

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 21, 2023

MEMORANDUM TO: Gerond A. George, Chief

Licensing Projects Branch

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

FROM: Ngola A. Otto, Project Manager /RA/

Licensing Projects Branch

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JUNE 26, 2023, CLOSED PRE-SUBMITTAL MEETING

WITH FRAMATOME INC. AND THE U.S. NUCLEAR REGULATORY

COMMISSION FOR PLANNED WHITE PAPER ON FUEL FRAGMENTATION, RELOCATION AND DISPERSAL

(EPID L-2023-LRM-0040)

On June 26, 2023, the U.S. Nuclear Regulatory Commission (NRC) staff held a closed hybrid meeting via Microsoft Teams with representatives from Framatome Inc. (Framatome). The purpose of the meeting was for the NRC staff and Framatome representatives to hold pre-submittal discussions on a planned white paper on fuel fragmentation, relocation, and dispersal (FFRD). The meeting notice is available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML23164A151. The NRC and Framatome also held another pre-submittal discussion on May 9, 2023 (ADAMS Accession No. ML23129A843) pertaining to this topic.

During the discussion, Framatome representatives described their near-term approach for high burnup FFRD, which includes a planned risk-informed white paper and topical report submittals. Framatome representatives explained that FFRD introduces regulatory uncertainty and analytical complexities but believe that the near-term approach provides a means for licensees to demonstrate continued safe operation with no undue risk to public health and safety. Framatome representatives also provided and overview of the FFRD policy challenges that they envision, the white paper contents, and next steps. In the white paper Framatome intends to provide justification for its risk-informed approach and supporting analysis.

In their presentation the Framatome representatives, stated that in the white paper they would be requesting NRC feedback on whether:

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1. It is acceptable to employ a risk-informed supplemental analysis to demonstrate that

Final Safety Analysis Report safety analyses remain applicable, and

2. The key attributes of the risk-informed approach are acceptable for this supplemental

analysis.

No feedback was provided by the NRC staff on Framatome's risk-informed approach based on

the information presented.

The NRC staff and Framatome representatives also discussed the following topics:

Probabilistic risk assessment analysis

Quantitative vs qualitative analysis or a combination of both

Use of Regulatory Guide 1.174, Revision 3, "An Approach for Using Probabilistic Risk

Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"

Feedback on the risk-informed FFRD analysis or concept

Planned hours, expected review schedule, and submittal date.

Use of NRC written response to the planned white paper

Long-term approach vs near-term approach for FFRD

• Plans for addressing rods rupture.

For the planned white paper, the NRC staff emphasized that the feedback would be like what has been provided for other white paper submittals and that no concurrence will be provided. The NRC staff and Framatome representatives also agreed that a post submittal meeting would

be beneficial.

A list of the attendees is enclosed. This meeting summary and other information associated with

this meeting can be found in ADAMS Package Accession No. ML23198A109.

Docket No. 99902041

Enclosure:

List of Attendees

List of Attendees

Closed Meeting between Framatome Inc. and the U.S. Nuclear Regulatory Commission to Discuss Planned White Paper on Fuel Fragmentation, Relocation, and Dispersal June 26, 2023

3:30 pm - 5:00 pm

| NAME | ORGANIZATION | |
|------------------|---|--|
| Gayle Elliott | Framatome Inc. (Framatome) | |
| Lisa Gerken | Framatome | |
| Jerald Holm | Framatome | |
| Steven Cole | Framatome | |
| Nathan Hottle | Framatome | |
| Bob Baxter | Framatome | |
| Gordon Wissinger | Framatome | |
| Paul Clifford | Framatome Consultant | |
| Gerond George | U. S. Nuclear Regulatory Commission (NRC) | |
| Joe Donoghue | NRC | |
| MJ Ross-Lee | NRC | |
| Scott Krepel | NRC | |
| Daniel King | NRC | |
| Carla Roque-Cruz | NRC | |
| Ngola Otto | NRC | |
| Leslie Fields | NRC | |
| Kevin Heller | NRC | |
| Benjamin Parks | NRC | |
| Chris Van Wert | NRC | |
| | Sign Language Interpreter | |

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SUBJECT: SUMMARY OF JUNE 26, 2023, CLOSED PRE-SUBMITTAL MEETING WITH

FRAMATOME INC. AND THE U.S. NUCLEAR REGULATORY COMMISSION FOR PLANNED WHITE PAPER ON FUEL FRAGMENTATION, RELOCATION

AND DISPERSAL (EPID L-2023-LRM-0040) DATED JULY 21, 2023

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EXTERNAL DISTRIBUTION:

Jerald.Holm.ext@framatome.com

ADAMS Accession Nos.:

ML23198A109 (Package)

ML23195A136 (Summary)

ML23174A133 (Presentation – Non-Proprietary)

ML23174A134 (Presentation – Proprietary)

ML23174A184 (Affidavit) *via email

| OFFICE | DORL/LLPB/PM* | DORL/LLPB/LA* | DORL/LLPB/BC* | DORL/LLPB/PM* |
|--------|---------------|---------------|---------------|---------------|
| NAME | NOtto | DHarrison | GGeorge | NOtto |
| DATE | 7/17/2023 | 7/18/2023 | 7/21/2023 | 7/21/2023 |

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