ArevaEPRDCPEm Resource

From: Tesfaye, Getachew
Sent: Friday, May 14, 2010 11:27 AM
To: 'usepr@areva.com'
Cc: Wheeler, Larry; Segala, John; Lee, Samuel; Peng, Shie-Jeng; McKirgan, John; McCann, Edward; Dreisbach, Jason; Hearn, Peter; Colaccino, Joseph; ArevaEPRDCPEm Resource
Subject: Draft - U.S. EPR Design Certification Application RAI No. 406(4683,4664,4707), FSAR Ch. 9
Attachments: Draft RAI_406_SBPA_4683_SPCV_4664_SBPA_4707.doc

Attached please find draft RAI No. 406 regarding your application for standard design certification of the U.S. EPR. If you have any question or need clarifications regarding this RAI, please let me know as soon as possible, I will have our technical Staff available to discuss them with you.

Please also review the RAI to ensure that we have not inadvertently included proprietary information. If there are any proprietary information, please let me know within the next ten days. If I do not hear from you within the next ten days, I will assume there are none and will make the draft RAI publicly available.

Thanks,
Getachew Tesfaye
Sr. Project Manager
NRO/DNRL/NARP
(301) 415-3361

Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 1418

Mail Envelope Properties (0A64B42AAA8FD4418CE1EB5240A6FED11293E82DD2)

Subject: Draft - U.S. EPR Design Certification Application RAI No. 406(4683,4664,4707), FSAR Ch. 9
Sent Date: 5/14/2010 11:27:15 AM
Received Date: 5/14/2010 11:27:13 AM
From: Tesfaye, Getachew

Created By: Getachew.Tesfaye@nrc.gov

Recipients:
"Wheeler, Larry" <Larry.Wheeler@nrc.gov>
Tracking Status: None
"Segala, John" <John.Segala@nrc.gov>
Tracking Status: None
"Lee, Samuel" <Samuel.Lee@nrc.gov>
Tracking Status: None
"Peng, Shie-Jeng" <Shie-Jeng.Peng@nrc.gov>
Tracking Status: None
"McKirgan, John" <John.McKirgan@nrc.gov>
Tracking Status: None
"McCann, Edward" <Edward.McCann@nrc.gov>
Tracking Status: None
"Dreisbach, Jason" <Jason.Dreisbach@nrc.gov>
Tracking Status: None
"Hearn, Peter" <Peter.Hearn@nrc.gov>
Tracking Status: None
"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>
Tracking Status: None
"ArevaEPRDCPEm Resource" <ArevaEPRDCPEm.Resource@nrc.gov>
Tracking Status: None
"'usepr@areva.com'" <usepr@areva.com>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	732	5/14/2010 11:27:13 AM
Draft RAI_406_SBPA_4683_SPCV_4664_SBPA_4707.doc		80378

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

Draft

Request for Additional Information No. 406(4683, 4664, 4707), Revision 0

5/14/2010

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 09.02.02 - Reactor Auxiliary Cooling Water Systems
SRP Section: 09.04.01 - Control Room Area Ventilation System
SRP Section: 09.05.01 - Fire Protection Program

Application Section: FSAR Chapter 9

QUESTIONS for Balance of Plant Branch 1 (AP1000/EPR Projects) (SBPA)
QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects) (SPCV)
QUESTIONS for Balance of Plant Branch 1 (SBPA)

09.02.02-109

Follow-up to RAI 334, Question 9.2.2-61 and RAI 174, Question 9.2.2-12

In RAI 9.2.2-61 the staff identified a group of follow-up items in regard to CCWS design information that was found to be missing, inconsistent or inaccurate. Staff review of the applicant's response to 9.2.2-61 provided in RAI 334, Supplement 1, identified the follow-up Questions listed below.

Part (1): In the response to RAI 9.2.2-61 Part 1, the applicant noted that pipe sizes were identified on FSAR Tier 2, P&IDs Figures 9.2.2-1, 2, 3 and 4. While this response is acceptable, the staff noted that some pipe sizes were still missing from Figure 9.2.2-1 for: (1) normal surge tank makeup demineralized water and (2) emergency surge tank makeup water.

