

April 11, 2023

Project No. 99902069

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

Subject: Kairos Power LLC
Approved Version of Metallic Material Qualification Topical Report

- References:
1. Kairos Power LLC, "Metallic Materials Qualification for the Kairos Power Fluoride Salt-Cooled High Temperature Reactor," KP-TR-013, Revision 4, September 28, 2022 (ML22263A456)
 2. Letter, Nuclear Regulatory Commission, "Kairos Power LLC – Final Safety Evaluation for Topical Report 'Metallic Material Qualification for the Kairos Power Fluoride Salt-Cooled High Temperature Reactor (KP-FHR) (Revision 4)'," March 13, 2023 (ML23062A730)

This letter submits the approved version of the Kairos Power topical report titled "Metallic Material Qualification for the Kairos Power Fluoride Salt-Cooled High Temperature Reactor (KP-FHR)." On September 28, 2022, Kairos Power submitted Revision 4 (Reference 1) of the topical report. On March 13, 2023, the NRC provided the final safety evaluation of this topical report (Reference 2).

Portions of the attached report are considered proprietary, and Kairos Power requests those portions be withheld from public disclosure in their entirety in accordance with the provisions of 10 CFR 2.390. Enclosure 1 provides the proprietary version of the approved report and Enclosure 2 provides the non-proprietary approved report. An affidavit supporting the withholding request is provided in Enclosure 3.

Additionally, the information indicated as proprietary has also been determined to contain Export Controlled Information. This information must be protected from disclosure pursuant to the requirements of 10 CFR 810.

If you have any questions or need any additional information, please contact John Price at price@kairospower.com or (972) 754-8221, or Darrell Gardner at gardner@kairospower.com or (704) 769-1226.

Sincerely,



Peter Hastings, PE
Vice President, Regulatory Affairs and Quality

Enclosures:

- 1) KP-FHR Metallic Material Qualification Topical Report (Proprietary)
- 2) KP-FHR Metallic Material Qualification Topical Report (Non-Proprietary)
- 3) Affidavit Supporting Request for Withholding from Public Disclosure (10 CFR 2.390)

xc (w/enclosure):

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