

March 14, 2018

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

Subject: Kairos Power LLC Request to Initiate Pre-Application Engagement

Consistent with Nuclear Regulatory Commission (NRC) policy of encouraging early discussions with prospective applicants, Kairos Power LLC (Kairos) hereby requests pre-application review and engagement with Kairos by the NRC staff. Kairos is based in Oakland, California, and was founded in 2016 with the intention of commercializing its design for the Kairos Power fluoride salt-cooled, high-temperature reactor (KP-FHR). The KP-FHR integrates solid coated particle fuel and fluoride salt coolants in a high-temperature, low-pressure system that presents a unique combination of inherent safety and deployment flexibility to meet U.S. electricity generation needs. Kairos is currently engaged with potential customers to ensure that technical decisions related to economics, safety, and plant operation are aligned with utility requirements.

Kairos' mission is to enable the world's transition to clean energy, with the ultimate goal of dramatically improving people's quality of life while protecting the environment. Timely and efficient regulatory review and approval of the KP-FHR is a key component to achieving that goal, and Kairos looks forward to active engagement with the NRC staff during pre-application review to facilitate familiarization with the design and preparation for review of licensing submittals.

Kairos is providing additional information in its separate response to Regulatory Issue Summary (RIS) 2017-08, Process for Scheduling and Allocating Resources for Fiscal Years 2020 Through 2022 for the Review of New Licensing Applications for Light-Water Reactors and Non-Light-Water Reactors, dated December 21, 2017 (ML17262B022). Further details regarding the timing of near-term interactions, anticipated Kairos pre-application submittals, and formal application submittals will be provided as part of development of a Regulatory Engagement Plan (REP).

Kairos is interested in beginning discussions with the NRC staff regarding REP development and the staff's earliest convenience and will be prepared for the first technical pre-application review meeting with NRC staff in September 2018.

If you have any questions or need any additional information, please contact Peter Hastings, Vice President of Regulatory Affairs and Quality, at (704) 918-1972 or hastings@kairospower.com.

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We appreciate your consideration and look forward to productive engagement with the NRC to enable the deployment of the KP-FHR in the U.S. electricity market.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Laufer", with a long horizontal flourish extending to the right.

Michael Laufer, PhD
Chief Executive Officer

cc:

V. M. McCree, Executive Director for Operations

M. R. Johnson, Deputy Executive Director for Reactor and Preparedness Programs

F. D. Brown, Acting Director, Office of New Reactors

V. L. Ordaz, Deputy Director, Office of New Reactors

J. D. Monninger, Director, Division of Safety Systems, Risk Assessment, and Advanced Reactors

J. P. Segala, Chief, Advanced Reactor and Policy Branch

C. Haney, Regional Administrator, Region II