



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 24, 2025

Sara Sheen  
State Historic Preservation Officer  
Wyoming State Historic Preservation Office  
2301 Central Avenue  
Barrett Building, Third Floor  
Cheyenne, WY 82002

SUBJECT: REQUEST FOR CONCURRENCE ON ARCHAEOLOGICAL TESTING PLAN FOR SITES 48LN740 AND 48LN8940 AT THE PROPOSED KEMMERER POWER STATION UNIT 1 SITE IN LINCOLN COUNTY, WYOMING (DBI\_WY\_2022\_280) (DOCKET NUMBER: 50-613)

Dear Sara Sheen:

The U.S. Nuclear Regulatory Commission (NRC) staff is requesting concurrence from the Wyoming State Historic Preservation Office (WY SHPO) on the enclosed archaeological testing plan for sites 48LN740 and 48LN8940 in Lincoln County, Wyoming, which are eligible for listing in the National Register of Historic Places (NRHP).

**Background**

TerraPower, LLC (TerraPower), on behalf of US SFR Owner, LLC, a wholly owned subsidiary of TerraPower, has applied to the NRC for a permit to construct the Natrium Reactor Plant in Kemmerer, Lincoln County, Wyoming (Kemmerer Power Station Unit 1). The NRC staff has determined that the issuance of this construction permit would be a Federal undertaking under Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA). Pursuant to paragraph 800.8(c) of Title 36 of the *Code of Federal Regulations* (36 CFR) Part 800, the regulations implementing NHPA Section 106, the NRC staff is using the National Environmental Policy Act of 1969, as amended, process to comply with NHPA Section 106 in lieu of the procedures set forth in 36 CFR 800.3 through 800.6. Accordingly, by letter dated June 12, 2024, the NRC staff initiated NHPA Section 106 consultation with the WY SHPO for this undertaking (WY SHPO project identifier DBI\_WY\_2022\_280) (Agencywide Documents Access and Management System (ADAMS) Accession No. [ML24114A090](#)). Thereafter, by letter dated February 4, 2025 ([ML25034A123](#)), the NRC staff notified the WY SHPO that:

- (1) Based on a Class III cultural resources report for the Kemmerer Power Station Unit 1 site ([ML25049A292](#)) and consistent with 36 CFR 800.5, the NRC staff had determined that the undertaking (the proposed issuance of a construction permit for Kemmerer Power Station Unit 1) would result in adverse effects on historic properties, specifically, sites 48LN740 and 48LN8940;
- (2) Pursuant to 36 CFR 800.6(a) and 36 CFR 800.8(c)(1)(v), the NRC staff was consulting with the WY SHPO, Tribes, and the Advisory Council on Historic Preservation (ACHP) to

solicit input to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects of the undertaking on historic properties; and

- (3) If the adverse effects could not be sufficiently avoided or minimized, resolution of adverse effects would be considered pursuant to 36 CFR 800.6(b) and a memorandum of agreement (MOA) would be prepared consistent with 36 CFR 800.6(c) (see also 36 CFR 800.8(c)(4)).

In response ([ML25044A095](#)), the WY SHPO concurred that sites 48LN740 and 48LN8940 would be adversely affected by the undertaking as planned and recommended that the NRC staff develop an MOA, specifying the terms under which the adverse effects to the historic properties would be mitigated. By letter dated February 18, 2025 ([ML25049A244](#)), the ACHP separately notified the NRC that it does not believe its participation in the consultation to resolve adverse effects is needed.

Consistent with 36 CFR 800.2(c)(2)(ii) and 36 CFR 800.8(c)(1), the NRC staff is ensuring that Indian Tribes that might attach religious and cultural significance to historic properties in the area of potential effects are afforded the opportunity to identify their concerns, provide advice on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, and participate in the resolution of any adverse effects on such properties. Accordingly, on February 25, 2025, the NRC staff held a virtual workshop for consulting Tribes, which provided information on the Kemmerer Power Station Unit 1 undertaking, potential impacts to historic and cultural resources, and the NRC staff's process to develop, as necessary, an MOA with the WY SHPO, the U.S. Department of Energy Office of Clean Energy Demonstrations (OCED), TerraPower, and Tribes. The NRC staff will continue to consult with Tribes throughout the NHPA Section 106 process, including consulting on archaeological testing of sites 48LN740 and 48LN8940 and will keep the WY SHPO informed of any input from Tribes.

### **Archaeological Testing Plan for Sites 48LN740 and 48LN8940**

The purpose of this letter is to request concurrence on the archaeological testing plan to further investigate sites 48LN740 and 48LN8940. The purpose of the archaeological testing is to: (1) determine the elements of sites 48LN740 and 48LN8940 that contribute to the sites' eligibility for inclusion in the NRHP; (2) determine if current planned construction of the proposed Kemmerer Power Station Unit 1 would adversely affect those elements; and (3) if so, either make changes to the planned construction to avoid those elements or develop the methodology to mitigate the potential adverse effect. The archaeological testing would be conducted by TerraPower's cultural resources contractor, Tetra Tech, Inc., in accordance with "Cultural Resource Testing Plan for Sites 48LN740 and 48LN8940 as part of TerraPower, LLC's Natrium Demonstration Project, Lincoln County, Wyoming" (the Testing Plan), completed by Tetra Tech, Inc., dated March 2025. The Testing Plan is enclosed with this letter. Pursuant to Title 10 of the *Code of Federal Regulations* section 2.390, "Public inspections, exemptions, requests for withholding," the Testing Plan is withheld from public disclosure and may not be made publicly available.

Consistent with the Testing Plan, the archaeological testing will utilize a combination of geophysical remote sensing and auger test probes within the 48LN740 and 48LN8940 site boundaries to fully define the horizontal and vertical extent of the subsurface cultural resource components already identified at the sites. Fully defining the subsurface cultural resource components at the sites will: (1) establish which subsurface portions of the sites are contributing

or non-contributing to the overall site eligibility; (2) allow the determination of what, if any, effect the undertaking will have on contributing portions; and (3) facilitate modifications to the undertaking to avoid contributing portions so that the undertaking will have no adverse effect on sites 48LN740 and 48LN8940 or else inform the methodology to mitigate adverse effects.

The NRC staff is requesting your concurrence review of the Testing Plan for sites 48LN740 and 48LN8940 by April 24, 2025. If you have any questions, comments, or concerns, please contact Sarah Lopas, Senior Environmental Project Manager, by phone at 301-415-6360 or via email at [Sarah.Lopas@nrc.gov](mailto:Sarah.Lopas@nrc.gov).

Sincerely,



Signed by Rome, Michelle  
on 03/24/25

Michelle R. Rome, Chief  
Environmental Technical Review Branch 1  
Division of Rulemaking, Environmental,  
and Financial Support  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 50-613

Enclosure:  
Testing Plan (Non-Public)

cc w/ enclosure:

Brian Beadles  
Deputy State Historic Preservation Officer  
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cc w/o enclosure:  
TerraPower Environmental Unit 1  
via GovDelivery

**SUBJECT:** REQUEST FOR CONCURRENCE ON ARCHAEOLOGICAL TESTING PLAN FOR SITES 48LN740 AND 48LN8940 AT THE PROPOSED KEMMERER POWER STATION UNIT 1 SITE IN LINCOLN COUNTY, WYOMING (DBI\_WY\_2022\_280) (DOCKET NUMBER: 50-613)

**DATED:** March 24, 2025

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**ADAMS Accession No: ML25073A136 (letter)**

**\*concurrence via e-mail**

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