

March 4, 2024

Docket No. 50-611

Docket No. 50-612

US Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Subject: Kairos Power LLC  
Transmittal of Responses to NRC Requests for Confirmatory Information for the Review  
of the Hermes 2 Environmental Report

## References:

1. Letter, Kairos Power LLC to Document Control Desk "Submittal of the Construction Permit Application for the Hermes 2 Kairos Power Fluoride Salt-Cooled, High Temperature Non-Power Reactor (Hermes 2), Revision 0," July 14, 2023 (ML23195A122)
2. Nuclear Regulatory Commission, "Kairos Power, LLC Hermes 2 Environmental Report Audit Plan," January 5, 2024 (ML23353A069)
3. Email, Peyton Doub (Nuclear Regulatory Commission) to Martin Bryan (Kairos Power), "RCI Confirmation Message," February 26, 2024

In July 2023, Kairos Power LLC submitted its Environmental Report (ER) (Reference 1) in support of the construction permit application (CPA) for the Hermes 2 non-power reactor. In January 2024, the Nuclear Regulatory Commission provided the Hermes 2 Environmental Audit Plan (Reference 2). As a result of that audit, the Nuclear Regulatory Commission (NRC) provided eight requests for confirmatory information (RCIs) that the staff will use to evaluate the environmental impacts from the proposed action (Reference 3). The enclosure to this letter provides Kairos Power's confirmation of each RCI. Kairos Power requests NRC review of this information in support of continued review of the Hermes 2 CPA.

If you have any questions or need any additional information, please contact Marty Bryan at [bryan@kairospower.com](mailto:bryan@kairospower.com) or at (865) 399-1136, or Darrell Gardner at [gardner@kairospower.com](mailto:gardner@kairospower.com) or (704) 769-1226.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed on March 4, 2024



Peter Hastings, PE  
Vice President, Regulatory Affairs and Quality

Enclosures:

- 1) Kairos Power Response to NRC Requests for Confirmatory Information for the Review of the Hermes 2 Environmental Report

xc (w/enclosure):

William Jessup, Chief, NRR Advanced Reactor Licensing Branch

Peyton Doub, Environmental Project Manager, NMSS, Environmental Review Branch

Mary Richmond, Environmental Project Manager, NMSS, Environmental Review Branch

KP-NRC-2403-003

**Enclosure 1**

**Kairos Power Response to NRC Requests for Confirmatory Information  
for the Review of the Hermes 2 Environmental Report**

**(Non-Proprietary)**