



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

October 23, 2019

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

SUBJECT: KAIROS POWER LLC - ACCEPTANCE OF "KP-FHR RISK-INFORMED
PERFORMANCE-BASED LICENSING BASIS DEVELOPMENT
METHODOLOGY" TOPICAL REPORT (CAC NO. 000431)

Dear Mr. Hastings:

By letter dated August 6, 2019, Kairos Power LLC (Kairos) submitted for U.S. Nuclear Regulatory Commission (NRC) staff review, "KP-FHR Risk-Informed Performance-Based Licensing Basis Development Methodology" Topical Report, (Agencywide Documents Access and Management System Accession No. ML19217A420). The NRC staff has performed an acceptance review of the topical report and found that it contains sufficient information to enable the staff to complete a detailed technical review. Notwithstanding the acceptance review, the NRC staff may require additional information to complete the detailed technical review. If needed, the NRC staff will request this information by separate correspondence by November 2019.

Based on the acceptance review, the NRC staff expects to issue a safety evaluation by July 2020. This date could change due to several factors, including the need for and timeliness of responses to requests for additional information; unanticipated changes to the scope of the review; and unsolicited supplements to the topical report. Additionally, the Advisory Committee for Reactor Safeguards (ACRS) will be notified of this topical report and may choose to discuss the report at an ACRS meeting which could impact the schedule for issuing the final safety evaluation to Kairos.

If the forecasted completion date changes, the NRC staff will notify you in writing of the new date and an explanation of the reason for the change. The NRC staff estimates that the review will require approximately 400 staff hours, including project management time.

Section 170.21 of Title 10 of the *Code of Federal Regulations* requires approvals and preapplication/licensing activities, including topical reports, to be subject to fees based on the full cost of the review. Kairos did not request a fee waiver for the cost of this review, therefore, NRC staff hours will be billed to Kairos accordingly.

The review schedule milestones, estimated level of effort, and associated review costs were discussed and agreed upon during a phone call between James Tomkins, Project Manager for Kairos and Stewart Magruder, Senior Project Manager, Advanced Reactor Licensing Branch, NRC on September 30, 2019.

P. Hastings

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If you have questions regarding this matter, please contact Stewart Magruder at (301) 348-5766 or Stewart.Magruder@NRC.gov.

Sincerely,

/RA/

Benjamin Beasley, Chief
Advanced Reactor Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Project No. 99902069

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OFFICE	NRR/DANU	NRR/DANU
NAME	SMagruder	BBeasley
DATE	10/15/2019	10/23/2019

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