ArevaEPRDCPEm Resource

From: McLellan, Judith
Sent: Friday, May 30, 2014 9:18 AM
To: ArevaEPRDCPEm Resource
Cc: Gleaves, Bill
Subject: FW: Response to US EPR FINAL RAI 626, Question 06.03-19, eRAI 7281
Attachments: RAI 626 Response US EPR DC.pdf

From: RYAN Tom (AREVA) [mailto:Tom.Ryan@areva.com]
Sent: Friday, April 04, 2014 12:40 PM
To: Gleaves, Bill
Cc: HOTTLE Nathan (AREVA); GUCWA Len (EXTERNAL AREVA); SEALS Jeff (AREVA); RANSOM Jim (AREVA); LEIGHLITER John (AREVA); WILLIFORD Dennis (AREVA); ROMINE Judy (AREVA); DELANO Karen (AREVA); WILLS Tiffany (AREVA); BALLARD Bob (AREVA); Wunder, George; WHITE David (AREVA); RYAN Tom (AREVA)
Subject: Response to US EPR FINAL RAI 626, Question 06.03-19, eRAI 7281

Billy,

Attached please find AREVA's response to the subject request for additional information (RAI). The attached file, "RAI 626 Response US EPR DC.pdf," provides a schedule since a technically correct and complete response to the one question cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 626 Response US EPR DC.pdf" that contain AREVA's response to the subject question.

Question #	Start Page	End Page
RAI 626 – 06.03-19	2	2

The schedule for technically correct and complete response to this question is provided below.

Question #	Response Date
RAI 626 – 06.03-19	May 5, 2014

Sincerely,

Tom Ryan
Manager, US EPR DCD
Regulatory Affairs
AREVA
7207 IBM Drive - CLT2B
Charlotte, NC 28262
Phone: 704-805-2643, Cell : 704-292-5627
Fax: 434-382-6657

From: Gleaves, Bill [mailto:Bill.Gleaves@nrc.gov]
Sent: Wednesday, March 05, 2014 11:37 AM
To: ZZ-DL-A-USEPR-DL

Cc: ArevaEPRDCPEm Resource; Gleaves, Bill; Budzynski, John; Wunder, George; Lu, Shanlai; Ashley, Clinton
Subject: US EPR FINAL RAI 626, Question 06.03-19, eRAI 7281

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on or about February 2, 2014, and discussed with your staff on or about February 27, 2014. We understand that the RAI contains no proprietary information. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs, unless otherwise agreed.

Sincerely,

Billy

William (Billy) Gleaves
Sr. Project Manager
U.S. EPR Design Certification
U.S. Nuclear Regulatory Commission
Telephone: 301-415-5848

Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 4867

Mail Envelope Properties (A41C2340DAB39B44AD0B9623285CB333E8C01FAF8D)

Subject: FW: Response to US EPR FINAL RAI 626, Question 06.03-19, eRAI 7281
Sent Date: 5/30/2014 9:18:13 AM
Received Date: 5/30/2014 9:18:14 AM
From: McLellan, Judith

Created By: Judith.McLellan@nrc.gov

Recipients:
"Gleaves, Bill" <Bill.Gleaves@nrc.gov>
Tracking Status: None
"ArevaEPRDCPEm Resource" <ArevaEPRDCPEm.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	2689	5/30/2014 9:18:14 AM
RAI 626 Response US EPR DC.pdf	60028	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Response to

Request for Additional Information No.626

03/05/2014
U.S. EPR Standard Design Certification
AREVA Inc.
Docket No. 52-020
SRP Section: 06.03 - Emergency Core Cooling System
Application Section: 6.3

Question 06.03-19:

GDC 35 states that the emergency core cooling system shall provide abundant core cooling assuming a single failure.

In Chapter 6 of Revision 5 to the U.S. EPR FSAR Tier 2, the design certification applicant specifies that a non-safety-related pump and safety related isolation valves will be installed (attached and in parallel to the medium head safety injection system) to address the potential for Extended Loss of AC Power (ELAP) at a U.S. EPR nuclear power plant.

Figure 6.3-2, “Safety Injection / Residual Heat Removal System Train (Typical),” shows a Class I MOV (30JND11 AA012) rated for 1525 psi leading off the safety-related medium head safety injection (MHSI) line that is capable of failing via spurious opening (see also Table 6.3-6, “Safety Injection System Failure Modes and Effects Analysis”). A check valve (30JND11 AA011) in sequence after the MOV intended to prevent flow off the MHSI line in the event of a spurious opening is Class II and rated for 600 psi. How does this configuration satisfy GDC 35? The FMEA results should be reviewed in order to ensure that they are consistent with the regulatory requirements.

The basis for the question relates to conditions that would result in loss of the MHSI function; that is, the direction of flow posited is from the MHSI system in reverse flow through the check valve.

Response to Question 06.03-19:

A response to this question will be provided by May 5th, 2014.