



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

April 4, 2024

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

SUBJECT: KAIROS POWER LLC – FINAL SAFETY EVALUATION OF TOPICAL REPORT,  
“INSTRUMENT SETPOINT METHODOLOGY FOR THE KAIROS POWER  
FLUORIDE SALT-COOLED HIGH-TEMPERATURE REACTOR,” REVISION 1  
(CAC NO. 000431 / EPID NO: L-2023-TOP-0033)

Dear Mr. Hastings:

By letter dated May 31, 2023 (Agencywide Documents Access and Management System (ADAMS) Package Accession No. ML23152A181), Kairos Power LLC (Kairos) requested the U.S. Nuclear Regulatory Commission (NRC) staff's review and approval of topical report (TR) KP-TR-021-NP, "Instrument Setpoint Methodology for the Kairos Power Fluoride Salt-Cooled High-Temperature Reactor," Revision 0. By letter dated October 4, 2023, Kairos submitted Revision 1 of KP-TR-021-NP (ML23277A313).

In an email dated March 15, 2024 (ML24086A549) the NRC staff provided Kairos with a draft of its safety evaluation (SE) (ML24033A263) for the purpose of identifying proprietary information. In an email dated March 21, 2024 (ML24086A551), Kairos confirmed that there was no proprietary information in the draft SE. The NRC staff's final SE for KP-TR-021-NP, Revision 1, is enclosed.

The NRC staff requests that Kairos publish an accepted version of this TR within 3 months of receipt of this letter. The accepted version shall incorporate this letter and the enclosed SE after the title page. The accepted version shall include an "-A" (designated accepted) following the TR identification number.

P. Hastings

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If you have any questions, please contact Samuel Cuadrado via email at [Samuel.Cuadrado@nrc.gov](mailto:Samuel.Cuadrado@nrc.gov).

Sincerely,

William Jessup, Chief  
Advanced Reactor Licensing Branch 1  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

Project No.: 99902069

Enclosure:  
Safety Evaluation

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**Letter: ML24091A005**

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