



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

September 26, 2022

E. Patrick McIntyre, Jr.  
Executive Director  
and State Historic  
Preservation Officer  
Tennessee Historical Commission  
State Historic Preservation Office  
2941 Lebanon Pike  
Nashville, TN 37214

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 E. Patrick McIntyre, Jr.:

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 a non-power test reactor termed Hermes on a 185-acre site in Oak Ridge, Tennessee. As part of the review, the NRC staff has completed a draft environmental impact statement (EIS) as required by 10 CFR part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions", the NRC's regulations that implement the National Environmental Policy Act (NEPA) of 1969, as amended. 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, including potential impacts and effects on historic properties. 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. 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 ([ML22031A288](#)), 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 NEPA 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 Tennessee Historical Commission and invite you to review and comment on the draft EIS. Chapter 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. Section 3.5.1.4 includes a summary of consultation comments received from federally recognized tribes during the public scoping period.

During this comment period NRC received comments from the Eastern Shawnee Tribe Tribal Historic Preservation Officer (THPO) and Cherokee Nation THPO. The Eastern Shawnee Tribe THPO requested that they be contacted immediately if the project inadvertently discover archaeological sites, human remains and associated funerary objects. As part of NRC's letter submitting of the draft EIS to the Eastern Shawnee Tribe, NRC describes how Kairos is developing an Archaeological Monitoring and Discovery Plan being that will outline stop work and notification procedures to address the unexpected discovery of human remains or archaeological material which is described in section 3.5 of the draft EIS. These procedures would be in place prior to commencing ground-disturbing activities. In addition, Kairos would follow applicable Tennessee law (T.C.A. § 11-6-107 et seq.) regarding inadvertent discovery of human remains. The Cherokee Nation THPO requested cultural resources reports associated with the Kairos site and the surrounding area. The NRC staff sent requested cultural resource reports on July 7 and 8, 2022 (ML22204A004).

The NRC staff thanks you for your comments provided via letter on March 11, 2022 (ML22088A294), which stated that the project as currently proposed will not adversely affect the Manhattan Project National Historical Park and that the Tennessee Historical Commission has no objection to the implementation of this project as currently planned.

Pursuant to 36 CFR 800.8(c), the NRC invites your office to submit any comments, or concerns you feel are appropriate 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.

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 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., 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.

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:

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DATED: September 26, 2022

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