

November 20, 2013 NRC:13:084

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

Response to a Draft Request for Additional Information Regarding Report BAW-10247PA, Revision 0, Supplement 1P, Revision 0, "Realistic Thermal-Mechanical Fuel Rod Methodology for Boiling Water Reactors Supplement 1: Qualification of RODEX4 for Recrystallized Zircaloy-2 Cladding"

AREVA NP Inc. (AREVA NP) requested the NRC review and approval of topical report BAW-10247PA, Revision 0, Supplement 1P, Revision 0, "Realistic Thermal-Mechanical Fuel Rod Methodology for Boiling Water Reactors Supplement 1: Qualification of RODEX4 for Recrystallized Zircaloy-2 Cladding" in Reference 1. Supplemental information for the submittal was transmitted to the NRC in Reference 2. The NRC provided a draft request for additional information (RAI) regarding this topical report in Reference 3. The responses to Questions 2 through 12 of this request were submitted to the NRC in Reference 4. The Response to Question 1 of the RAI is enclosed with this letter as an attachment.

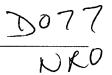
AREVA NP considers some of the material contained in the enclosed to be proprietary. As required by 10 CFR 2.390(b), an affidavit is attached to support the withholding of the information from public disclosure. Proprietary and non-proprietary versions of the attached RAI responses are provided.

If you have any questions related to this submittal, please contact Mr. Alan B. Meginnis, Product Licensing Manager by telephone at 509-375-8266 or by e-mail at Alan.Meginnis@Areva.com.

Sincerely - 1

Pedgo Salas, Director Regulatory Affairs AREVA NP Inc.





References

- Ref. 1: Letter, Ronnie L. Gardner (AREVA NP Inc.) to Document Control Desk (NRC), "Realistic Thermal-Mechanical Fuel Rod Methodology for Boiling Water Reactors Supplement 1: Qualification of RODEX4 for Recrystallized Zircaloy-2 Cladding," NRC:09:133, December 22, 2009.
- Ref. 2: Letter, Ronnie L. Gardner (AREVA NP Inc.) to Document Control Desk (NRC), "Transmittal of Revised Information for Review of Topical Report BAW-10247PA, Revision 0, Supplement 1P, Revision 0," NRC:10:093, October 22, 2010.
- Ref. 3: Email, Holly C. Cruz (NRC) to Gayle F. Elliott (AREVA NP Inc.) "Draft RAIs re: BAW-10247, Sup. 1 related to RXA Zr-2 in the RODEX4 code," September 19, 2011.
- Ref. 4: Letter, Pedro Salas (AREVA NP Inc.) to Document Control Desk (NRC), Response to a Draft Request for Additional Information Regarding Report BAW-10247PA, Revision 0, Supplement 1P, Revision 0, "Realistic Thermal-Mechanical Fuel Rod Methodology for Boiling Water Reactors Supplement 1: Qualification of RODEX4 for Recrystallized Zircaloy-2 Cladding" NRC:13:016, April 19, 2013.

Enclosures

- 1. BAW-10247PA, Revision 0, Supplement 1Q2P, Revision 0, "Realistic Thermal-Mechanical Fuel Rod Methodology for Boiling Water Reactors Supplement 1: Qualification of RODEX4 for Recrystallized Zircaloy-2 Cladding Responses to NRC Request for Additional Information"
- 2. BAW-10247PA, Revision 0, Supplement 1Q2NP, Revision 0, "Realistic Thermal-Mechanical Fuel Rod Methodology for Boiling Water Reactors Supplement 1: Qualification of RODEX4 for Recrystallized Zircaloy-2 Cladding Responses to NRC Request for Additional Information"
- 3. Notarized Affidavit
- cc: J. A. Golla J. L. Dean Project 728

AFFIDAVIT

STATE OF WASHINGTON)) ss. COUNTY OF BENTON)

1. My name is Alan B. Meginnis. I am Manager, Product Licensing, for AREVA NP Inc. and as such I am authorized to execute this Affidavit.

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

3. I am familiar with the AREVA NP information contained in the report BAW-10247PA, Revision 0, Supplement 1Q2P, Revision 0, "Realistic Thermal-Mechanical Fuel Rod Methodology for Boiling Water Reactors Supplement 1: Qualification of RODEX4 for Recrystallized Zircaloy-2 Cladding Responses to NRC Request for Additional Information," dated November 2013 and referred to herein as "Document." Information contained in this Document has been classified by AREVA NP as proprietary in accordance with the policies established by AREVA NP 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 NP 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 NP to determine whether information should be classified as proprietary:

- (a) The information reveals details of AREVA NP'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 NP.
- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA NP in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by AREVA NP, would be helpful to competitors to AREVA NP, and would likely cause substantial harm to the competitive position of AREVA NP.

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

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

8. AREVA NP 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.

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SUBSCRIBED before me this $15 \frac{1}{5}$ day of <u>hovember</u>, 2013.

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Susan K. McCoy NOTARY PUBLIC, STATE OF WASHINGTON MY COMMISSION EXPIRES: 1/14/2016

