

ArevaEPRDCPEm Resource

From: BRYAN Martin (EXTERNAL AREVA) [Martin.Bryan.ext@areva.com]
Sent: Tuesday, November 02, 2010 8:00 PM
To: Tesfaye, Getachew
Cc: KOWALSKI David (AREVA); GARDNER Darrell (AREVA); Hearn, Peter
Subject: RE: RAI 345 Q9.2.1-39
Attachments: DRAFT RESPONSE RAI 345 Q.09.02.01-39.pdf

Getachew,

This was what I was given right before the meeting. If there are any changes I will let you know.

Thanks,

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From: Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Tuesday, November 02, 2010 5:36 PM
To: BRYAN Martin (External RS/NB)
Cc: KOWALSKI David (RS/NB)
Subject: FW: RAI 345 Q9.2.1-39

Marty,
Are we getting -39 today?

From: Wheeler, Larry
Sent: Tuesday, November 02, 2010 4:17 PM
To: Tesfaye, Getachew
Cc: Eul, Ryan
Subject: RE: RAI 345 Q9.2.1-39

Getachew:

Can you check on the draft copy of RAI 345 Q9.2.1-39 which was reviewed at the gotomeeting today. AREVA was going to send it after the phone call meeting.

Thanks

From: Tesfaye, Getachew
Sent: Tuesday, November 02, 2010 2:55 PM
To: ArevaEPRDCPEm Resource
Cc: Wheeler, Larry; Eul, Ryan; Lee, Samuel; Segala, John; Hearn, Peter
Subject: FW: DRAFT RESPONSES FOR FSAR Chapter 9 Weekly NRC Telecon <A E>
Importance: High

Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 2223

Mail Envelope Properties (BC417D9255991046A37DD56CF597DB7108226E3C)

Subject: RE: RAI 345 Q9.2.1-39
Sent Date: 11/2/2010 7:59:45 PM
Received Date: 11/2/2010 8:00:56 PM
From: BRYAN Martin (EXTERNAL AREVA)

Created By: Martin.Bryan.ext@areva.com

Recipients:

"KOWALSKI David (AREVA)" <David.Kowalski@areva.com>
Tracking Status: None
"GARDNER Darrell (AREVA)" <Darrell.Gardner@areva.com>
Tracking Status: None
"Hearn, Peter" <Peter.Hearn@nrc.gov>
Tracking Status: None
"Tsfaye, Getachew" <Getachew.Tsfaye@nrc.gov>
Tracking Status: None

Post Office: AUSLYNCMX02.adom.ad.corp

Files	Size	Date & Time
MESSAGE	1206	11/2/2010 8:00:56 PM
DRAFT RESPONSE RAI 345 Q.09.02.01-39.pdf		223051

Options

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

Question 09.02.01-39:

Follow-up to RAI 119, Question 9.2.1-14

Means must be provided for monitoring effluent discharge paths and the plant environs for radioactivity that may be released in accordance with GDC 64 requirements. Also, 10 CFR 52.47(a)(6) and 10 CFR 20.1406 require applicants for standard plant design certifications to describe facility design and procedures for operation that will minimize contamination of the facility and the environment. The staff's review criteria (SRP Section 9.2.1, Paragraph III.3.D) specify that provisions should be provided to detect and control leakage of radioactive contamination into and out of the ESWS. The design is considered to be acceptable by the staff if the ESWS P&IDs show that radiation monitors are located on the ESWS discharge and at components that are susceptible to leakage, and if the components that are susceptible to leakage can be isolated. However, the staff noted that Tier 2 FSAR Section 9.2.1 and the ESWS P&ID do not include radiation monitors in the system design and the NRC regulations in this regard have not been addressed. Therefore, the applicant needs to provide additional information in Tier 2 FSAR Section 9.2.1 to address the NRC requirements referred to above.

Based on the staff's review of response to RAI 119, Question 9.2.1-14 and an audit by the staff conducted on October 27, 2009, this item remains open and requires further resolution and/or clarification by the applicant. The following description provides the results of the staff's evaluation of the applicant's initial response and justification for the item remaining open.

Cooling tower blow down stream (includes filter backwash) provides the source of effluent from the system. Accordingly, the applicant's response was not complete to address provisions for monitoring of cooling tower blow down effluent and to reconcile these requirements with those of SRP 11.5 Table 2 and U.S. EPR Tier 2 Table 11.5-1. In addition, SRP Section 9.2.1, Paragraph III.3.D was not completely addressed in that provisions should be provided to detect and control leakage of radioactive contamination into and out of the ESWS.

Response to Question 09.02.01-39:

The U.S. EPR Essential Service Water System (ESWS) is not normally expected to be radioactive. However, potential radioactive material in the ESWS is an indication of leakage within the heat exchange equipment. Four monitors will be provided, one for each of the four ESWS trains and will be located downstream of the CCWS heat exchanger. The location of the monitors represents the closest location to the potential point of contamination. Detection of radiation exceeding a predetermined set-point will provide an alarm in the MCR for operator actions. Two valves in series provide isolation of the potentially contaminated ESWS loop. The ESWS isolation is performed before the contaminated fluid exits the building to prevent spreading contamination consistent with 10CFR20.1406.