

AGENDA

Title: HEARING ON CONSTRUCTION PERMIT FOR KAIROS POWER TESTING FACILITY (HERMES): SECTION 189A OF THE ATOMIC ENERGY ACT PROCEEDING (Public Meeting)

Purpose: To receive testimony and exhibits regarding the application of Kairos Power LLC (Kairos) for a construction permit for the Hermes test reactor. The testimony will focus on unique features of the facility or novel issues that arose as part of the review process and other significant technical or policy issues associated with aspects of the staff's review that are important for the Commission to make its final decision. The Commission will determine whether the staff's review has been adequate to support the findings in 10 C.F.R. §§ 50.35(a), 50.40, 50.50, and 51.105(a).

Scheduled: October 19, 2023
9:00 am

Duration: 1 day

Location: Commissioners' Conference Room, 1st Floor OWFN

NOTE: Chair to provide opening remarks, admit exhibits, and swear in witnesses. **20 mins.**

Participants: **Presentation**

(Note: Witnesses seated at the table are listed, other staff available to answer questions will be seated in the well and reserved rows.)

Overview (Kairos Power LLC) (9:20 am) **30 mins.***

At the table:

Mike Laufer, Chief Executive Officer, Kairos Power LLC

Ed Blandford, Chief Technology Officer, Kairos Power LLC

Per Peterson, Chief Nuclear Officer, Kairos Power LLC

Peter Hastings, Vice President of Regulatory Affairs and Quality, Kairos Power LLC

Topic: Overview

Commission Q & A (round of questions; 6 minutes each) **24 mins.****

Overview (NRC Staff)

30 mins.*

At the table:

Robert Taylor, Deputy Director, Office of Nuclear Reactor Regulation (NRR)
Mohamed Shams, Director, Division of Advanced Reactors and Non-power Production and Utilization Facilities, NRR

Jeremy Bowen, Deputy Director, Division of Advanced Reactors and Non-power Production and Utilization Facilities, NRR

Christopher Regan, Director, Division of Rulemaking, Environmental, and Financial Support, Office of Nuclear Material Safety and Safeguards (NMSS)

Topic: Overview of the staff's methodology for its review of the Kairos construction permit application and summary of key regulatory findings.

Commission Q & A (round of questions; 6 minutes each)

24 mins.**

BREAK

10 mins.

NOTE: For the remaining panels, the applicant is expected to discuss the contents of the construction permit application while the staff is expected to discuss its review process and regulatory conclusions. Each panel should include a discussion of any permit conditions associated with the subject matter of the panel.

Safety Panel (11:30 am)

Applicant

15 mins.*

At the table:

Mike Laufer, Chief Executive Officer, Kairos Power LLC

Ed Blandford, Chief Technology Officer, Kairos Power LLC

Per Peterson, Chief Nuclear Officer, Kairos Power LLC

Peter Hastings, Vice President of Regulatory Affairs and Quality, Kairos Power LLC

Staff

30 mins.*

At the table:

William Jessup, Chief, Advanced Reactor Licensing Branch 1, NRR

Ed Helvenston, Project Manager, Research and Test Reactors Licensing Branch, NRR

Alexander Chereskin, Materials Engineer, Advanced Reactor Technical Branch 2, NRR

Michelle Hart, Senior Reactor Engineer, Advanced Reactor Technical Branch 2, NRR

Alexandra Siwy, Nuclear Engineer, Advanced Reactor Technical Branch 2, NRR

Chris van Wert, Senior Technical Advisor for Reactor Fuel, Division of Safety Systems, NRR

Topic: Discussion of the Kairos application and staff conclusions from the Final Safety Evaluation focused on unique features of the facility or novel issues,

including the tri-structural isotropic (TRISO) fuel, molten salt coolant, functional containment, high temperature materials, and passive accident response.

Commission Q & A (round of questions; 6 minutes each) **24 mins.****

BREAK (Lunch Break-Approx. 12:45 – 2:00 pm)

Environmental Panel (2:00 pm)

Applicant **10 mins.***

At the table:

Mike Laufer, Chief Executive Officer, Kairos Power LLC

Ed Blandford, Chief Technology Officer, Kairos Power LLC

Per Peterson, Chief Nuclear Officer, Kairos Power LLC

Peter Hastings, Vice President of Regulatory Affairs and Quality, Kairos Power LLC

Staff **15 mins.***

At the table:

Ken Erwin, Chief, New Reactor Environmental Review Branch, NMSS

Tamsen Dozier, Project Manager, New Reactor Environmental Review Branch, NMSS

Peyton Doub, Environmental Scientist, New Reactor Environmental Review Branch, NMSS

Topic: Discussion of the Final Environmental Impact Statement including the proposed federal action, purpose and need for the project, the environmental review process and the public outreach, impact evaluations and NEPA findings, and alternatives. The staff will also discuss agency compliance with other environmental regulations and consultation status.

Commission Q & A (round of questions; 6 minutes each) **24 mins.****

BREAK **10 mins.**

Closing (3:05 pm)

Closing Statement by Applicant **10 mins.***

Mike Laufer, Chief Executive Officer, Kairos Power LLC

Ed Blandford, Chief Technology Officer, Kairos Power LLC

Per Peterson, Chief Nuclear Officer, Kairos Power LLC

Peter Hastings, Vice President of Regulatory Affairs and Quality, Kairos Power LLC

Closing Statement by Staff **10 mins.***

Robert Taylor, Deputy Director, NRR

Commission Q & A and Closing Statements **24 mins.****

*For presentation only and does not include time for Commission Q & A's.

**All Commissioners will have an opportunity to ask questions after each panel. Commissioners will start the Q&A with their total time allotted to allocate as they see fit among the panels.