



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

September 11, 2023

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

SUBJECT: ACCEPTANCE FOR DOCKETING OF THE HERMES 2 TEST REACTOR  
FACILITY CONSTRUCTION PERMIT APPLICATION SUBMITTED BY KAIROS  
POWER LLC

Dear Mr. Hastings:

By letter dated July 14, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23195A121), Kairos Power LLC (Kairos) submitted a construction permit (CP) application for a two-unit test reactor facility pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, "Domestic Licensing of Production and Utilization Facilities," and Section 104c of the Atomic Energy Act of 1954, as amended. The two-unit facility, referred to as Hermes 2, would be built in Oak Ridge, Tennessee. The purpose of this letter is to inform you of the results of the NRC staff's acceptance review of this application.

The NRC staff performed an acceptance review and determined that Kairos submitted sufficient information in accordance with 10 CFR 2.101, "Filing of Application," 10 CFR 50.33, "Contents of applications; general information," 10 CFR 50.34, "Contents of application; technical information," and 10 CFR 51.50, "Environmental report-construction permit, early site permit, or combined license stage." The acceptance review confirmed that the NRC staff will be able to conduct its detailed safety and environmental technical reviews and to complete the reviews on a predictable schedule.

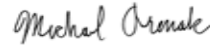
The NRC staff performed the acceptance review of the CP application in accordance with 10 CFR Part 2, "Agency Rules of Practice and Procedure," 10 CFR Part 50, and the agency's procedures. The review assessed the various criteria and considerations specified in the agency's procedures associated with accepting an application. The NRC staff concluded that the application is acceptable for docketing. However, the NRC staff's determination does not preclude audits or requests for additional information as the review proceeds. The docket numbers established for the Hermes 2, Units 1 and 2, test reactors are 50-611 and 50-612, respectively.

The NRC staff will provide a schedule for completion of the safety and environmental reviews of the application, to include key milestones and resource estimates, within 30 days of the date of this letter.

A notice of acceptance for docketing will be published by the Office of the Federal Register.

If you have any questions regarding this matter, please contact me at (301) 415-3229, or via email at Michael.Orenak@nrc.gov.

Sincerely,



Signed by Orenak, Michael  
on 09/11/23

Michael Orenak, Project Manager  
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

cc: Distribution via Gov Delivery ListServ

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 CONSTRUCTION PERMIT APPLICATION SUBMITTED BY KAIROS POWER  
 LLC DATED: SEPTEMBER 11, 2023

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**NRR-106**

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