

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



RECIPIENT: NLR

STATE: CO

PROJECT TITLE : NLR-26-009 Electric thermal storage in Fort Wainwright – Fairbanks, AK

Notice of Funding Opportunity Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NLR-26-009	GO28308

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

Description:

**B5.16 Solar photovoltaic systems**

(a) The installation, modification, operation, or decommissioning of commercially available solar photovoltaic systems:

1. Located on a building or other structure (such as rooftop, parking lot or facility, or mounted to signage, lighting, gates, or fences); or
2. Located within a previously disturbed or developed area.

(b) Covered actions would be in accordance with applicable requirements (such as land use and zoning requirements) in the proposed project area and the integral elements listed at the start of appendix B of this part, and would be consistent with applicable plans for the management of wildlife and habitat, including plans to maintain habitat connectivity, and incorporate appropriate control technologies and best management practices.

**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); 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's (DOE) National Laboratory of the Rockies (NLR) is proposing to partner with the Department of War (DoW) to install an electric thermal storage (ETS) at the U.S. Army base at Fort Wainwright in Fairbanks, Alaska. The purpose of the project would be to improve energy resilience and secure DoW installations in cold climates through integration of electrical thermal storage, distributed energy resources, and advanced load management.

The project would be funded by the Environmental Security Technology Certification Program, a DoW program. NLR would act as the project's lead organization installing the ETS units and making basic connections. The NLR subcontractor would be performing the electrical work and PV installation. The DoW previously completed a NEPA review of the project and issued a NEPA Determination using a categorical exclusion. NLR would follow DoW's requirements.

The proposed project would install three ETS system heater units (units) in three different rooms within the Burch Hill Snow Lodge (building number B1169) and one small photovoltaic (PV) system outside adjacent to the building. Units would be installed in the (1) Ski School Office; (2) the Great Room and; (3) Ski Issue Room. The PV system would be 3.6 kilowatt and installed in front of B1169, outside the Electrical Room. The PV panels would be ground mounted on a fixed-tilt solar racking system and connected to the main distribution panel through an overhead line. A new building management system would be installed to control ETS units in two rooms. 208-volt outlets would be created for the Ski School Office and Great Room. The circuit in the Ski issue Room would be modified to allow for a plug-in unit.

Once the proposed installation is complete, NLR would monitor the room units' performance and conduct experiments to evaluate their resilience value. One NLR has completed performance testing, Fort Wainwright would like to take ownership of the full ETS system. NLR would transfer ownership of the system. Work would be conducted on DoW property and completed in accordance with DoW construction policies.

#### Impacts

Air emissions would occur during local travel, use of construction adhesives, and operation of small vehicles but it is expected to be de minimis. Workers would follow required specifications to limit air emissions from the construction site. Waste generated during the project would be reused, recycled, or disposed of in accordance with applicable regulations, policies, and procedures.

Erosion and stormwater impacts would occur if excavation were required. Erosion control measures would be required and maintained throughout the project lifecycle. All ground disturbance would occur in areas that have been previously disturbed. DoW would provide a dig permit for the PV system if excavation is deeper than six inches.

U.S. Fish and Wildlife Service (FWS) has identified two eagle species and three additional migratory bird species that may occur in the proposed project location using the Information for Planning and Consultation (IPaC) tool; no critical habitat occurs in the proposed project location. The Bald Eagle, Golden Eagle, American Golden-plover, Lesser Yellowlegs, and Olive-sided Flycatcher are listed as bird species within the range of the proposed project. The area selected for the PV system would be scanned for ground-nesting birds and installation of the panel would not occur if there are nesting birds present. The project location would not intersect any wetlands mapped by the FWS inventory. Because the proposed work is mostly indoors and installation of the PV system would require minimal ground disturbance, the activities would preserve natural ecological conditions of the area, and protective measures would be implemented, DOE has determined that the proposed project would have no effect on any listed species or critical habitat.

There are 29 historic sites within a 10-mile radius of the proposed project. No historical features or sites were identified within and adjacent to the proposed project area. No visual impacts to these sites are anticipated as the

solar panel installation would not be visible from any of these locations. The remaining work would be in the interior of the building.

Individuals working on this project could be exposed to various physical, chemical, and electrical hazards during construction and operation. Existing corporate health and safety policies and procedures would be followed including employee training, work/worker authorization, proper protective equipment, engineering controls, and monitoring, as well as obtaining a Safe Work Permit. Additional policies and procedures would be implemented as necessary if new health and safety risks are identified.

**NEPA PROVISION**

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

A migratory bird nesting survey shall be completed if project activities involving ground disturbance occur between March 15 and September 15.

All required permits shall be obtained prior to commencing project activities.

Notes:

NLR  
Brandon Bammel, 3/25/2026

**FOR CATEGORICAL EXCLUSION DETERMINATIONS**

The proposal fits within a class of actions that is listed in Appendix B to 10 CFR Part 1021 or Appendix B and C of DOE’s NEPA Implementing Procedures (June 30, 2025). To fit within the classes of actions listed in Appendix B to 10CFR Part 1021, or Appendix B of DOE’s NEPA Implementing Procedures, a proposal must satisfy the conditions that are integral elements of the classes of actions in Appendix B of both 10 CFR Part 1021 and DOE’s NEPA Implementing Procedures.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion.

The proposed action is categorically excluded from further NEPA review.

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

NEPA Compliance Officer Signature:

 Electronically Signed By: **Nicole Serio**  
NEPA Compliance Officer

Date: 3/25/2026

**FIELD OFFICE MANAGER DETERMINATION**

- Field Office Manager review not required
- Field Office Manager review required

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature:

\_\_\_\_\_  
Field Office Manager

Date: \_\_\_\_\_