



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

September 26, 2022

Niki S. Nicholas, Superintendent  
Manhattan Project National Historical Park  
4564 Leatherwood Road  
Oneida, TN 37841

SUBJECT: SECTION 106 CONSULTATION AND NOTIFICATION OF THE  
ISSUANCE OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT  
FOR THE CONSTRUCTION PERMIT FOR THE KAIROS HERMES TEST  
REACTOR IN OAK RIDGE, TENNESSEE (DOCKET NUMBER: 50-7513)

Dear Superintendent Niki Nicholas:

The U.S. Nuclear Regulatory Commission (NRC) staff is conducting an environmental review for a construction permit (CP) application submitted by Kairos Power, LLC (Kairos) pursuant to title 10 of the *Code of Federal Regulations* (10 CFR) part 50, for Hermes a non-power test reactor termed Hermes on a 185-acre site located in Oak Ridge, Tennessee. As part of the review, the NRC staff has completed a draft environmental impact statement (EIS). The draft EIS, NUREG-2263, "Environmental Impact Statement for the Construction Permit for the Kairos Hermes Test Reactor" is publicly available from the NRC's Agencywide Documents Access and Management System (ADAMS) as ML22259A126. ADAMS is accessible from the NRC website at <https://www.nrc.gov/reading-rm/adams.html>.

The draft EIS includes analyses of relevant environmental issues and documents the NRC staff's determination regarding effects of constructing the Kairos Hermes test reactor. As discussed in chapter 5 of the draft EIS, the NRC staff's preliminary recommendation, unless safety issues mandate otherwise, is that the CP be issued as proposed. This recommendation is based on: (1) the analysis and findings of the staff's independent environmental review documented in the draft EIS; (2) consultation with Federal, State, Tribal, and local agencies; (3) the environmental report submitted by the applicant; and (4) the consideration of public comments. If a CP were granted, it would not authorize operation of the reactor. Should Kairos choose to proceed with its proposed project, they would need to apply for, and receive, a separate operating license from the NRC. This authorization would constitute a separate NRC undertaking and would require the NRC to prepare a supplement to the CP final EIS.

In a letter dated March 4, 2022 ([ML22031A287](#)), the NRC staff notified you that in accordance with title 36 *Code of Federal Regulations* (36 CFR) section 800, "Protection of Historic Properties" section 800.8(c), the NRC is using the National Environmental Policy Act of 1969, as amended process to comply with section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), in lieu of the procedures set forth in 36 CFR 800.3 through 800.6. The purpose of this letter is to continue NRC's NHPA section 106 consultation with the National Park Service and invite you to review and comment on the draft EIS. Section 3.5 of the draft EIS contains a discussion of historic and cultural resources and historic properties identified in the direct and indirect area of potential effects, discusses impacts to historic and

cultural resources from construction and operation as well as the NRC staff's preliminary determination of no adverse effect to historic properties. It also addresses cumulative impacts to historic and cultural resources and provides a summary of the results of NRC's ongoing NHPA section 106 consultation process.

The NRC staff thanks you for your comments provided via letter on April 12, 2022 (ML22169A009), which stated that the National Park Service (NPS) is interested in collaborating with Kairos to develop interpretative material near the proposed Kairos facility site that illustrates the history of nuclear science and technology and demonstrates linkages to the work done at K-25 during World War II. Additionally, the NPS expressed concerns related to other U.S. Department of Energy planned development in the area, and that public access locations to the K-25 site have not yet been determined.

On August 23, 2022, the NRC staff met with you to discuss your comments. During the conversation, the NRC staff shared NRC's initial NHPA section 106 finding of no adverse effect to the National Register of Historic Places eligible Manhattan Project National Historic Park and discussed comments regarding development of interpretive material and concerns about public access and recreational activities along the Poplar Creek in the vicinity of the proposed Hermes site. The NRC staff followed up the telephone meeting with an email dated August 30, 2022 (ML22242A204). In this email NRC indicated that they had reached out to Kairos Power to facilitate discussions with the NPS on interpretive signage and that Kairos staff intend to reach out to the NPS. The email further confirmed that the Hermes Site boundary would not encompass Poplar Creek and therefore would not limit recreation along the waterway.

The NRC staff plans to hold a public meeting to discuss the analyses and results in the draft EIS on Wednesday, November 16, 2022, at the Hilton DoubleTree, 215 S. Illinois Avenue in Oak Ridge, Tennessee. The meeting will convene at 7:00p.m. and will continue until 9:00p.m. EST, as necessary. Those unable to attend in person may view and participate in the meeting virtually and should monitor the NRC's Public Meeting Schedule website at <https://www.nrc.gov/pmns/mtg> for access information. Meeting details will also be available by November 1, 2022, at <https://www.nrc.gov/reactors/non-power/kairos-hermes.html>. The meeting will be transcribed and will include: (1) a presentation of the contents of the draft EIS; and (2) the opportunity for interested government agencies, organizations, and individuals to provide comments on the draft EIS. Additionally, the NRC staff will host an open house one hour before the start of the meeting during which members of the public may meet with NRC staff. You and your staff are invited to attend.

The NRC requests that your office submit any information, comments, or concerns you may have on the draft EIS during the 60-day comment period, which ends on December 6, 2022. Comments can be submitted: (1) by email to [KairosHermes-CPEIS@nrc.gov](mailto:KairosHermes-CPEIS@nrc.gov); or (2) in person during the public meetings. After consideration of public comments received, as well as information received through consultation, the NRC will prepare a final EIS, which is scheduled to be published on or before September 2023.

If you have any questions concerning the NRC staff's environmental review of this CP application, please contact Peyton Doub via phone at (301) 415-6703 or via email at [Peyton.Doub@nrc.gov](mailto:Peyton.Doub@nrc.gov) or Tamsen Dozier via phone at (301) 415-2272 or via email at [Tamsen.Dozier@nrc.gov](mailto:Tamsen.Dozier@nrc.gov).

Sincerely,



Signed by Erwin, Kenneth  
on 09/26/22

Kenneth Erwin, Chief  
Environmental Review New Reactors Branch  
Division of Rulemaking, Environment,  
and Financial Support  
Office of Nuclear Material Safety  
and Safeguards

Docket No: 50-7513

cc:

Ms. Kris Kirby, Superintendent  
Manhattan Project National Historical Park  
c/o NPS Intermountain Regional Office  
P.O. Box 25287  
Denver, CO 80225-0287

SUBJECT: SECTION 106 CONSULTATION AND NOTIFICATION OF THE ISSUANCE OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE CONSTRUCTION PERMIT FOR THE KAIROS HERMES TEST REACTOR IN OAK RIDGE, TENNESSEE (DOCKET NUMBER: 50-7513)

DATED: September 26, 2022

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