



November 24, 2009
NRC:09:119

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

Conversion of ANP-10281P, "U.S. EPR Digital Protection System Topical Report" to ANP-10309P, "U.S. EPR Digital Protection System Technical Report"

Ref. 1: Letter, Ronnie L. Gardner (AREVA NP Inc.) to Document Control Desk (NRC), "Withdrawal of ANP-10281P, 'U.S. EPR Digital Protection System Topical Report' (TAC No. MD 4977)," NRC:09:090, September 4, 2009.

Ref 2: Letter, Ronnie L. Gardner (AREVA NP Inc.) to Document Control Desk (NRC), "ANP-10281P, 'U.S. EPR Digital Protection System Topical Report,' Proposed Alternative to Satisfy 10 CFR 50.55a(h) Requirements - Use of IEEE Std 603-1998 in Lieu of IEEE Std 603-1991," NRC:09:034, March 31, 2009.

AREVA NP Inc. (AREVA NP) committed in Reference 1 to convert ANP-10281P, "U.S. EPR Digital Protection System Topical Report" to a technical report and submit the converted report by November 24, 2009.

In accordance with the plans outlined in Reference 1, AREVA NP has revised the protection system topical report to incorporate changes associated with responses to Requests for Additional Information (RAIs). The report has also been revised to address feedback received from the NRC staff at several meetings related to U.S. EPR instrumentation and controls design, and to remove information already included in the U.S. EPR Final Safety Analysis Report (FSAR). The most significant revision to the report is the incorporation of the manual actuation design as discussed with the NRC staff. AREVA NP has reissued the revised report as a technical report rather than a topical report. The resulting technical report, "U.S. EPR Digital Protection System Technical Report" (ANP-10309P) is enclosed with this letter.

Also enclosed is a set of FSAR changes. The changes address feedback received from the NRC staff at several meetings related to U.S. EPR instrumentation and controls design, and including items discussed in NRC RAIs. The changes are related to the withdrawal of ANP-10273P, "AV42 Priority Actuation and Control Module Topical Report;" subsequent submittal of ANP-10310P, "Methodology for 100% Combinatorial Testing of the U.S. EPR™ Priority Module Technical Report;" diversity and defense-in-depth analysis, functional allocations within the I&C system architecture, Diverse Actuation System (DAS) as a separate system, and conversion of topical reports to technical reports. With these changes, AREVA NP has integrated the substantive points discussed with the NRC staff to date regarding I&C design issues as related to these topics. The FSAR changes enclosed are for Tier 2. Changes to FSAR Tier 1 will be provided by December 4, 2009.

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An AREVA and Siemens company

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FORM: 22709A-1 (4/1/2006)

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AREVA NP will incorporate this report by reference in Chapter 7 of the U.S. EPR Final Safety Analysis Report (FSAR). AREVA NP requests that the NRC incorporate the review of this report into the evaluation of the instrumentation and controls design in the safety evaluation report for the U.S. EPR FSAR in a manner consistent with other reports which are incorporated by reference in the U.S. EPR FSAR.

It should be noted that in Reference 2, AREVA NP requested authorization for use of IEEE Std 603-1998 as an alternative to the requirement in 10 CFR 50.55a(h)(3) to use IEEE Std 603-1991. In Reference 2, AREVA NP requested authorization for use of the proposed alternative in conjunction with NRC issuance of the safety evaluation regarding ANP-10281P. Since ANP-10281P has now been converted from a topical report to a technical report (ANP-10309P), which is incorporated by reference in Chapter 7 of the U.S. EPR FSAR, AREVA NP requests authorization for use of the alternative, as proposed in Reference 2, be addressed in the safety evaluation report for Chapter 7 of the U.S. EPR FSAR.

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. Proprietary and non-proprietary version of the attachments are provided on the enclosed CDs.

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

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

7. In accordance with AREVA NP'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 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 Parnell

SUBSCRIBED before me on this 24th
day of November, 2009.

Sherry L. McFaden

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

