



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

June 13, 2023

Mr. Peter Hastings  
Vice President, Regulatory Affairs  
and Quality  
Kairos Power LLC  
707 W Tower Ave  
Alameda, CA 94501

SUBJECT: SAFETY EVALUATION FOR THE KAIROS POWER LLC CONSTRUCTION  
PERMIT APPLICATION FOR THE HERMES NON-POWER TEST REACTOR  
(EPID NO. L-2021-NEW-0011)

Dear Mr. Hastings:

This letter is to inform you that the U.S. Nuclear Regulatory Commission (NRC) staff has completed the safety evaluation (SE) for the Kairos Power LLC (Kairos) construction permit application for the Hermes non-power test reactor. Kairos's application was submitted in two parts by letters dated September 29, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21272A375) and October 31, 2021 (ML21306A131).

The enclosed SE is provided to Kairos for information and will be submitted to the Commission in preparation for the mandatory (uncontested) hearing. The SE has also been made public (ML23158A268). The NRC staff issuance of this SE does not constitute a commitment to issue the construction permit.

Sincerely,

A handwritten signature in black ink, appearing to read "M Shams".

Signed by Shams, Mohamed  
on 06/13/23

Mohamed Shams, Director  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

Docket No. 50-7513

Enclosure:  
As stated

SUBJECT: SAFETY EVALUATION FOR THE KAIROS POWER LLC CONSTRUCTION PERMIT APPLICATION FOR THE HERMES NON-POWER TEST REACTOR (EPID NO. L-2021-NEW-0011) DATED: JUNE 13, 2023

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**ADAMS Accession Nos.:**

**Pkg: ML23158A265**

**Letter: ML23158A266**

**Safety Evaluation: ML23158A268**

**NRR-043**

<b>OFFICE</b>	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:LA	NMSS/DFM/MCAB:BC*	NSIR/DPR/RLB:BC*
<b>NAME</b>	MHiser (EHelvenston for)	DGreene	JRubenstone	JQuichocho
<b>DATE</b>	6/12/2023	6/12/2023	2/15/23	2/22/23
<b>OFFICE</b>	NRR/DRA/APLB:BC*	NRR/DEX/EXHB:BC*	NRR/DEX/ESEB:BC*	NRR/DEX/EICB:BC*
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<b>DATE</b>	2/23/23	2/24/23	2/27/23	2/27/23
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<b>DATE</b>	2/27/23	2/28/23	6/6/23	6/7/23
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<b>NAME</b>	CdeMessieres	AProffitt	BAyersman	MShams
<b>DATE</b>	6/13/2023	6/13/2023	4/10/23	6/13/2023

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