

From: Mazza, Jan
Sent: Friday, September 18, 2020 3:25 PM
To: Caroline Cochran
Cc: Lupold, Timothy; Beasley, Benjamin; Alex Renner; Hayes, Michelle
Subject: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE OKLO QUALITY ASSURANCE PROGRAM SCOPE
Attachments: Oklo_Final_RAI_9773_QA_9-18-2020.docx

Dear Ms. Cochran:

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. 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 an understanding of the scope of the Quality Assurance Program (QAP). As part of the step-one review, the NRC staff has identified additional information needed to support its review of the QAP scope.

A draft of this request for additional information (RAI) was transmitted to Oklo on September 4, 2020 (ADAMS Accession No. ML20262H121). After reviewing the draft RAI Oklo determined that a clarification call was not needed. The NRC staff is issuing this RAI as final and requests that Oklo provide a response to the RAI or a written request for additional time to respond, including the proposed response date and a brief explanation of the reason, by October 14, 2020.

The response to the RAI must be submitted in accordance with Title 10 of the Code of Federal Regulations (10 CFR) 50.4, "Written communications," and be executed in a signed original document under oath or affirmation per 10 CFR 50.30(b), "Oath or affirmation,". Information included in the response that you consider sensitive or proprietary, and seek to have withheld from public disclosure, must be marked in accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding." Any information related to safeguards should be submitted in accordance with 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements."

In the case that the NRC staff requires additional information beyond that provided in the response to this RAI, the NRC staff will request that information by separate correspondence. If you have any questions regarding the NRC staff's review or if you intend to request additional time to respond, please contact Jan Mazza at 301-415-0498 or by electronic mail at Jan.Mazza@nrc.gov.

Regards – Jan

Jan Mazza

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Hearing Identifier: Oklo_COL_Docs_Public
Email Number: 4

Mail Envelope Properties (DM6PR09MB5543D6EC387E64BCE78E87A6F33F0)

Subject: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE OKLO
QUALITY ASSURANCE PROGRAM SCOPE
Sent Date: 9/18/2020 3:25:00 PM
Received Date: 9/18/2020 3:25:00 PM
From: Mazza, Jan
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Recipients:
"Lupold, Timothy" <Timothy.Lupold@nrc.gov>
Tracking Status: None
"Beasley, Benjamin" <Benjamin.Beasley@nrc.gov>
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"Hayes, Michelle" <Michelle.Hayes@nrc.gov>
Tracking Status: None
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Tracking Status: None

Post Office: DM6PR09MB5543.namprd09.prod.outlook.com

Files	Size	Date & Time
MESSAGE	2800	9/18/2020 3:25:00 PM
Oklo_Final_RAI_9773_QA_9-18-2020.docx		31904

Options
Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:

Request for Additional Information 2

Issue Date: 9/18/2020

Application Title: Oklo Aurora COL - Docket 52-049

Operating Company: Oklo Power LLC

Docket No. 52-049

Review Section: Aurora Step 1 – QA

Application Section: Part II.12.0 Quality Assurance Plan Description

Aurora Step 1 – QA - 1

Regulatory Basis

Title 10 of the Code of Federal Regulations (CFR) Part 52 Section 79(a) states that an application for a combined license (COL) must contain a final safety analysis report (FSAR) that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components of the facility as a whole. The FSAR shall include information, at a level of information sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a COL including a description of the quality assurance program, applied to the design, and to be applied to the fabrication, construction, and testing, of the structures, systems, and components of the facility as required by 10 CFR 52.79(a)(25). Appendix B to 10 CFR Part 50 sets forth the requirements for quality assurance programs for nuclear power plants. Pursuant to 10 CFR 52.79(a)(25), the description of the quality assurance program in a COL application must include a discussion of how the applicable requirements of Appendix B to 10 CFR Part 50 have been and will be satisfied, including a discussion of how the quality assurance program will be implemented.

10 CFR Part 50 Appendix B Part II, "Quality Assurance Program," requires the applicant to identify the structures, systems, and components to be covered by the quality assurance program and the major organizations participating in the program, together with the designated functions of these organizations.

Issue

Part II-"Quality Assurance Program Description Details," Section 2, "Quality Assurance Program" of Oklo, Inc. Quality Assurance Program Description (QAPD): Design and Construction OKLO-2019-14-NP, Rev.1," (ML20027A007) states: *...Oklo ensures through the systematic process described herein that its suppliers of safety-related equipment or services meet the applicable requirements of 10 CFR 50, Appendix B.* Staff is seeking information on which SSCs and services, if any, fall under Part II in the QAPD.

FSAR Section 5.6.2.12.1, Design Commitment DC.RXS.01.A states: The fuel in the reactor system is procured according to 10 CFR Part 50 Appendix B, with a critical characteristic of thermal conductivity (see Oklo QAPD). Staff is seeking clarification on which Part of the QAPD this refers to and if the QAP is limited to specific activities or specific characteristics of the fuel.

Request

Please identify in the FSAR all the equipment and services which fall under the requirements outlined under Part II of the QAPD. Please identify if the fuel procurement will fall under Part II or Part III of the QAPD, and what specific aspects of the fuel will fall under the QAPD, and how the specific characteristics will be treated under the QAPD.

Aurora Step 1 – QA - 2

Regulatory Basis

Title 10 of the Code of Federal Regulations (CFR) Part 52 Section 79(a) states that an application for a combined license (COL) must contain a final safety analysis report (FSAR) that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components of the facility as a whole. The FSAR shall include information, at a level of information sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a COL including a description of the quality assurance program, applied to the design, and to be applied to the fabrication, construction, and testing, of the structures, systems, and components of the facility as required by 10 CFR 52.79(a)(25). Appendix B to 10 CFR Part 50 sets forth the requirements for quality assurance programs for nuclear power plants. Pursuant to 10 CFR 52.79(a)(25), the description of the quality assurance program in a COL application must include a discussion of how the applicable requirements of Appendix B to 10 CFR Part 50 have been and will be satisfied, including a discussion of how the quality assurance program will be implemented.

10 CFR Part 50 Appendix B Part II, "Quality Assurance Program," requires the applicant to identify the structures, systems, and components to be covered by the quality assurance program and the major organizations participating in the program, together with the designated functions of these organizations.

Issue

Part III – "Nonsafety-Related SSC Quality Control," of "Oklo, Inc. Quality Assurance Program Description (QAPD): Design and Construction OKLO-2019-14-NP, Rev.1," (ML20027A007) states, in part: *Specific program controls are applied to nonsafety-related SSCs, for which 10 CFR 50, Appendix B is not applicable, that are significant contributors to plant safety.* Staff is seeking information on which SSCs, if any, fall under Part III in the QAPD.

Request

Please provide a listing in the FSAR of those SSCs, if any, which fall under the requirements outlined under Part III of the QAPD.