



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

June 3, 2019

Mr. Gary Peters, Director
Licensing and Regulatory Affairs
Framatome Inc.
3315 Old Forest Road
Lynchburg, VA 24501

SUBJECT: FINAL SAFETY EVALUATION FOR FRAMATOME INC. TOPICAL REPORT
BAW-10227, REVISION 1, SUPPLEMENT 1P, "EVALUATION OF ADVANCED
CLADDING AND STRUCTURAL MATERIAL (M5) IN PWR REACTOR FUEL"
(CAC NO. MF9716; EPID L-2017-TOP-0031)

Dear Mr. Peters:

By letter dated May 4, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17130A708), Framatome, Inc. (Framatome, formerly AREVA, Inc.) submitted Topical Report (TR) BAW-10227, Revision 1, Supplement 1P, "Evaluation of Advanced Cladding and Structural Material (M5) in PWR [pressurized water reactor] Reactor Fuel," to the U.S. Nuclear Regulatory Commission (NRC) staff for review and approval. By letter dated April 24, 2019 (ADAMS Accession No. ML19088A246), an NRC draft safety evaluation (SE) regarding our approval of TR BAW-10227, Revision 1, Supplement 1P, was provided for your review and comment. By letter dated May 16, 2019 (ADAMS Accession No. ML19140A065), Framatome provided comments on the draft SE. The NRC staff's disposition of the Framatome comments on the draft SE are discussed in the attachment (ADAMS Accession No. ML19141A368) to the final SE enclosed with this letter.

The NRC staff has found that TR BAW-10227, Revision 1, Supplement 1P, is acceptable for referencing in licensing applications for nuclear power plants to the extent specified and under the limitations delineated in the TR and in the enclosed final SE. The final SE defines the basis for our acceptance of the TR.

Our acceptance applies only to material provided in the subject TR. We do not intend to repeat our review of the acceptable material described in the TR. When the TR appears as a reference in licensing action requests, our review will ensure that the material presented applies to the specific plant involved. Requests for licensing actions that deviate from this TR will be subject to a plant-specific review in accordance with applicable review standards.

NOTICE: The Enclosure 1 transmitted here within contains Proprietary Information. When separated from the Enclosure 1, this transmittal document is decontrolled.

G. Peters

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In accordance with the guidance provided on the NRC website, we request that Framatome publish approved proprietary and non-proprietary versions of TR BAW-10227, Revision 1, Supplement 1P, within 3 months of receipt of this letter. The approved versions shall incorporate this letter and the enclosed final SE after the title page. Also, they must contain historical review information, including NRC requests for additional information and your responses. The approved versions shall include an "-A" (designating approved) following the TR identification symbol.

As an alternative to including the RAIs and RAI responses behind the title page, if changes to the TR were provided to the NRC staff to support the resolution of RAI responses, and if the NRC staff reviewed and approved those changes as described in the RAI responses, there are two ways that the accepted version can capture the RAIs:

1. The RAIs and RAI responses can be included as an Appendix to the accepted version.
2. The RAIs and RAI responses can be captured in the form of a table (inserted after the final SE) which summarizes the changes as shown in the approved version of the TR. The table should reference the specific RAIs and RAI responses which resulted in any changes, as shown in the accepted version of the TR.

If future changes to the NRC's regulatory requirements affect the acceptability of this TR, Framatome will be expected to revise the TR appropriately or justify its continued applicability for subsequent referencing. Licensees referencing this TR would be expected to justify its continued applicability or evaluate their plant using the revised TR.

Sincerely,

/RA/

Dennis C. Morey, Chief
Licensing Processes Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation

Project No. 728
Docket No. 99902041

Enclosure:

1. Final SE (Proprietary)
2. Final SE (Non-Proprietary)

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(CAC NO. MF9716; EPID L-2017-TOP-0031) DATE: JUNE 3, 2019

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ADAMS Accession Nos.:

ML19141A179 (Package)

ML19141A191 (Cover Letter)

ML19141A183 (Enclosure 1-Proprietary SE)

ML19141A186 (Enclosure 2-Nonproprietary)

ML19141A368 (Attachment)

***concurrence via email**

NRR-106

OFFICE	NRR/DLP/PLPB/PM	NRR/DLP/PLPB/LA*	NRR/DSS/SNPB/BC	NRR/DLP/PLPB/BC
NAME	JRowley	DHarrison	RLukes	DMorey
DATE	05/30/19	05/30/19	06/03/19	06/03/19

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