

November 18, 2011 NRC:11:113

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

Submittal of Revision 4 to Technical Report ANP-10293P, "U.S. EPR™ Design Features to Address GSI-191"

- Ref. 1: Letter, Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk (NRC), "Closure Plan for Issues Associated with GSI-191 for the U.S. EPR Design Certification," NRC:10:111, December 14, 2010.
- Ref. 2: Letter, Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk (NRC), "Closure Plan for Issues Associated with GSI-191 for U.S. EPR Design Certification and Submittal of Revision 3 to Technical Report ANP-10293P, 'U.S. EPR<sup>TM</sup> Design Features to Address GSI-191," NRC:11:035, March 31, 2011.
- Ref. 3: Letter, Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk (NRC), "Plan for Resolution of GSI-191 In-Vessel Downstream Effects for U.S. EPR Design Certification," NRC:11:037, April 28, 2011.
- Ref. 4: Letter, Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk (NRC), "Closure Plan for Resolution of Issues Associated with GSI-191 for U.S. EPR Design Certification," NRC:11:092, August 25, 2011

In Reference 1, AREVA NP Inc. (AREVA NP) provided a closure plan for resolution of issues associated with GSI-191 supporting U.S. EPR design certification. On March 31, 2011, AREVA NP provided a revision to technical report ANP-10293P, "U.S. EPR<sup>TM</sup> Design Features to Address GSI-191" (Reference 2) and responses to requests for additional information regarding GSI-191 issued prior to March 17, 2011 (with the exception of those related to in-vessel downstream effects). In Reference 2, AREVA NP also committed to providing the path forward for resolution of in-vessel downstream effects by April 30, 2011. In Reference 3, AREVA NP provided a plan for the resolution of issues associated with GSI-191 in-vessel downstream effects supporting U.S. EPR design certification. In Reference 4, AREVA NP provided an updated closure plan for resolution of issues associated with GSI-191 supporting U.S. EPR design certification.

Attachment 1 to this letter contains a list of Requests for Additional Information (RAIs) received to date that are directly related to GSI-191 issues for which AREVA NP will provide a response or an updated response by November 18, 2011. These RAIs pertain to a range of GSI-191 topics, including in-vessel and ex-vessel downstream effects; sump strainer/retaining basket

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design; Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC); and Combined License (COL) items. AREVA NP has provided via separate correspondence the associated RAI responses on these topics as well as the markups to affected sections of the Final Safety Analysis Report (FSAR). In addition, AREVA NP has revised ANP-10293P to incorporate changes associated with RAIs, including the results of fuel assembly downstream effects testing performed in July and August 2011. Revision 4 of ANP-10293P is enclosed.

AREVA NP has completed all planned testing associated with the resolution of GSI-191 issues for U.S. EPR design certification and has revised ANP-10293P to incorporate the results of the testing and the evaluations that demonstrate adequate long term core cooling.

AREVA NP considers some of the material contained in ANP-10293P, Revision 4 to be proprietary. As required by 10 CFR 2.390(b), an affidavit is enclosed to support the withholding of the proprietary information from public disclosure. Proprietary and non-proprietary versions of the document are provided on the enclosed CDs.

AREVA NP is committed to continuing the frequent communications with the NRC staff to efficiently close all GSI-191 related issues.

If you have any questions related to this information, please 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** 

Sandra M. Sloan

AREVA NP Inc.

**Enclosures** 

cc: G. Tesfave Docket 52-020

## Attachment 1

GSI-191 Requests for Additional Information

RAI	Questions
30	15.6.5-4 <sup>1</sup> , 15.6.5-7 <sup>1</sup> , 15.6.5-18 <sup>1</sup> , 15.6.5-19 <sup>1</sup>
111 <sup>2</sup>	6.2.2-9 <sup>1,3</sup>
191	15.6.5-43, 15.6.5-44, 15.6.5-45, 15.6.5-46, 15.6.5-47, 15.6.5-49
362	15.6.5-56, 15.6.5-57, 15.6.5-58, 15.6.5-59, 15.6.5-60
363	6.2.2-43 <sup>1,3</sup> , 6.2.2-44 <sup>1,3</sup>
428	15.6.5-81 <sup>1,3</sup> , 15.6.5-82 <sup>1,3</sup> , 15.6.5-83 <sup>1,3</sup> , 15.6.5-84 <sup>1,3</sup> , 15.6.5-85, 15.6.5-86, 15.6.5-87, 15.6.5-88, 15.6.5-95
429	6.2.2-67 <sup>1</sup>
457	6.2.2-80 <sup>1,3</sup>
480	6.1.2-10, 6.1.2-11, 6.2.2-89, 6.3-17
483	6.2.2-90
488	6.2.2-91, 6.2.2-92, 6.2.2-93, 6.2.2-94, 6.2.2-95, 6.2.2-96, 6.2.2- 97, 6.2.2-98, 6.2.2-99
490	6.2.2-100, 6.2.2-101, 6.2.2-102, 6.2.2-103, 6.2.2-104, 6.2.2-105, 6.2.2-106, 6.2.2-107, 6.2.2-108, 6.2.2-109
493	15.6.5-98, 15.6.5-99, 15.6.5-100, 15.6.5-101, 15.6.5-102, 15.6.5-103, 15.6.5-105, 15.6.5-106, 15.6.5-107, 15.6.5-108, 15.6.5-109, 15.6.5-110
498	6.2.2-110, 6.2.2-111, 6.2.2-112, 6.2.2-113, 6.2.2-114, 6.2.2-115, 6.2.2-116, 6.2.2-117, 6.2.2-118, 6.2.2-119
507 <sup>4</sup>	6.2.2-120 <sup>3</sup> , 6.2.2-121 <sup>3</sup> , 6.2.2-123 <sup>3</sup>
511 <sup>4</sup>	6.2.2-124 <sup>3</sup>
514 <sup>4</sup>	15.6.5-114 <sup>3</sup>

## Notes:

 <sup>1 –</sup> Response was made prior to August 25, 2011, and has subsequently been revised.
 2 – The response to Question 6.2.2-8 was identified in the August 25, 2011 closure plan; however, no revision is necessary.

<sup>&</sup>lt;sup>3</sup> – Question was not identified in the August 25, 2011 closure plan.

<sup>&</sup>lt;sup>4</sup> – RAI received after August 25, 2011.

## AFFIDAVIT

COMMONWEALTH OF VIRGINIA		SS
CITY OF LYNCHBURG	)	

- My name is Sandra M. Sloan. I am Manager, New Plants Regulatory
   Affairs, for AREVA NP Inc. (AREVA NP) 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 enclosure to the letter NRC:11:113, "Submittal of Revision 4 to Technical Report ANP-10293P, 'U.S. EPR<sup>TM</sup> Design Features to Address GSI-191" 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) and 6(c) 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.

Sandra M. Slogn

SUBSCRIBED before me this \_\_\_\_\_\_

day of N) (N / M) , 2011

Sherry L. McFaden

NOTARY PUBLIC, COMMONWEALTH OF VIRGINIA

MY COMMISSION EXPIRES: 10/31/14

Reg. # 7079129

SHERRY L. MCFADEN
Notary Public
Commonwealth of Virginia
7079129
My Commission Expires Oct 31, 2014

## **AREVA NP Packing Slip for NRC Correspondence**

Date:///8///	<u>/</u>
Contents:	1. CD-ONE POF FILF FOR AND-10293P REV. 4
	2. CD-ONE POF FILE FOR AND-10293 ND REV. 4
	3. LETTER NRC: 11:113 dated 11/18/11
	4. AFFADAVIT dated 11/18/11
	5
	6
	7
CDs:	Proprietary (ONE COPY)
	Non-Proprietary (ONE Copy)
NOTE:	
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