



October 22, 2010
NRC:10:093

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Transmittal of Revised Information for Review of Topical Report BAW-10247PA, Revision 0, Supplement 1P, Revision 0

Ref. 1: Letter, Ronnie L. Gardner (AREVA NP Inc.) to DCD (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.

AREVA NP Inc. (AREVA NP) requested the NRC's 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. AREVA NP has self-identified information in the submitted topical report that requires updating to be consistent with the current RODEX4 code implementation. The nature of the updated information is described in the Attachment A to this letter.

It is desired that the updated figures in Attachment A replace the corresponding figures in the submitted topical report when the final approved version is issued. Therefore, it is requested that the NRC recognize the need to replace these figures in the final SE for the topical report.

Proprietary and nonproprietary version of Attachment A are enclosed. As required by 10 CFR 2.390(b), an affidavit is enclosed to support the withholding of the information from public disclosure.

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

Sincerely,

A handwritten signature in cursive script that reads "Ronnie L. Gardner".

Ronnie L. Gardner, Manager
Corporate Regulatory Affairs
AREVA NP Inc.

Enclosures

cc: H. Cruz
Project 728

AREVA NP INC.

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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.

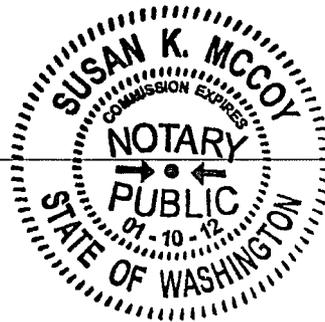
7. In accordance with AREVA NP's policies governing the protection and control of information, proprietary information contained in this Document have been made available, on a limited basis, to others outside AREVA NP only as required and under suitable agreement providing for nondisclosure and limited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

Al B. Mag...

SUBSCRIBED before me this 13th
day of October, 2010.



Susan McCoy

Susan K. McCoy
NOTARY PUBLIC, STATE OF WASHINGTON
MY COMMISSION EXPIRES: 1/10/12

ATTACHMENT A

UPDATE TO BAW-10247PA, REVISION 0, SUPPLEMENT 1P, REVISION 0

The RODEX4 RXA clad analyses of report BAW-10247PA, Revision 0, Supplement 1P, Revision 0 used version unov09. Since the submittal, RODEX4 version umay10 has been issued to supersede unov09.

The unov09 code version had been developed from the originally approved ujun07 code version but the internal coding had undergone substantial restructuring in order to modernize the code and adapt it for implementation on other computing platforms. AREVA has self identified potential anomalous behavior in this restructured code that the ujun07 code does not exhibit. It has been determined that extensive work will be required to identify and correct the anomalous behavior.

As a result, AREVA has developed a new code version (umay10) based on the originally approved ujun07 code version that implements the recrystallized clad models and does not exhibit the potentially anomalous behavior observed in the unov09 code.

While it is not believed that the recrystallized clad analyses submitted to the NRC in BAW-10247PA, Revision 0, Supplement 1P, Revision 0 were impacted by the potentially anomalous behavior of the restructured code, it is necessary to verify the submitted results with the new code version. Due to the numerical nature of the analyses performed by the RODEX4 code, it was expected that results from the new code should be similar but not identical to the submitted results.

The submitted RXA clad Benchmarks were reanalyzed with the umay10 RODEX4 code version and the results compared to those presented in BAW-10247PA, Revision 0, Supplement 1P, Revision 0. As expected, results are similar but not identical. The reported best-estimate and model uncertainty parameters remain unchanged within reported precision but the results of individual benchmark cases are not identical. As a result, the attached figures are being submitted to replace the figures which presented the individual benchmark results in the topical report.

AREVA has also identified that Figure 3 and Figure 6 in the BAW-10247PA Revision 0, Supplement 1P, Revision 0 are reversed. The captions are appropriately numbered but the figures should be swapped.

All of the above noted changes should be updated in the topical report when the approved version is issued.

Following are the updated 5 figures to be substituted in the topical report:

