

**U.S. DEPARTMENT OF ENERGY
OFFICE OF CRITICAL MINERALS AND ENERGY INNOVATION
NEPA DETERMINATION**

RECIPIENT: **NLR**

STATE: **CO**

PROJECT TITLE : **NLR 26-015 UAS Flight for Raccoon Mountain Pump Storage Plant - TN**

Notice of Funding Opportunity Number	Procurement Instrument Number	NEPA Control Number	CID Number
		GFO-NLR 26-015	

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:

B3.2 Aviation activities	Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.
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Rationale for determination:

The U.S. Department of Energy's (DOE) National Laboratory of the Rockies (NLR) is proposing to use uncrewed aircraft systems (UAS) to capture high-definition video and photographs of the Raccoon Mountain Pump Storage Plant in Chattanooga, Tennessee.

The purpose of the proposed project is to obtain high-definition videography and photography of the pump storage plant to help address a gap in existing imagery available for future communications, outreach, technical presentations, and educational materials.

The UAS that would be used for aerial survey is a DOE owned Parrot Ai. Flights would be conducted with a minimum flight crew of two. The minimum essential flight crew is the pilot in command (PIC) and one visual observer.

Following a set flight plan, the UAS would be deployed just outside the area of the Raccoon Mountain Visitor Center. Flights would consist of ascents, descents, hovering, and horizontal travel. The launch and landing areas would be determined by the PIC prior to each flight. Flights would be conducted within the visual line of sight with the UAS. A visual observer would be present to assist the pilot to identify air traffic, ground hazards, birds, and situational awareness.

All flights would be conducted during daylight hours only. Flights would maintain a minimum distance of 10 feet from all structures. The UAS speed would not operate at wind speeds higher than 22 mph. Flights would not intentionally fly over private residences, residential yards, occupied structures, or other non-project related private property. Workers are required to maintain a minimum of 10 feet of separation from the UAS when it is powered on. There are no airspace restrictions in the vicinity of the facility, and UAS flights would be allowed to ascend to a maximum of 399 feet above sea level. After completion of each day's activities, the UAS system and any associated equipment would be removed.

Impacts

Within the project area, there are seven threatened and endangered species, Bald and Golden eagles, and 13 migratory birds listed by the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) report. The threatened and endangered species include the Gray bat, Northern Long-Eared Bat, Tricolored bat, Whooping Crane, Large-flowered skullcap, Price's potato-bean, and White fringeless orchid. Proposed threatened and endangered species include the Monarch Butterfly. There are no critical habitats present at the project location.

A visual observer would be present during all flights to ensure there are no collisions with birds they might encounter in the project area. If bats, birds, or flocks of birds enter the takeoff area prior to deployment of the UAS, the flight would not occur. The UAS would be moved away and grounded when bats, birds, or flocks of birds are present, and any birds moving into the landing zone after takeoff would be monitored and an alternate landing location would be selected. If active nests are in the takeoff or landing areas, an alternate location would be selected. The UAS may emit low levels of noise but due to the short duration of the flights and the ambient noise generated by the surrounding area, adverse impacts due to noise are not anticipated. Due to the short duration of the flights, the presence of

visual observer before and during each flight, and that flights would only occur during daylight hours, DOE has determined there would be no effect on special status species as a result of project activities.

Flight activities would be conducted by NLR staff as authorized in accordance with NLR policies, procedures, and safety requirements under FAA Part 107 regulations. This proposed flight resides within the Class G airspace, for which no notifications, authorization, or permits are required. Based on the location of the flights and planned safety measures, no adverse impacts are expected.

A risk assessment would be completed for flights at the Raccoon Mountain Pump Storage Plant. Operational parameters, hazards, and controls would be identified in an Aviation Safety Plan prepared in consultation with NLR Environment, Safety, and Health staff and the UAS Steering Committee.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

An approved Aviation Safety Plan shall be obtained prior to conducting flight activity.

All required permits and permissions shall be obtained as required prior to conducting flight activity.

Notes:

NLR
Brandon Bammel, 08/05/2026

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the ‘Rationale for Determination’ above) 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.

To fit within the classes of actions listed in Appendix B to 10 CFR Part 1021 or Appendix B of DOE’s NEPA Implementing Procedures, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B (4) of Appendix B to 10 CFR Part 1021; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B (5) of Appendix B to 10 CFR Part 1021.

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. This proposal is not connected to other actions with potentially significant impacts, is not related to other actions with individually insignificant but cumulatively significant impacts and is not precluded by applicable regulations or procedures concerning limitations on actions during preparation of an environmental impact statement.

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: 8/5/2026

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: _____