

October 31, 2023

Docket No. 50-0611
Docket No. 50-0612US Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001Subject: Kairos Power LLC
Additional Information Related to Hermes 2 Construction Permit Application - PSAR
Chapter 1

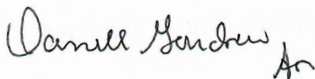
- References:
1. Letter, Kairos Power LLC to Document Control Desk, "Submittal of the Preliminary Safety Analysis Report for the Hermes 2 Kairos Power Fluoride Salt-Cooled, High Temperature Non-Power Reactor (Hermes 2), Revision 0," July 14, 2023 (ML23195A122)
 2. Audit Plan, Nuclear Regulatory Commission, "Kairos Power LLC – Plan for a General Audit of the Hermes 2 Construction Permit Application (EPID No. L-2023-CPS-0000)," October 3, 2023 (ML23268A446)

In July 2023, Kairos Power submitted Revision 0 of the Preliminary Safety Analysis Report (PSAR) (Reference 1) as part of the Construction Permit Application (CPA) for the Hermes 2 non-power reactor. This letter transmits a copy of a letter from the US Department of Energy (DOE) to Kairos Power regarding contract discussions for the management of spent nuclear fuel and high level waste. The information in Enclosure 1 is provided to address NRC feedback received on PSAR Chapter 1 in the General Audit (Reference 2). Kairos Power requests NRC review of the response in support of continued review of the Hermes 2 test reactor construction permit application.

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

I declare under penalty of perjury that the foregoing is true and correct.
Executed on October 31, 2023

Sincerely,



Peter Hastings, PE
Vice President, Regulatory Affairs and Quality

Enclosure: Letter from DOE to Kairos Power

KP-NRC-2310-007

Page 2

xc (w/enclosure):

William Jessup, Chief, NRR Advanced Reactor Licensing Branch

Michael Orenak, Project Manager, NRR Advanced Reactor Licensing Branch

Matthew Hiser, Project Manager, NRR Advanced Reactor Licensing Branch

Edward Helvenston, Project Manager, NRR Advanced Reactor Licensing Branch

Samuel Cuadrado de Jesus, Project Manager, NRR Advanced Reactor Licensing Branch

Enclosure 1
Letter from DOE to Kairos Power
(Non-Proprietary)



Department of Energy

Washington, DC 20585

October 31, 2023

VIA ELECTRONIC MAIL

Peter S. Hastings, PE
Vice President, Regulatory Affairs & Quality
Kairos Power LLC
121 West Trade Street, Suite 1010
Charlotte, NC 28202
hastings@kairospower.com

Re: Confirmation of Active and Good Faith Negotiations for Disposal Contract for Hermes-2

Dear Mr. Hastings:

I am writing to affirm that Kairos Power LLC (“Kairos”) is actively and in good faith negotiating with the Secretary of Energy for a contract for the Hermes-2 reactor under section 302(b) of the Nuclear Waste Policy Act of 1982, as amended (“NWPA”).

Although section 302(b)(1)(A)(ii) of the NWPA assigns to the Secretary of Energy the function of making the above affirmation, section 304(b) of the NWPA further provides that the director of the Office of Civilian Radioactive Waste Management (OCRWM) “shall be responsible for carrying out the functions of the Secretary under [the NWPA], subject to the general supervision of the Secretary.” In 2010, OCRWM was closed and the functions relating to the Standard Contract were assigned to the Office of the General Counsel. Those functions were later assigned by the General Counsel to my office.

DOE is reviewing the issue of the appropriate contract mechanism and will be in contact for further discussions.

Sincerely,

/s/ Constance A. Barton

Constance A. Barton
Contracting Officer, Director
Office of Standard Contract Management
Office of the General Counsel

cc via email:
Darrell Gardner (gardner@kairospower.com)