

October 18, 2017

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

SUBJECT: AREVA'S REQUEST FOR U.S. NUCLEAR REGULATORY COMMISSION CONCURRENCE REGARDING ACCEPTABILITY OF THE STANDARD FRICTION FACTOR CORRELATION WITHIN ANP-10311P-A, "COBRA-FLX: A CORE THERMAL-HYDRAULIC ANALYSIS CODE"

By letter dated July 2, 2017 (Agencywide Documents Access and Management System Accession No. ML17157B396), AREVA Inc. (AREVA) requested formal U.S. Nuclear Regulatory Commission (NRC) concurrence for an Errata to Topical Report (TR) ANP-10311P-A, "COBRA-FLX: A Core Thermal-Hydraulic Analysis Code." This errata was focused on three topics:

1. Clarification that the standard friction factor correlation described within ANP-10311P-A, "COBRA-FLX: A Core Thermal-Hydraulic Analysis Code," is approved for licensing calculations.
2. Agreement that a small revision to benchmarking results which was required due to the discovery of a small error did not impact the conclusions of the TR or of the NRC staff's safety evaluation (SE).
3. Small editorial changes which clarified certain discussions in the TR.

The NRC staff concurs with each of these changes. In the TR, AREVA only requested approval of the Lehmann friction factor correlation, therefore, that was the only correlation which the NRC staff approved in the SE. However, the NRC staff approved the Lehmann correlation on the basis that it produced very similar results to the standard friction factor correlation. Given that its similarity to the standard model was the justification for its approval in licensing analysis, the NRC staff agrees that the standard model itself should also be acceptable in licensing analysis. This was confirmed with one of the lead reviewers of ANP-10311 who also agreed with this conclusion.

The NRC staff agrees that the small revision to the benchmarking results did not impact the conclusions of the TR or of the NRC staff's SE. Finally, the NRC staff agreed that the small editorial changes were minor and did clarify the discussions in the TR.

It is anticipated that in receiving receipt of this letter from the NRC which indicates concurrence, as consistent with its incoming letter, AREVA will submit a revision to ANP-10311P-A reflecting the NRC's concurrence.

If you have any questions, please contact Jonathan G. Rowley at 301-415-4053.

Sincerely,

/RA/

Dennis C. Morey, Chief
Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Project No. 728

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ADAMS Accession No.: ML17249A888; *concurrence via e-mail

NRR-106

OFFICE	NRR/DPR/PLPB	NRR/DPR/PLPB*	NRR/DSS/SNPB	NRR/DLP/PLPB
NAME	JRowley	DHarrison	RLukes	DMorey
DATE	9/6/17	9/19/17	10/16/17	10/18/17

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