



January 29, 2010
NRC:10:005

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

Response to U.S. EPR Design Certification Application RAI No. 319, Supplement 2

Ref. 1: E-mail, Getachew Tesfaye (NRC) to Ronda Pederson, et al (AREVA NP Inc.), "U.S. EPR Design Certification Application RAI No. 319 (3842), FSAR Ch 18," November 17, 2009.

Ref. 2: Letter, Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk (NRC), "Response to U.S. EPR Design Certification Application RAI No. 319," NRC 09:136, December 17, 2009.

In Reference 2, AREVA NP Inc. (AREVA NP) submitted technically correct and complete responses to 8 of the 10 questions to RAI No. 319. The enclosed response consists of the following:

Question #	Start Page	End Page
RAI 319 — 18-37	2	2
RAI 319 — 18-46	3	3

Also enclosed with this letter are the documents requested in RAI 319-18-37, AREVA NP Technical Document 117-9097806, "U.S. EPR Local Control Station Guide," and AREVA NP Technical Document 117-9041149-000, "U.S. EPR Human System Interface Design Guide," which completes responses to 10 of the 10 RAI 319 questions.

As discussed in the Human Factors Engineering (HFE) meeting December 8, 2009 between AREVA NP and the NRC, the enclosed documents will continue to evolve during the HFE design process, AREVA NP does not plan to resubmit these documents as changes occur. The enclosed documents are considered by AREVA NP to be representative of the design guides that will be used in the U.S. EPR HFE detailed design process.

AREVA NP 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 the withholding of the information from public disclosure. Enclosed with this submittal are Non-proprietary (NP) and Proprietary (P) versions of the documents.

AREVA NP INC.
An AREVA and Siemens company

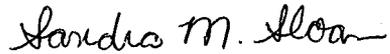
3315 Old Forest Road, P.O. Box 10935, Lynchburg, VA 24506-0935
Tel.: (434) 832-3000 Fax: (434) 832-3840

FORM 22709VA-1 (4/1/2006)

D077
NRO

If you have any questions related to this submittal, please contact me by telephone at 434-832-2369 or by e-mail at sandra.sloan@areva.com.

Sincerely,



Sandra M. Sloan, Manager
New Plants Regulatory Affairs
AREVA NP Inc.

Enclosures

cc: G. Tesfaye
Docket No. 52-020

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 these Documents is considered proprietary for the reasons set forth in paragraphs 6(b) and 6(c) above.

7. In accordance with AREVA NP's policies governing the protection and control of information, proprietary information contained in these Documents 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.

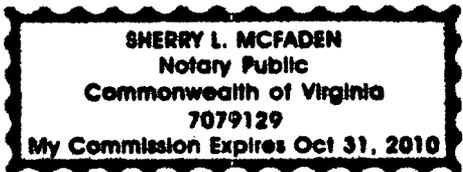
9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.

George Kimmel

SUBSCRIBED before me this 21st
day of January, 2010.

Sherry L. McFaden

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



Response to

Request for Additional Information No. 319 Supplement 2

11/17/2009

U.S. EPR Standard Design Certification

AREVA NP Inc.

Docket No. 52-020

SRP Section: 18 - Human Factors Engineering

Application Section: 11, Verification and Validation

**QUESTIONS for Operating Licensing and Human Performance Branch
(AP1000/EPR Projects) (COLP)**

Question 18-37:

Information used as a basis a safety determination and for verifying implementation of NUREG-0711 criteria for the Human Factors Engineering Program must be docketed. As discussed in the 09/29/09 audit with AREVA, provide the latest revisions of the following documents for docketing:

1. AREVA NP Technical Document 117-9097806-000, "U.S. EPR Local Control Station Style Guide"
2. AREVA NP Technical Document 117-9041149-000, "U.S. EPR Human System Interface Design Guide"

Response to Question 18-37:

The latest revision of Documents 117-9097806-000 and 117-9041149-000 are submitted by Letter NRC-10:005, January 29, 2010.

FSAR Impact

The U.S. EPR FSAR will not be changed as a result of this question.

Question 18-46:

Section 3.4.2 of NUREG-0711 identifies 3 criteria for issue analysis, tracking and review. Analysis content states that issues should be analyzed with regard to the identification of:

- human performance issues, problems, and sources of human error
- design elements that support and enhance human performance.

Section 4.0 of the OER implementation plan says that once issues are entered into the tracking database, those related to human factors are assigned to a knowledgeable HFE engineer for evaluation.

Describe for staff the training the knowledgeable engineer receives to be qualified to conduct this evaluation. Also, identify any guidance that may be used for the evaluations.

Response to Question 18-46:

Human Factors Engineering (HFE) personnel will be trained on NUREG-0711 and the implementation plans associated with the NUREG-0711 process. The U.S. EPR HFE Program Management Plan describes the staff knowledge and experience levels as well as the consideration used to assign those individuals within their areas of expertise. Guidance for analyzing human factors issues is also provided in Reference [7] of the Operating Experience Review (OER) IP.

FSAR Impact:

The U.S. EPR FSAR will not be changed as a result of this question.