



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

July 31, 2025

MEMORANDUM TO: Josh Borromeo, Chief
Advanced Reactor Licensing Branch 1
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

FROM: Cayetano Santos Jr., Senior Project Manager
Advanced Reactor Licensing Branch 1
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JUNE 25, 2025, MEETING WITH KAIROS ON
CRITICALITY ALARM EXEMPTION FROM 10 CFR 70.24 FOR
THE HERMES NON-POWER REACTOR FACILITY

Meeting Information:

Applicant: Kairos Power LLC (Kairos)

Project No.: 99902069

Meeting Type: Observation Meeting

Public Meeting Notice: Agencywide Documents Access and Management System (ADAMS)
Accession No.: ML25122A094

Applicant Presentation Slides: ML25169A320

Enclosure 2 to this memorandum contains proprietary export-controlled information. When separated from this enclosure, this letter and Enclosure 1 is DECONTROLLED.

Contact: Cayetano Santos, NRR/DANU
(301) 415-7270

Meeting Summary:

On June 25, 2025, a partially closed observation meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Kairos Power, LLC (Kairos). The purpose of the meeting was to discuss a forthcoming exemption request for the Hermes non-power reactor facility from requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) 70.24 regarding criticality alarms.

Below is a summary of the comments and discussions during the open portion of the meeting:

- The NRC staff commented that in addition to information on the design features and controls relied on to prevent inadvertent criticality, the final safety analysis report (FSAR) should also include a summary of the supporting analyses, including the methodology and assumptions used, the scenarios analyzed, and the analysis results. Kairos responded that it plans to include this information in the FSAR with more detailed information available in internal documents.

Members of the public voiced no comments or questions.

Enclosures:

1. List of Attendees
2. Summary of Closed Portion of the Meeting

cc: Kairos Power Hermes via GovDelivery

SUBJECT: SUMMARY OF JUNE 25, 2025, MEETING WITH KAIROS ON CRITICALITY ALARM EXEMPTION FROM 10 CFR 70.24 FOR THE HERMES NON-POWER REACTOR FACILITY DATED: JULY 31, 2025

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Package: ML25171A145

Letter and Enclosure 1 - : ML25171A146

Enclosure 2 - : ML25171A147

NRR-109

OFFICE	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:LA	NRR/DANU/UAL1:BC	NRR/DANU/UAL1:PM
NAME	CSantos	DGreene	JBorromeo	CSantos
DATE	7/3/2025	7/9/2025	7/31/2025	7/31/2025

OFFICIAL RECORD COPY

List Of Attendees

Summary of Meeting with Kairos

June 25, 2025

Name	Organization
Cayetano Santos	U.S. Nuclear Regulatory Commission (NRC)
Alex Siwy	NRC
Jeremy Munson	NRC
Logan Crevelt	NRC
Zee St. Hilaire	NRC
Jim Tomkins	Kairos Power, LLC (Kairos)
Joe-Nimique Cilliers	Kairos
Nader Satvat	Kairos
Drew Peebles	Kairos
Chris Campbell	Kairos
Keoni Sanny	Kairos
Kevin Deyette	Member of the Public
Jana Bergman	Member of the Public
Diego Saenz	Member of the Public
Spencer Toohill	Member of the Public
John Pfabe	Member of the Public