

Public Meeting to Discuss Information Requests for Oklo, Inc. Maximum Credible Accident Methodology and Performance-Based Licensing Methodology Topical Reports

September 1, 2021

Meeting Agenda

Time	Topic	Speaker
3:00 – 3:10 pm	Introductions	NRC/Oklo
3:10 – 3:45 pm	Technical Discussion	Oklo/NRC
3:45 – 3:50 pm	Opportunity for Public Questions/Comments	NRC/Public
3:50 – 4:05 pm	Break	ALL
4:05 – 4:40 pm	Technical Discussion	Oklo/NRC
4:40 – 4:50 pm	Opportunity for Public Questions/Comments	NRC/Public
4:50 – 5:00 pm	Wrap up and Adjourn	ALL

Maximum Credible Accident (MCA)

Methodology: Overview

- Oklo-2021-R19-NP, Rev. 2 (ML21184A002)
- Additional Information Needed (ML21201A010):
 - I. Regulatory Evaluation (What rules does the methodology address?)
 - II. Steps needed to execute a structured, systematic approach
 - III. Accounting for uncertainty (new/novel features)
 - IV. Necessary conditions and interfaces to implement the methodology**
 - V. Description of PRA

MCA: Necessary Conditions and Interfaces

- What are the conditions and interfaces necessary to implement the MCA methodology?
 - *Team*: What necessary knowledge, skills, and abilities are needed to perform a thorough identification of initiating events, hazards, and accident sequences (collectively referred to as hazards)?
 - *Information Needs*: What design information does the team need to perform a thorough hazard identification assessment?
 - *Documentation*: How is the hazard identification assessment documented for future reference?

Performance-Based Licensing Methodology (PBLM) Topical Report (TR): Overview

- Oklo-2021-R20-NP, Rev. 0 (ML21187A001)
- Additional Information Needed (ML21201A104):
 - I. A regulatory evaluation explaining how the methodology satisfies current regulatory requirements
 - II. Any necessary exemptions from regulatory requirements
 - III. Design, analysis, operation, and maintenance of SSCs

PBLM TR: I. Regulatory Evaluation

- The TR does not address:
 - I.A Provisions under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.43(e)
 - I.B The regulatory requirement under 10 CFR 52.79(a)(2)(ii)
 - I.C The regulatory requirement under 10 CFR 50.34(f)(3)
 - I.D The TR discusses the use of dose as the single acceptance criterion, which only addresses item (3) of the 10 CFR 50.2 definition of safety-related SSCs

PBLM TR: II. Exemptions

- The PBLM TR states that the approach complies with requirements in 10 CFR and does not identify or discuss exemptions.
- It appears to the NRC staff that exemptions from regulatory requirements may be needed to implement the methodology.
 - See previous slide for possible examples

PBLM TR: III. Design, analysis, operation, and maintenance of SSCs

- III.A Margin in the design and analysis
- III.B Design and analysis provisions to address long-term operations
- III.C Provisions to ensure qualification of SSCs
- III.D Design, analysis, fabrication, and construction provisions
- III.E Provisions to ensure reliability and capability of SSCs throughout their lifecycle