



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

January 31, 2025

MEMORANDUM TO: Joshua Borromeo 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 *Donna Williams*
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 NOVEMBER 12-13, 2024, CLOSED
MEETING WITH OKLO TO DISCUSS SAFETY ANALYSIS, FUEL
QUALIFICATION, AND DESIGN UPDATES (EPID L-2022-LRM-
0042)

Meeting Information:

Applicant: Oklo, Inc. (Oklo)

Project No.: 99902095

Public Meeting Notice Agencywide Documents Access and Management System (ADAMS)
Accession No.: ML24305A253

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

Applicant presentation slides ADAMS Accession Nos.: ML25008A224, ML25008A225,
ML25008A229, ML25008A227, ML25008A226, and ML25008A230.

Enclosures 2, 3 and 4 to this letter
contain proprietary information.
When separated from the
enclosures, this letter is
DECONTROLLED.

CONTACT: Donna Williams, NRR/DANU/UAL1
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 meeting included discussions on the safety analysis, advanced fuel qualification, and design updates for Oklo's advanced reactor design.

The NRC staff previously met with Oklo in December 2022 to discuss its safety analysis methodology in the context of a white paper on initiating events that was submitted by Oklo on December 22, 2022 (ML22356A203). The staff issued feedback on the white paper on April 23, 2023 (ML23089A401). The staff met again with Oklo in August 2023 for a more comprehensive discussion of Oklo's safety analysis methodology.

At the November 12, 2024, meeting Oklo presented the evolution of its safety analysis methodology, including changes from previous discussions and the results of incorporating key design updates. Oklo stated that the safety analysis methodologies are not substantially updated due to the various design updates. Oklo requested NRC staff feedback on event-specific safety methodologies that were not discussed in previous meetings. The staff noted that, due to not having detailed information in front of it to review, it is a challenge to make definitive statements on the approach. The staff noted that more detailed feedback can be provided during the readiness assessment.

At the meeting on November 13, 2024, Oklo updated the staff on its fuel qualification strategy for current and future fuel types. Oklo had previously discussed fuel qualification with NRC staff in a meeting on December 6, 2022 (ML22326A071). At that meeting, Oklo described its approach to leveraging legacy fabrication methods and requirements. Oklo's strategy is based on NUREG-2246, "Fuel Qualification for Advanced Reactors." Oklo is developing advanced fuels and updated the staff on its strategy around current and future fuel types. The staff provided feedback on the information that it will want to see for the readiness assessment related to use of lead test assemblies. The staff also stated that it is important to understand how Oklo plans to close validation gaps, both technically and from a regulatory standpoint. It is particularly noted that deviation outside of historic operating and design envelopes, including geometry, will need to be justified in detail.

No regulatory decisions were made as a result of this meeting. No additional interactions on these topics are currently planned before readiness.

Enclosures:

1. List of Attendees
2. Meeting Notes on safety analysis (proprietary)
3. Meeting Notes on Fuels surveillance and advanced fuel qualification (proprietary)
4. Meeting Notes on Design update development (proprietary)

cc: Oklo Powerhouse via GovDelivery w/o Enclosures 2-4

SUBJECT: SUMMARY OF THE NOVEMBER 12-13, 2024, PARTIALLY CLOSED MEETING
WITH OKLO TO DISCUSS SAFETY ANALYSIS, FUEL QUALIFICATION, AND
DESIGN UPDATE (EPID L-2022-LRM-0042)

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ADAMS Accession Nos.: Package ML24339A058

Letter: ML24339A057

Enclosure 2: ML24339A061

Enclosure 3: ML24339A062

Enclosure 4: ML24339A065

NRR-106

OFFICE	NRR/DANU/UAL1:PM	NRR/DEX/EMIB	NRR/DANU/UAL1:BC	NRR/DANU/UAL1:PM
NAME	DWilliams	SBailey	JBorromeo	DWilliams
DATE	12/3/24	12/4/25	1/31/25	1/31/25

OFFICIAL RECORD COPY

List of Meeting Attendees

SUMMARY OF THE NOVEMBER 12-13, 2024, PARTIALLY CLOSED MEETING WITH OKLO TO DISCUSS SAFETY ANALYSIS, FUEL QUALIFICATION, AND DESIGN UPDATE

(EPID L-2022-LRM-0042)

Name	Organization	November 12	November 13 am	November 13 pm
Donna Williams	U.S. Nuclear Regulatory Commission (NRC)	x	x	x
Walter Williams	NRC	x	x	x
Candace deMessieres	NRC	x	x	x
Reed Anzalone	NRC		x	
Katie Wagner	NRC	x	x	
Hanh Phan	NRC	x		
Michelle Hart	NRC	x		
Tracy Radal	NRC	x	x	
Jason Schaperow	NRC	x		
Bruce Lin	NRC			x
Nick Hansing	NRC			x
Roberto Torres	NRC			x
Tom Scarborough	NRC			x
Gurjendra Bedi	NRC			x
Stewart Bailey	NRC			x
Jacqueline Tulip	NRC	x	x	
Zach Gran	NRC	x		
Ross Moore	Oklo Inc. (Oklo)	x	x	x
Pat Everett	Oklo	x	x	x
Carmen Teolis	Oklo	x	x	x
Alex Renner	Oklo	x	x	x
Diego Saenz	Oklo	x	x	x
Tyrell Arment	Oklo	x	x	
Kellen McCarroll	Oklo	x	x	x
Brian Suggs	Oklo			x
Alan Smith	Oklo	x	x	x
Margaret Kozak	Oklo			x
Ryan Webster	Oklo		x	x
Scott Auerbach	Oklo			x
Everett Redmond	Oklo		x	x
Joy Jiang	Public	x		

