



NRC NEWS

Office of Public Affairs, Headquarters

Washington, DC. 20555-0001
www.nrc.gov ■ opa.resource@nrc.gov



No: 21-042
CONTACT: [Scott Burnell](#), 301-415-8200

October 29, 2021

NRC Makes Available Kairos Construction Permit Application

The Nuclear Regulatory Commission has received the first portion of a construction permit application from Kairos Power, which requests permission to build a test reactor at a site in Oak Ridge, Tennessee. The [application](#) is now available for public inspection on the NRC website.

Kairos filed the application on Sept. 29, providing a preliminary safety analysis report for the company's "Hermes" test reactor. The 35-megawatt, non-power reactor would use molten salt to cool the reactor core, providing operational data to support development of a larger version meant for a commercial nuclear power plant. The company will need to submit a separate application for an operating license in the future.

The NRC staff is reviewing this portion of the permit application to determine if it is complete and ready for processing. If the partial application is determined to be sufficient, the staff will docket it and begin a detailed technical review.

The NRC understands Kairos plans to file the second portion of the Hermes application, an environmental report, in several weeks. That report will undergo a separate docketing acceptance review at that time. If the environmental report is accepted for review, the NRC will publish a notice of opportunity to request an adjudicatory hearing on the full application before the NRC's Atomic Safety and Licensing Board. Information about the Kairos design is available on the NRC [website](#).