Part (3): In follow-up RAI 9.2.2-61 Part (3) the applicant was asked to provide detail design for I&C. In response the applicant stated that the CCWS control logic has been identified and referenced information provided in Section 9.2.2.6.1 "Control Features and Interlocks," which has been totally revised and reorganized in the FSAR markup provided with RAI 334, Supplement 1.

The staff's review of the markup of Section 9.2.2.6.1 identified the follow-up items listed below:

1. Page 9.2-43 of the markup proposes to add a new section entitled "CCWS Automatic I&C Safety-Related Functions." "Emergency Backup Switchover Sequence" addresses the case where "automatic" CCWS train switchover has failed this sequence implies that remote manual actions (from the control room) are needed to complete the switchover. The sequence should be revised in the FSAR to clearly state automatic actions and manual actions since it is confusing.

2. The FSAR should clearly explain the differences between the various types of common header switchovers that are described; (1) automatic, (2) emergency backup, (3) emergency, (4) normal and (5) semi-automatic. Similarly, on FSAR mark-up page 9.2-47 under "Normal Switchover Sequence" make it clear where the description "semi-automatic" applies.

3. Page 9.2-43 includes a description under "Emergency CCWS Temperature Control," that the bypass control valve closes when at a high temperature threshold of MAX 1. Describe if the valve goes fully closed at MAX1 or is stepped closed until MAX1 is cleared. This statement is confusing based on the staff's review of "CCWS Temperature Controls" on FSAR markup page 9.2-48. Also the last sentence states "this temperature control function is required during all plant modes of operation, except for SBO, when the CCWS (KAA10/20/30/40) is energized." Provide clarification of the SBO exception in the FSAR.

4. Page 9.2-44, "Emergency Leak Detection Sequence," third bullet from top states that if surge tank level continues to drop to less than MIN4 then the switchover sequence function is unlocked to allow supplying the common users by the "associated train". Clarify in the FSAR the basis for the restoration of flow to the common users, which were isolated at MIN3.

5. Page 9.2-45, "Thermal Barrier Isolation," the following clarifications are needed:

    a. Since both bullets list indications; the heading, "the following actions indicate" should be corrected.
    b. The statement about high radiation not performing an isolation conflicts with Section 9.2.2.6.1.5, "Additional Controls Features and Interlocks," (page 9.2-50) which states "only the RCP thermal barrier and CVCS HP cooler leaks results in automatic isolation of the failed user". This quote is described under "detection of increased radiation" bullet and should be clarified in the FSAR. Thermal barrier isolation is based on pressure or high flow only.
    c. Operating experiences with thermal barrier cracks indicate that among the various parameters utilized for early detection of cracks on the thermal barrier housing, the variation in exit temperature from the component cooling system water coil was the only one to be considered sufficiently representative and reliable. Describe in your FSAR the utilization of the CCWS temperature monitoring for the determination of degraded thermal barrier conditions and include any trip functions based on temperature rise in CCWS from the thermal barrier.

6. Page 9.2-46, fourth bullet lists valve AA015 twice and should be corrected in the FSAR.

7. Page 9.2-48, "CCWS Temperature Control," described the CCW Hx bypass valve control that during normal operation the CCW Hx bypass valve is stepped 'closed' when the heat exchanger outlet temperature reaches MAX1. Clarify in the FSAR the step increments of the valve (for example 10% increments) and what is the end position of the valve (full closed or is this a temperature setpoint).

Also describe in the FSAR if the bypass control valve is “manually positioned” in the field or manually positioned by the main control room operator in the control room on the control room display. While in “remote manual” describe in the FSAR if the automatic controls still function to control valve position based on control signals.

8. Page 9.2-49, “Dedicated CCWS Circuit Pressurization,” describe in the FSAR the means for preventing the nitrogen gas from entering the dedicated train piping system.

