



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

September 18, 2023

MEMORANDUM TO: William Jessup, Chief
Advanced Reactor Licensing Branch 1
Division of Advanced Reactors and Non-power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

FROM: Donna Williams, Senior Project Manager /RA/
Advanced Reactor Licensing Branch 1
Division of Advanced Reactors and Non-power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE MAY 30, 2023, PARTIALLY CLOSED
MEETING TO DISCUSS SEISMIC DESIGN CATEGORIZATION
AND SITE CHARACTERIZATION FOR THE OKLO DESIGN
(EPID NO. L-2022-LRM-0042)

Meeting Information:

Applicant: Oklo, Inc.

Project No.: 99902095

Public Meeting Notice Agencywide Documents Access and Management System (ADAMS)
Accession No.: ML23139A277

Meeting Attendees: See Enclosure 1 for a list of meeting attendees.

CONTACT: Donna Williams, NRR/DANU
301-415-1322

Meeting Summary:

The U.S. Nuclear Regulatory Commission (NRC) staff conducted the meeting in accordance with NRC Management Directive 3.5, "Attendance at NRC Staff-Sponsored Meetings" ([ML21180A271](#)). The purpose of this meeting was for the staff to provide preliminary feedback to Oklo on their proposed methodology for identifying the seismic design category for structures, systems, and components (SSCs) that make up the reactor and their approach to seismic site characterization.

Oklo shared a draft white paper with the staff in January 2023 that explained their proposed methodology for seismic design categorization and site characterization. Oklo requested feedback from the staff on their determination of the seismic design category for SSCs and on their approach to compliance with regulations including those in Title 10 of the Code of Federal Regulations (10 CFR), Section 100.23, "Geologic and Seismic Siting Criteria," and 10 CFR Part 50 Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants." Oklo stated that its approach differs from the methodology used for large light water reactors due to the small size and other characteristics of its design.

The staff met with Oklo in February 2023 (ML23082A242) to provide its preliminary feedback, ask clarifying questions, and share insights on the staff's expectations for meeting the regulations related to seismic design and site characterization. Following that meeting, Oklo had asked for additional clarifications on the staff's expectations on the applicability of regulations and guidance documents for advanced microreactors, such as the Oklo design. At the May 30 meeting, the staff provided details on its position regarding the viability of the use of certain standards, such as those issued by the American Society of Civil Engineers, and on the additional information that Oklo would need to provide in future submittals to meet regulatory requirements and for the staff to make regulatory findings.

At the May 30 meeting, the staff explained its views on the consistency of Oklo's proposed approach with the regulations and provided references to NRC guidance that can be used by applicants to develop source and ground motion models and for performance of the site response analysis. The staff also noted that the requirements of 10 CFR 100.23 likely could not be met with generic site data (i.e., the staff would expect site-specific data in order to meet the regulatory requirements). The staff and Oklo agreed that additional pre-application discussions would benefit Oklo's further development of its proposed approach. Following these additional discussions, Oklo plans to submit a white paper for staff feedback.

No regulatory decisions were made as a result of this meeting.

Project No.: 99902095

Enclosures:

1. List of Attendees
2. Meeting overview (proprietary)

Enclosure 2 to this letter contains proprietary information. When separated from the enclosure, this letter is DECONTROLLED.

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ADAMS Accession Number: package ML23220A432

Letter ML23220A434

Enclosure 2 ML23220A435

NRR-106

OFFICE	NRR/DANU/UAL1:PM	NRR/DANU/UAL1:BC	NRR/DANU/UAL1:PM
NAME	DWilliams	WJessup	DWilliams
DATE	9/8/2023	9/18/2023	9/18/2023

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List of Meeting Attendees

Partially Closed Pre-Application Meeting with Oklo, Inc. to Discuss Seismic Design

Categorization and Site Characterization for the Oklo Design

May 30, 2023

Name	Organization
Donna Williams	U.S. Nuclear Regulatory Commission (NRC)
Cliff Munson	NRC
Zuhan Xi	NRC
Ian Tseng	NRC
Mohsin Ghazali	NRC
Thomas Weaver	NRC
Hanh Phan	NRC
Andrew Proffitt	NRC
Trace Orf	Oklo, Inc. (Oklo)
Ross Moore	Oklo
Mory Diané	Oklo
Emma Redfoot	Oklo
Alex Renner	Oklo