



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

**OKLO AURORA – STEP 1 MAXIMUM CREDIBLE ACCIDENT  
REQUEST FOR ADDITIONAL INFORMATION  
AUDIT PLAN  
(EPID L-2020-NEW-0004)**

**APPLICANT INFORMATION**

**Applicant:** Oklo Power LLC  
**Applicant Address:** 230 E Caribbean Dr. Sunnyvale, CA 94089  
**Plant Name(s) and Unit(s):** Aurora  
**Docket No(s).:** 52-0049

**Background**

By letter dated March 11, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20075A000), Oklo Power LLC (Oklo), submitted a combined license (COL) application for one micro-reactor to be located at the Idaho National Laboratory located in Idaho. This proposed plant is to be designated as the Aurora. By letter dated June 5, 2020 (ADAMS Accession No. ML20149K616), the U.S. Nuclear Regulatory Commission (NRC) informed Oklo of its decision to accept the application for docketing and that a two-step approach will be used in order to gain a fulsome understanding of four key safety and design aspects of the licensing basis prior to establishing a schedule for the licensing review. One of those key safety and design aspects is the identification of a maximum credible accident (MCA). As part of the step-one review, the NRC staff finalized Request for Additional Information (RAI) 9774 (ADAMS Accession No. ML20265A123) to identify the information needed to support review of the MCA. The NRC staff's audit follows the guidance in Nuclear Reactor Regulation Office Instruction LIC-111, "Regulatory Audits," Revision 1 (ADAMS Accession No. ML19226A274).

**Purpose:**

The purpose of this audit is to gain a better understanding of the basis for the information in the Oklo application for the MCA, identify additional information that may be needed on the docket, and potentially formulate additional RAIs.

**Regulatory Audit Basis:**

The bases for this audit are as stated in RAI 9774.

## **Regulatory Audit Scope**

This audit will focus on the topics raised in RAI 9774: (1) Credible Failure Definition/Basis for Exclusion, (2) Comprehensive MCA Analysis, (3) Reactor Cell Can Leakage, and (4) Consideration of Unprotected Events. These will be audited as needed.

## **Information and Other Material Necessary for the Regulatory Audit**

The audit team requests to have any reports, documents, or references available in an online reference portal that would support Oklo's RAI response or RAI closure plan.

## **Team Assignments**

Jan Mazza	Project Manager, NRR/DANU/UARL – overall audit coordination
Tim Drzewiecki	Reactor Systems Engineer, NRR/DANU/UART – RAI 9774 Questions (2) and (4)
Ian Jung	Sr. Reliability and Risk Analyst, NRR/DANU/UART – RAI 9774 Questions (1), (2), and (4)
Hahn Phan	Sr. Reliability and Risk Analyst, NRR/DANU/UART – RAI 9774 Questions (1) and (2)
Andrew Yeshnik	Materials Engineer, NRR/DANU/UART – RAI 9774 Questions (2) and (3)
Tim Lupold	Sr. Mechanical Engineer, NRR/DANU/UART – RAI 9774 Questions (1), (2) and (3), audit technical lead

Additional audit team members may be added as needed.

## **Logistics**

Entrance Meeting	TBD
Exit Meeting	October 9, 2020

Audit meetings will take place in a virtual format, using Microsoft Teams, or in a platform requested by the applicant. The entrance meeting will take place the week of September 21, 2020, along with at least one additional technical discussion meeting. Additional meeting needs will be based on the outcome of the initial technical meeting discussion. Audit meetings are expected to take place weekly at a minimum. Specific dates and time for the audit meetings will be coordinated between the NRC audit team and Oklo staff to accommodate availability. To supplement any audit meetings, the NRC will request that appropriate documents be added to the online reference portal.

## **Special Requests**

The NRC staff requests that Oklo technical personnel and designers be available for meetings and informal interactions to provide information on equipment and component design drawings and scenarios considered in establishing the MCA.

## **Deliverables**

The audit will be completed when staff has a fulsome understanding of the basis for the MCA information provided in the application and determined if additional information is needed on the docket and whether additional RAIs need to be prepared. At the completion of the audit, the

audit team will issue an audit summary within 90 days after the exit meeting but will strive for a shorter duration.

If necessary, any circumstances related to the conduct of the audit should be communicated to Jan Mazza (NRC) at 301-415-0498 or via email at Jan.Mazza@nrc.gov.

Date: September 22, 2020

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

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SUBJECT: AURORA – STEP 1 - REVIEW MCA AUDIT PLAN (EPID L-2020-NEW-0004)  
DATED: SEPTEMBER 22, 2020

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**ADAMS Accession Nos.: ML20265A262 Package; ML20265A273 Audit Plan**

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