



April 6, 2017
NRC:17:017

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

PROD728

Response to Request for Comment on Draft Safety Evaluation for ANP-10334P, "Q12™ Structural Material"

Ref. 1: Letter, Kevin Hsueh (NRC) to Gary Peters (AREVA), "Draft Safety Evaluation for AREVA Inc. Topical Report ANP-10334P, 'Q12™ Structural Material' (CAC No. MF7128)," March 9, 2017.

In Reference 1, the NRC requested AREVA's review and comment on the draft safety evaluation for topical report ANP-10334P, "Q12™ Structural Material." AREVA has reviewed the draft safety evaluation and offers the enclosed comments for consideration in preparing the final safety evaluation.

A summary table of AREVA's comments on the draft safety evaluation is attached. A marked-up copy of the draft safety evaluation showing the proposed changes is enclosed. AREVA considers some of the material contained in the enclosure to be proprietary. As required by 10 CFR 2.390(b), an affidavit is enclosed to support withholding of information from public disclosure.

There are no regulatory commitments within this letter or its enclosures.

If you have any questions related to this information, please contact Mr. Nathan Hottle, Product Licensing Manager, by telephone at (434) 832-3864, or by e-mail at Nathan.Hottle@areva.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Peters'.

Gary Peters, Director
Licensing & Regulatory Affairs
AREVA Inc.

cc: J. G. Rowley
Project 728

Enclosures:

- 1) Marked Copy – ANP-10334P Draft Safety Evaluation (PROPRIETARY)
- 2) Notarized Affidavit

AREVA INC.

3315 Old Forest Road, Lynchburg, VA 24501
Tel.: 434 832 3000 - www.areva.com

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Summary Table – AREVA Comments on ANP-10334P Draft Safety Evaluation

Page	Line	Proposed Change / Comment
3	5	Proprietary information: Add proprietary bracketing as shown in the enclosed markup, consistent with AREVA's response to RAI-4.
5	7	Proposed change: "... will be used in design analyses <i>requiring the use of bounding mechanical properties at room temperature</i> " to match ANP-10334P.
5	18	Comment: "AREVA has stated that irradiated properties are not used in design calculations..." This statement is correct for currently approved methods. ANP-10337P, currently under NRC review, uses irradiated mechanical properties. No change to the draft safety evaluation is requested.
5	27	Proposed change: Replace "Properties specific to the Q12™ alloy will be used in the [-----]" with "The [-----] will be applied to Q12™." The model will not be adapted with Q12™-specific properties. (<i>proprietary information removed from summary table</i>)
6	17-18	Proprietary information: Add proprietary bracketing as shown in the enclosed markup, consistent with ANP-10334P.
6	25	Proprietary information: Extend proprietary bracketing as shown in the enclosed markup, consistent with ANP-10334P.
7	22-23	Proprietary information: Add proprietary bracketing as shown in the enclosed markup, consistent with ANP-10334P.
7	40	Proposed change: Correct references to Sections 3.5.2 and 3.5.3.
8	25, 27	Proposed change: Replace "flux" with "fluence" consistent with ANP-10334P.
9	12	Proposed change: Insert "fuel assembly" before "growth behavior." Statement does not pertain to grid growth.
9	12	Proposed change: Replace "M5®" with "zirconium alloys." The growth behavior is also compared to zircaloy-4 in the Top Fuel paper and is found to be improved.
9	17	Proprietary information: Use bold brackets consistently to clearly denote proprietary information.
10	7	Proposed change: Add the proprietary statement in the enclosed markup clarifying the definition of the UDL and LDL consistent with the response to RAI-2.
10	22	Proprietary information: Use bold brackets consistently to clearly denote proprietary information.
10	24	Proposed change: Revise the wording in the proprietary passage as indicated in the enclosed markup to be consistent with ANP-10334P.
10	29-30	Proposed change: Replace "no more than" with "similar to" to be consistent with ANP-10334P.
10	29-30	Proprietary information: Add proprietary bracketing as shown in the enclosed markup, consistent with ANP-10334P.
11	2	Proprietary information: Add proprietary bracketing as shown in the enclosed markup.
11	8	Proposed change: Remove the number of assemblies. PIE plans are not specific about the number of measurements.
13	13-15	Proposed change: Replace the citation for Reference 5 as shown in the enclosed markup. Reference 5 should be AREVA's response to RAI-3.

AFFIDAVIT

COMMONWEALTH OF VIRGINIA)
) ss.
CITY OF LYNCHBURG)

1. My name is Nathan E. Hottle. I am Manager, Product Licensing, for AREVA Inc. (AREVA) and as such I am authorized to execute this Affidavit.

2. I am familiar with the criteria applied by AREVA to determine whether certain AREVA information is proprietary. I am familiar with the policies established by AREVA to ensure the proper application of these criteria.

3. I am familiar with the AREVA information contained in the following document: "Draft Safety Evaluation for AREVA Inc. Topical Report ANP-10334P, 'Q12™ Structural Material'," referred to herein as "Document." Information contained in this Document has been classified by AREVA as proprietary in accordance with the policies established by AREVA Inc. for the control and protection of proprietary and confidential information.

4. This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by AREVA and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.

5. This Document has been made available to the U.S. Nuclear Regulatory Commission in confidence with the request that the information contained in this Document be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR 2.390. The information for which withholding from disclosure is

requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information."

6. The following criteria are customarily applied by AREVA to determine whether information should be classified as proprietary:

- (a) The information reveals details of AREVA's research and development plans and programs or their results.
- (b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.
- (c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for AREVA.
- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by AREVA, would be helpful to competitors to AREVA, and would likely cause substantial harm to the competitive position of AREVA.

The information in this Document is considered proprietary for the reasons set forth in paragraphs 6(a), 6(c) and 6(d) above.

7. In accordance with AREVA's policies governing the protection and control of information, proprietary information contained in this Document has been made available, on a limited basis, to others outside AREVA only as required and under suitable agreement providing for nondisclosure and limited use of the information.

8. AREVA policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge,
information, and belief.

Nathan E. Roth

SUBSCRIBED before me this 6th
day of April, 2017.

Sherry L. McFaden

Sherry L. McFaden
NOTARY PUBLIC, COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES: 10/31/18
Reg. # 7079129

