

May 10, 2018

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

SUBJECT: FINAL SAFETY EVALUATION FOR TOPICAL REPORT ANP-10333P,  
REVISION 0, "AURORA-B: AN EVALUATION MODEL FOR BOILING WATER  
REACTORS; APPLICATION TO CONTROL ROD DROP ACCIDENT (CRDA)"  
(CAC NO. MF3889/EPID: L-2014-TOP-0005)

Dear Mr. Peters:

By letter dated March 31, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14098A331), Framatome Inc. (Framatome) (formerly AREVA Inc.) submitted Topical Report (TR) ANP-10333P, Revision 0, "AURORA-B: An Evaluation Model for Boiling Water Reactors; Application to Control Rod Drop Accident (CRDA)," to the U.S. Nuclear Regulatory Commission (NRC) staff for review and approval. By letter dated October 25, 2017 (ADAMS Accession No. ML17240A268), an NRC draft safety evaluation (SE) regarding our approval of TR ANP-10333P, Revision 0, was provided for your review and comment. By letter dated December 15, 2017 (ADAMS Accession No. ML17353A223), 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. ML18128A004) to the final SE enclosed with this letter.

The NRC staff has found that TR ANP-10333P, Revision 0, 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.

In accordance with the guidance provided on the NRC website, we request that Framatome publish approved proprietary and non-proprietary versions of TR ANP-10333P, Revision 0, 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:  
Final Safety Evaluation (Non-Proprietary)

SUBJECT: FINAL SAFETY EVALUATION FOR TOPICAL REPORT ANP-10333P, REVISION 0, "AURORA-B: AN EVALUATION MODEL FOR BOILING WATER REACTORS; APPLICATION TO CONTROL ROD DROP ACCIDENT (CRDA)" (CAC NO. MF3889/EPID: L-2014-TOP-0005) DATE: MAY 10, 2018

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**ADAMS Accession Nos.: ML18128A002 (Ltr.); ML18128A003 (SE); ML18128A002 (Pkg.); ML18128A004 (Attachment); \*concurrence via e-mail NRR-106**

OFFICE	NRR/DLP/PLPB/PM	NRR/DLP/PLPB/BC
NAME	JRowley, Jr.	DMorey
DATE	05/8/18	05/10/18

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