



National Environmental Policy Act (NEPA) Determination Categorical Exclusion

Recipient: TerraPower, LLC (TerraPower) and Global Nuclear Fuels – Americas, LLC (GNF-A)

State: North Carolina

Project Title: GNF-A Fuel Fabrication Facility Preconstruction Activities

Notice of Funding Opportunity (NOFO) Number: DE-FOA-0002936

Award Number: DE-NE0009054

OCED NEPA Control Number: OCED-009054-002-CX

Categorical Exclusion Appendix, Number, and Description:

B3.6 Small-scale research and development, laboratory operations, and pilot projects

Siting, construction, modification, operation, and decommissioning of facilities for small-scale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rationale for determination: In October 2020, the U.S. Department of Energy's (DOE) Advanced Reactor Demonstration Program entered into a cooperative agreement with TerraPower for the development and demonstration for a new sodium cooled fast reactor that will be located in Kemmerer, WY. The scope of the cooperative agreement includes, among other elements, the development and operation of the Natrium Fuel Fabrication Facility (FFF) which TerraPower has contracted with Global Nuclear Fuels America, LLC (GNF-A) to construct. The NFFF would produce Natrium fuel rods and assemblies for use in the reactor located in Kemmerer, WY. The NFFF would consist of an incoming materials area, uranium processing area with confinement zone nuclear ventilation, encapsulated uranium processing area, inspection area, product shipping area, and production support areas. Authorization of federal funding for project activities is contingent upon a NEPA review. Currently, DOE is proposing to provide funding to GNF-A, under the existing cooperative agreement, for preconstruction activities in support of the Natrium FFF. The NFF will be located on the GNF-A Nuclear Facility controlled access area of the GNF-A Energy site in Wilmington, NC. The CX would cover preconstruction activities only; activities involving the direct use of radioactive materials are not included and will be analyzed by a separate NEPA review led by the Nuclear Regulatory Commission (NRC).

Preconstruction activities would include the following actions:

- Site preparation, including (1) vegetation clearing; (2) grubbing; (3) grading and excavating; and (4) stockpiling soils;
- Soil backfill area;
- Construction trailers and restrooms;
- Support structure and building related preconstruction activities;
- Material laydown areas; and
- Access road and parking lot construction.

Preconstruction activities would occur on approximately 20 acres of previously disturbed land within an industrial site. The dominant land cover within the project boundary is maintained lawn, with smaller areas of unvegetated industrial development and early successional woodland. A federal permit from the Corps under section 404 of the Clean Water Act may be required prior to commencement of ground disturbing activities. DOE does not anticipate adverse impacts to sensitive resources as a result of the proposed activities.

Related regulatory requirements: DOE received concurrence from the North Carolina State Historic Preservation Office on December 29, 2025, for no historic properties affected.

DOE staff concludes preconstruction activities would have no effect on the federally listed piping plover, red-cockaded woodpecker, rufa red knot, American alligator, green sea turtle, Kemp's Ridley sea turtle, magnificent ramshorn, Cooley's meadowrue, golden sedge, and rough-leaved loosestrife because: (1) favorable habitat for these species does not occur at the project; and (2) field surveys conducted in 2025 did not identify these species at the project. We also conclude preconstruction activities would not jeopardize the continued existence of the proposed southern hognose snake and the monarch butterfly.

Approximately 2.4 acres of early and mid-successional woodland would be cleared as part of preconstruction activities. To ensure any negative effects resulting tree removal to the northern long-eared bat and tricolored bat would be minimized, GNF-A has proposed to: (1) direct temporary lighting away from suitable northern long-eared bat and tricolored bat habitat; and (2) seasonally restrict tree removal until a period of probable absence (October 1 through December 14, and February 16 through March 31). Therefore, DOE concluded that preconstruction activities are not likely to adversely affect the northern long-eared bat and tricolored bat.

On December 4, 2025, DOE staff accessed the IPaC database and used the northern long-eared bat and tricolored bat rangewide determination keys to request concurrence with the determination of "not likely to adversely affect" for the northern long-eared bat and tricolored bat. Based on the site-specific information DOE staff submitted for the project, the IPaC database generated a letter of concurrence that would become valid if FWS personnel did not intervene within 15 calendar days. DOE staff was not contacted within this 15-day timeframe, thus validating FWS's concurrence and concluding informal consultation.

Signature of this Categorical Exclusion determination affirms that:



The proposed action (or the part of the proposal described in 'rationale for determination') 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 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.

Any work to be carried out outside of the United States, its territories and possessions is exempt from further review pursuant to Section 5.1.1 of the DOE Final Guidelines for Implementation of Executive Order 12114; "Environmental Effects Abroad of Major Federal Actions."

Conditions:

1. If the Recipient proposes to add to or modify the activities or locations described herein, those new activities/locations will be subject to additional NEPA review.
2. All required permits and approvals must be obtained before work can begin and all work must be completed in accordance with all required permits and approvals.
3. All cultural resource identification activities (e.g., archaeological, historic above ground, historic visual assessments) must be completed in accordance with applicable guidelines and standards provided by the State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office



(THPO) and the Secretary of the Interior's Identification Standards. Coordination with DOE is required to establish an Area of Potential Effects (APE) and scope of effort (i.e., research design) prior to geotechnical surveys and cultural resource field investigations. DOE will initiate Section 106 consultation prior to any geotechnical surveys and cultural resource field investigations in order to support coordination with SHPO/THPO, Tribes, and other Section 106 consulting parties.

Signature of this memorandum constitutes a record of this decision.

DOE Office of Nuclear Energy NEPA Compliance Officer Signature:



Jason Anderson

Date: 1/14/2026