



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

August 30, 2024

Mr. Peter Hastings
Vice President, Regulatory Affairs
and Quality
Kairos Power LLC
707 W Tower Ave, Suite A
Alameda, CA 94501

SUBJECT: NOTIFICATION OF THE ISSUANCE OF THE FINAL ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR THE CONSTRUCTION PERMIT REVIEW FOR THE KAIROS HERMES 2 TEST REACTOR FACILITY AND EXEMPTIONS FROM CERTAIN REQUIREMENTS IN 10 CFR PART 51

Dear Mr. Hastings:

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing a construction permit (CP) application submitted by Kairos Power, LLC (Kairos) for two non-power test reactors referred to collectively as Hermes 2. The application was submitted by Kairos in a letter dated July 14, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23195A121), pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities." The two CPs, if issued, would authorize the construction of the two Hermes 2 reactors on a 185-acre site located in Oak Ridge, TN, adjacent to the Hermes reactor, for which Kairos received a CP from the NRC dated December 14, 2023 (ML23338A258). The Hermes 2 reactors would demonstrate additional key elements of the Kairos Power Fluoride Salt-Cooled, High Temperature Reactor Technology for possible future commercial deployment.

As part of the review of this CP application, the NRC prepared a draft environmental assessment (EA) and a draft finding of no significant impact (FONSI) that consider the environmental impacts associated with issuing the CPs. The draft EA and draft FONSI were issued for public comment on April 26, 2024, in the *Federal Register* (89 FR 32462). After consideration of public comments, the NRC made a determination that the proposed action would not significantly affect the quality of the human environment, and therefore, a FONSI is warranted and an environmental impact statement (EIS) will not be prepared. The final EA and FONSI are publicly available at ML24240A034. The final EA and FONSI also address the environmental impacts of granting the exemptions described below.

To support the issuance of the final EA and FONSI for the Hermes 2 test reactor facility, the NRC has granted exemptions from certain NRC requirements in 10 CFR Part 51 which require the NRC to prepare an EIS to support the issuance of a CP for a test facility. Specifically, the exemptions are from the requirements of 10 CFR 51.20, "Criteria for and identification of licensing and regulatory actions requiring environmental impact statements," paragraph (b)(1); 10 CFR 51.25, "Determination to prepare environmental impact statement or environmental


assessment; eligibility for categorical exclusion;” and 10 CFR 51.75, “Draft environmental impact statement – construction permit, early site permit, or combined license,” paragraph (a).

Granting these exemptions was not in response to a request by Kairos. The NRC determined that exemptions from these requirements were necessary to issue a final EA and FONSI instead of an EIS to meet the staff’s obligations under the National Environmental Policy Act of 1969 and the NRC’s regulations for the environmental review of the Hermes 2 CP application.

These exemptions are effective on August 30, 2024. A copy of the exemptions is enclosed and has been forwarded to the Office of the Federal Register for publication.

If you have questions regarding this matter, please contact Cayetano Santos Jr., at (301) 415-7270 or via email at Cayetano.Santos@nrc.gov.

Sincerely,
**Joshua M.
Borromeo**

 Digitally signed by Joshua M.
Borromeo
Date: 2024.08.30 08:05:27 -04'00'

Joshua Borromeo, Chief
Advanced Reactor Licensing Branch 1
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Docket Nos.:
50-611
50-612

Enclosure:
As stated

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