

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-611 and 50-612; NRC-2023-0138]

Kairos Power LLC; Notice of Hearing

AGENCY: Nuclear Regulatory Commission.

ACTION: Construction permit application; Notice of uncontested hearing.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC or the Commission) will commence an uncontested hearing, in which the Commission will receive written evidence in the form of testimony and exhibits regarding the application from Kairos Power LLC (Kairos) for a construction permit (CP) to construct a non-power test reactor termed Hermes 2 in Oak Ridge, Tennessee.

DATES: The Commission may issue written questions to the parties (the NRC staff and the applicant) no later than September 26, 2024. For the full schedule for submitting documents in this hearing, see Sections V and VI of the **SUPPLEMENTARY INFORMATION** section of this document.

ADDRESSES: Please refer to Docket ID **NRC-2023-0138** 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-2023-0138**. 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 individuals 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.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. Eastern Time, Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Wesley W. Held, Office of the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-287-3591; e-mail: Wesley.Held@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. BACKGROUND

The Commission hereby gives notice that, pursuant to Section 189a of the Atomic Energy Act (AEA) of 1954, as amended, it will commence an uncontested hearing, in which the Commission will receive written evidence in the form of testimony and exhibits regarding the application from Kairos for a CP to construct a non-power test reactor facility termed Hermes 2 in Oak Ridge, Tennessee.

Kairos's application was submitted by letter on July 14, 2023, Agencywide Documents Access and Management System (ADAMS) Accession No. ML23195A122.

The NRC staff's Environmental Assessment (including its Finding of No Significant Impact) and Safety Evaluation Report may be viewed at ADAMS Accession Nos. ML24240A034 and ML24200A115, respectively. This mandatory hearing will concern safety and environmental matters relating to the requested construction permit application, as more fully described below.

II. EVIDENTIARY UNCONTESTED HEARING

The Commission will conduct this hearing using written materials only. The schedule and process for submitting written materials to the Commission is detailed in Sections V and VI below. The parties to this proceeding are Kairos and the NRC staff.

III. PRESIDING OFFICER

The Commission is the presiding officer for this proceeding.

IV. MATTERS TO BE CONSIDERED

The matter at issue in this proceeding is whether the review of the Kairos Hermes 2 construction permit application by the Commission's staff has been adequate

to support the findings found in title 10 of the *Code of Federal Regulations* (10 CFR) 50.35, 50.40, 50.50, and 10 CFR 51.105. Those findings are as follows:

Issues Pursuant to the Atomic Energy Act of 1954, as Amended

With respect to the construction permit: (1) whether the applicant has described the proposed design of the facility, including, but not limited to, the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public; (2) whether such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report; (3) whether safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components; (4) whether on the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility, and (ii) taking into consideration the site criteria contained in 10 CFR part 100, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public; (5) whether there is reasonable assurance (i) that the construction of the facility will not endanger the health and safety of the public, and (ii) that construction activities can be conducted in compliance with the Commission's regulations; (6) whether the applicant is technically and financially qualified to engage in the proposed activities in accordance with the Commission's regulations in Chapter I of 10 CFR; (7) whether the issuance of a permit for the construction of the facility to the applicant will not, in the opinion of the Commission, be

inimical to the common defense and security or to the health and safety of the public; and (8) whether the application meets the standards and requirements of the AEA and the Commission's regulations, and that notifications, if any, to other agencies or bodies have been duly made.

Issues Pursuant to the National Environmental Policy Act (NEPA) of 1969

With respect to the construction permit: (1) determine whether the requirements of Sections 102(2)(A), (C), and (E) of NEPA and the applicable regulations in 10 CFR part 51 have been met; (2) independently consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken; (3) determine, after weighing the environmental, economic, technical, and other benefits against environmental and other costs, and considering reasonable alternatives, whether the construction permit should be issued, denied, or appropriately conditioned to protect environmental values; and (4) determine whether the NEPA review conducted by the NRC staff has been adequate.

V. SCHEDULE FOR SUBMITTAL OF WRITTEN EVIDENCE

All documents to be filed by the parties as described below should be filed in accordance with the requirements of our E-filing rules at 10 C.F.R. § 2.304(g) and will be considered exhibits in this proceeding once filed.

No later than October 10, 2024, the NRC staff should E-file the following documents to add them to the docket for this hearing: (1) SECY-24-0075, which will serve as the NRC staff's primary written testimony in this hearing, (2) the construction

permit application,¹ (3) the draft construction permit, (4) the safety evaluation, (5) the environmental assessment and finding of no significant impact, and (6) any report submitted by the Advisory Committee on Reactor Safeguards in compliance with § 182(b) of the AEA and 10 C.F.R. § 50.58(a) regarding the Hermes 2 construction permit and any NRC staff response thereto. If any of these documents are non-public, then the NRC staff should also file a public version, if practicable.

No later than September 26, 2024, the Commission may issue written questions to one or both of the parties (the NRC staff and the applicant). If such questions are issued, party testimony responding to such questions, and associated exhibits (if any), are due October 10, 2024, unless the Commission directs otherwise. The applicant may also file additional written testimony by October 10, 2024.

VI. INTERESTED GOVERNMENT PARTICIPANTS

No later than September 20, 2024, any interested State, local government body, or Federally recognized Indian Tribe may file with the Commission a statement of any issues or questions that the State, local government body, or Indian Tribe wishes the Commission to give particular attention to as part of the uncontested hearing process. Such statement may be accompanied by any supporting documentation that the State, local government body, or Indian Tribe sees fit to provide. Any statements and supporting documentation (if any) received by the Commission using the agency's E-

¹ If, due to its size, the application is too large to file through the E-filing system, the NRC staff may file a document that lists the ADAMS accession number for the package of each part of the application.

filing system² by the deadline indicated above will be made part of the record of the proceeding. The Commission will use such statements and documents as appropriate to inform its questions to the NRC staff and applicant and its hearing decision.

Many of the procedures and rights applicable to the inherently adversarial nature of NRC's contested hearing process are not available in this uncontested hearing. Participation in the NRC's contested hearing process is governed by 10 CFR 2.309 (for persons or entities, including a State, local government, or Indian Tribe seeking to file contentions of their own) and 10 CFR 2.315(c) (for an interested State, local government, or Federally recognized Indian Tribe seeking to participate with respect to contentions filed by others). Participation in this uncontested hearing does not affect the right of a State, a local government, or an Indian Tribe to participate in a separate contested hearing process.

Dated at Rockville, Maryland, this 10th day of September, 2024.

For the Nuclear Regulatory Commission.

/RA/

Carrie Safford
Secretary of the Commission.

² The process for accessing and using the agency's E-filing system is described in the November 22, 2023, notice of hearing (88 Fed. Reg. 81,439) that was issued by the Commission for this proceeding. Participants who are unable to use the electronic information exchange (EIE), or who will have difficulty complying with EIE requirements in the time frame provided for submission of written statements, may provide their statements by electronic mail to hearingdocket@nrc.gov.