species are not expected to nest in the immediate area. Although low numbers of eiders may migrate through the project area, no impacts are expected from the PV array installation and operation. Any encounters with transient polar bears are expected to be rare and with the existing wind farm and human activity that already occurs within the project area, no additional impacts are anticipated as a result of installation of the PV arrays. Based on the above, DOE has determined there would be no effect to threatened species from project activities at the Kotzebue site.

There are no hazardous materials associated with this project, with the exception of those used in general construction, such as diesel fuel for equipment use, construction adhesives, and cleaning agents. All hazardous materials would be managed in accordance with federal, state, and local environmental regulations. Existing corporate health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. Additional policies and procedures would be implemented as necessary as new health and safety risks are identified. During construction, non-hazardous waste would be generated, such as packing materials, excess copper wire, and other materials. Waste (packing materials and other construction waste) would be disposed at the local landfill, used as supplemental material for the existing facility, or backhauled at the point of demobilization.

Based on review of the project information, DOE has determined that the project activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that these activities are consistent with actions contained in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination," and B5.16 "Solar photovoltaic systems," and are 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.

Note to Specialist :

Office of Indian Energy

This NEPA Determination does not require a tailored NEPA provision.

Casey Strickland 05/10/16

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_



Signed By: Kristin Kerwin

A blue ink handwritten signature, likely of Kristin Kerwin.

NEPA Compliance Officer

Date: 5/12/2016

**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: \_\_\_\_\_

