

From: Beasley, Benjamin
Sent: Thursday, October 28, 2021 5:25 PM
To: Peter Hastings
Cc: Darrell Gardner; Kennedy, William; Cuadrado de Jesus, Samuel; Rivera, Richard; Orenak, Michael; Young, Mitzi; Harper, Richard; Burnell, Scott; Wolf, Carolyn
Subject: Acknowledgement of Receipt of the Construction Permit Application for the Hermes Test Reactor
Attachments: Notice of Availability for Hermes CP Application CLEAN_LRC Review.pdf

Peter,

By letter dated September 29, 2021, you submitted a portion of a construction permit application for a test reactor to be located in Oak, Ridge, Tennessee. This proposed facility is designated as Hermes. In your letter you stated that you were submitting the application pursuant to the requirements of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities." The construction permit application is in support of an eventual filing of an application for a Class 104c facility operating license for Hermes.

The U.S. Nuclear Regulatory Commission (NRC) staff acknowledges receipt of your application and is reviewing the application to determine its acceptability for docketing. The staff plans to make this determination by November 29, 2021. The staff will communicate with you if issues arise during this review.

Attached is a draft of the notice that was forwarded to the Office of the *Federal Register* to inform the public of receipt and availability of the application.

If your application is found to be acceptable for review, the application will be docketed. A schedule for review of the Hermes application will not be published until after submission of the remainder of the application and the full application is accepted for review.

If you have any questions, please contact me at Benjamin.Beasley@nrc.gov.

Ben

Hearing Identifier: KairosPower_CPDocs_Public
Email Number: 2

Mail Envelope Properties (BY3PR09MB736177B61CD6BF3ECE2E0E8396869)

Subject: Acknowledgement of Receipt of the Construction Permit Application for the
Hermes Test Reactor
Sent Date: 10/28/2021 5:24:46 PM
Received Date: 10/28/2021 5:24:00 PM
From: Beasley, Benjamin

Created By: Benjamin.Beasley@nrc.gov

Recipients:

"Darrell Gardner" <gardner@kairospower.com>
Tracking Status: None
"Kennedy, William" <William.Kennedy@nrc.gov>
Tracking Status: None
"Cuadrado de Jesus, Samuel" <Samuel.CuadradoDeJesus@nrc.gov>
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Tracking Status: None
"Peter Hastings" <hastings@kairospower.com>
Tracking Status: None

Post Office: BY3PR09MB7361.namprd09.prod.outlook.com

Files	Size	Date & Time	
MESSAGE	1438	10/28/2021 5:24:00 PM	
Notice of Availability for Hermes CP Application CLEAN_LRC Review.pdf			168199

Options

Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:

NUCLEAR REGULATORY COMMISSION

[Docket No. 99902069; NRC-2021-0193]

Kairos Power, LLC

Receipt of Construction Permit Application

AGENCY: Nuclear Regulatory Commission.

ACTION: Construction permit application; receipt.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is providing public notice of receipt and availability of an application for a construction permit from Kairos Power, LLC. The application for the construction permit was received on September 29, 2021.

DATES: [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: Please refer to Docket ID **NRC-2021-0193** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2021-0193**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209,

301-415-4737, or by email to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document

- **Attention:** The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via email at pdr.resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8:00 a.m. and 4:00 p.m. (ET), Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Benjamin Beasley, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-348-5766; email: Benjamin.Beasley@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Discussion

On September 29, 2021, Kairos Power LLC filed with the NRC pursuant to Section 103 of the Atomic Energy Act, as amended, and Part 50 of title 10 of the *Code of Federal Regulations* (10 CFR), “Domestic Licensing of Production and Utilization Facilities,” an application for a construction permit for one test reactor located in Oak Ridge, Tennessee. The reactor is to be identified as Hermes and is a high-temperature fluoride salt-cooled design. This design utilizes solid tri-structural isotropic fuel and a molten salt coolant.

The application is available in ADAMS under Package Accession No. ML21272A375. Along with other documents, the ADAMS package includes the transmittal letter (ADAMS Accession No. ML21272A376) and the preliminary safety analysis report (ADAMS Accession No. ML21272A378). The information submitted by the applicant includes certain administrative information such as financial qualifications

submitted pursuant to 10 CFR 50.33 as well as technical information submitted pursuant to 10 CFR 50.34. The environmental report will be submitted at a later date.

The NRC staff is currently undertaking its acceptance review of the application. If the application is accepted for docketing, subsequent *Federal Register* notices will be issued that address the acceptability of the tendered construction permit application for docketing and provisions for participation of the public in the permitting process.

Dated: October 25, 2021.

For the Nuclear Regulatory Commission.

Stewart L. Magruder, Senior Project
Manager,
Advanced Reactor Licensing Branch,
Division of Advanced Reactors and
Non-Power Production and Utilization
Facilities,
Office of Nuclear Reactor Regulation.