

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 7, 2020

MEMORANDUM TO: Benjamin Beasley, Chief

Advanced Reactor Licensing Branch

Division of Advanced Reactors and Non-Power

Production and Utilization Facilities
Office of Nuclear Reactor Regulation

FROM: Stewart Magruder, Senior Project Manager /RA/

Advanced Reactor Licensing Branch

Division of Advanced Reactors and Non-Power

Production and Utilization Facilities
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF FEBRUARY 19, 2020, PUBLIC MEETING TO

DISCUSS KAIROS POWER LLC'S QUALITY ASSURANCE

**TOPICAL REPORT** 

On February 19, 2020, the U.S. Nuclear Regulatory Commission (NRC) staff held a Category 1 public meeting with Kairos Power LLC (Kairos) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss the proposed submittal of a Topical Report on their quality assurance (QA) program. The meeting notice can be found in the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML20037B845. The Enclosure provides the attendance list for the meeting. Members of the public were not in attendance. Public Meeting Feedback forms were not received. The presentation slides can be found in ADAMS under Accession No. ML20045E561.

The meeting began with an overview by Kairos of their Kairos Power fluoride salt-cooled high temperature reactor (KP-FHR); with a focus on the safety case. The NRC staff asked several questions about Kairos' use of the Licensing Modernization Project (LMP) guidance endorsed by the staff in DG-1353 "Guidance for a Technology-Inclusive, Risk-Informed, and Performance-Based Methodology to Inform the Licensing Basis and Content of Applications for Licenses, Certifications, and Approvals for Non-Light-Water Reactors" to classify structures, systems and components for the KP-FHR. The NRC staff also asked clarification questions about how Kairos will define "safety-related". Kairos explained that their definition of "safety-related" is contained in their LMP Topical Report which can be found in ADAMS under Accession No. ML19217A420 and that it is consistent with the approach endorsed by DG-1353.

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Next Kairos presented an overview of their QA Topical Report. They noted that it is based on the template in Nuclear Energy Institute 11-04, "Nuclear Generation Quality Assurance Program Description." The staff asked clarification questions about which of the QA program elements are applicable for the different activities covered. Kairos stated that they will review their topical report before they submit it to ensure that this information is clear. The staff also urged Kairos not to include decommissioning in the scope of activities covered by the QA program.

The meeting participants next discussed the change process that Kairos could use for their QA program. The staff noted that 10 CFR 50.4 specifies a change process and that it may also be possible to use 10 CFR 50.54(a). The staff agreed to continue discussions with Kairos on this issue.

At the conclusion of the meeting, Kairos stated that they intend to submit their QA Topical Report in March 2020.

Project No. 99902069

Enclosure: List of attendees B. Beasley - 3 -

SUBJECT: SUMMARY OF FEBRUARY 19, 2020, PUBLIC MEETING TO DISCUSS

KAIROS POWER LLC's QUALITY ASSURANCE TOPICAL REPORT

DATED: April 07, 2020

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NAME	SLent	SMagruder	BBeasley
DATE	3/27/2020	4/01/2020	4/7/2020

OFFICIAL RECORD COPY

## List of Attendees

NAME	ORGANIZATION	
Darrell Gardner	Kairos Power LLC (Kairos)	
Peter Hastings*	Kairos	
John Price	Kairos	
Gordon Vytlacil	Kairos	
Kerri Kavanagh	U.S. Nuclear Regulatory Commission (NRC)	
Paul Prescott	NRC	
Jonathan Ortega-Luciano	NRC	
Stu Magruder	NRC	

<sup>\*</sup>Participated by phone