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

December 23, 2020

OKLO AURORA – STEP 1 REVIEW REGULATORY APPLICABILITY AUDIT SUMMARY (EPID NO. L-2020-NEW-0004)

APPLICANT INFORMATION

Applicant: Oklo Inc.

Applicant Address: 230 E Caribbean Dr. Sunnyvale, CA 94089

Plant Name(s) and Unit(s): Aurora

Docket No(s).: 52-049

Audit Location/Dates:

The audit was conducted intermittently between September 28, 2020 and November 17, 2020. An entrance meeting was held via Microsoft Teams on September 28, 2020, at 1:30 PM EDT. The audit took place virtually through an electronic reading room allowing the NRC staff to examine documents loaded by Oklo. The documents made available via the electronic reading room were never in the NRC staff's possession or control and have not been submitted on the docket.

Audit Team Members:

Michelle Hayes	Branch Chief, NRR/DANU/UART, responsible for general audit oversight
Tim Lupold	Sr. Mechanical Engineer, NRR/DANU/UART, Audit Lead responsible for audit summary report preparation
Jan Mazza	Project Manager, NRR/DANU/UARL, responsible for audit logistics
Jesse Seymour	Reactor Operations Engineer, NRR/DRO/IOLB/HFT, responsible for review of Three Mile Island Nuclear Station (TMI) requirements

Participating Applicant Staff:

Alexandra Renner
Caroline Cochran
Ross Moore

Documents Audited:

1. Oklo Inc. - Non-Applicabilities Justifications, Rev. 1.pdf
2. Oklo Inc. - Electric equipment environmental qualification non-applicability, Rev. 0.pdf
3. Oklo Inc. - Relevance of TMI Requirements to the Aurora Design, Rev. 0.pdf

Audit Activities:

The audit team followed the Oklo Aurora – Regulatory Applicability Audit Plan (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20268C260). The staff's audit focused on regulations Oklo identified as not applicable to its Aurora design in Part V of its combined license (COL) application. The audit occurred during Step 1 of the two-step review process described in the Oklo COL acceptance letter (ADAMS Accession No. ML202149K604). The staff did not evaluate the acceptability of requested exemptions included in Part V of the Aurora COL application. This evaluation will take place during Step 2 of the staff's review. The purpose of the audit was to gain a better understanding of Oklo's position on the applicability of regulations to the Aurora, determine if any of the information should be submitted on the docket, and assess if requests for additional information (RAIs) are appropriate. The audited documents are discussed below.

Oklo Inc. - Non-Applicabilities Justifications, Rev. 1.pdf

- This document identified the regulations that Oklo categorizes as not applicable to the Aurora design in Part V of its COL application. For each regulation, Oklo provided a strikeout-out of the specific language in the regulation that it considers not to be applicable along with technical and administrative justifications. Consistent with the COL application, this document considers the applicability of a regulation to be "nested" in what Oklo asserts are the assumptions underpinning each regulation.
- During Step 2 of the review, information in this document may be helpful to demonstrate compliance with or to provide justification for exemption requests from regulations determined to be applicable to the Aurora. The staff expects to seek clarification on several items in this document including, but not limited to, the statement included in the technical justification for non-applicability of the Maintenance Rule asserting that the few systems, structures, and components comprising Aurora do not need to be appropriately maintained in order to preserve plant safety.

Oklo Inc. - Electric equipment environmental qualification non-applicability, Rev. 0.pdf

- This document provides additional information on Oklo's determination that Aurora's electrical equipment is located in a mild environment. It is also identified as Document 31 in the acceptance review audit summary (ADAMS Accession Number ML20230A372).
- During Step 2 of the review, information in this document may help demonstrate compliance with 10 CFR 52.79(a)(10).

Oklo Inc. - Relevance of TMI Requirements to the Aurora Design, Rev. 0.pdf

- This document examined each item in 10 CFR 50.34(f)(1), 10 CFR 50.34(f)(2) and 10 CFR 50.34(f)(3) and described why it was not applicable to the Aurora design.
- During Step 2 of the review, information in this document may help demonstrate compliance with or to provide justification for exemption requests from 10 CFR 50.34(f) items. The staff expects to seek clarification on several items in this document including, but not limited to, the following:
    - Statements that requirements related to control room design are not applicable because the Aurora does not have a control room
    - Statement that because the monitoring room is first of a kind, 10 CFR 50.34(f)(2)(ii) related to state-of-the-art control room design will be inherently met
    - Statement that 10 CFR 50.34(f)(3)(i) related to evaluating operating, design, and construction experience is not applicable because Oklo will be the operator

Exit Briefing:

No exit briefing was held. The staff completed Step 1 of the Oklo COL review related to the applicability of regulations to the Aurora and documented its position in a letter sent to Oklo on November 17, 2020 (ADAMS Accession No. ML20300A593).

RAIs or Potential RAIs:

No additional information is required to be submitted on the docket to support the completion of Step 1. No RAIs were issued as part of this audit.

Open Items:

No Open Items exist in Step 1.

Deviations from Audit Plan:

Jesse Seymour was added to the audit team to review "Oklo Inc. - Relevance of TMI Requirements to the Aurora Design, Rev. 0.pdf". Because there was no exit briefing, the audit end date was chosen as the date NRC issued the letter documenting the completion of Step 1 for the focus area of regulatory applicability.

Date: December 23, 2020

/RA/

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

Docket No. 52-049

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