<u>Part (4):</u> In Part 4 of RAI 9.2.2-61 the applicant was asked to provide the detail design for valve positions. The applicant’s response included a list of CCWS valve responses to a safety injection. The staff noted the list of CCWS CCSs automatic system realignments that result from a safety injection signal (FSAR markup Page 9.2-44) needs to be considered for addition to the Tier 1 design description and ITAAC. This is references in SRP 14.3, Appendix C, page 14.3-26, paragraph V.I.

<u>Part 6:</u> In Part 6 the applicant was asked to simplify the 24 page CCWS functional arrangement drawing in Tier 1 (Figure 2.7.1-1). Accordingly the applicant provided a simplified version (11 pages) of Figure 2.7.1-1. The staff found the revised drawings were acceptable but noted that pipe transitions between ASME Class 2 and Class 3 need to be added as appropriate for the CCWS containment penetrations. This is based on SRP 14.3, Appendix C, page 14.3-35, “Figure Check List”. The applicant needs to correct the Tier 1 FSAR markup accordingly.

<u>Part 7b:</u> In Part 7(b) of RAI 9.2.2-12 the staff asked the applicant if the non-safety load hydraulic isolation valves operated in the same manner as the common header switchover valves described in FSAR Tier 2 Section 9.2.2.2. In response the applicant explained that the difference between the switchover valves and non-safety load isolation valves was in the actuation of the pilot valves. The switchover valve pilots are energized to open and bleed off the hydraulic fluid while the non-safety load isolation valve pilots are de-energized to open. The applicant also provided a markup of FSAR Tier 2 Section 9.2.2.2 consistent with this explanation. In follow-up RAI 9.2.2-61 Part 7b the staff asked the applicant to explain the reason for the difference. However, in response the applicant stated that details of the pilot valve operation are part of vendor supplied information and that the vendor will be provided with details of system operation along with I&C logic requirements for all hydraulic valves. The vendor is required to develop an appropriate pilot operating system. The applicant also provided a markup to remove the description previously added to FSAR Tier 2 Section 9.2.2.2 and stated that information would be added when available from the vendor.

Since the details of the pilot valve will be added to the FSAR at a later date all inaccurate information presently in the FSAR related to these pilot valves should be removed (FSAR markup page 9.2-27 to 28 presently describes pilot valve operation). Once this new information is available, Tier 1 ITAACs should be considered for proper valve performance and the pilot valves should be added to the Tier 2 failure mode and effects analyses table related to single failure. The staff will consider this an open item until this information is added to the FSAR and has been evaluated by the staff.

09.02.02-110

Follow-up to RAI 334, Question 9.2.2-62 and RAI 174, Question 9.2.2-13

In RAI 9.2.2-62 the applicant was requested to determine CCWS minimum heat transfer and flow requirements for the various plant operating modes and accident conditions. The applicant previously stated this information would not be available until later in the design process. In response to RAI 9.2.2-62 the applicant provided a FSAR markup that included FSAR Tier 2 Table 9.2.2-2, "CCWS User Requirements," with heat load and flow information. The staff's review of this information identified the follow-up questions discussed below:

a. The applicant should provide a summary table in the FSAR to identify the total system flow and heat load requirements for normal and accident conditions as well as an assessment in the RAI response of margin by comparison with the design heat transfer and flow capacities for the CCWS heat exchanger and CCWS pump, respectively.

b. Explain the basis for the CCW LHSI heat exchanger DBA heat load (241 MBTU/Hr) in the markup of Table 9.2.2-2 and explain its difference from the DBA heat load identified elsewhere in the FSAR. For example both Tables 9.2.2-1 and 9.2.5-1 identify a DBA heat load of 291.3 MBTU/Hr. This should be explained in the FSAR.

c. Table 9.2.2-2 states that RCP motor air and bearing oil coolers isolate on a Stage 1 Containment isolation signal. However, FSAR Tier 2 Section 9.2.2 indicates that these loads isolate at Stage 2. This table should also state that the CVCS HP coolers isolate at Stage 2. These discrepancies should be corrected in the FSAR.

d. Describe in the RAI response the differences between the CCW Fuel Pool Cooling heat load for normal refueling (47.8 MBTU/Hr) which is significantly greater than the heat load for a full core offload (33.78 MBTU/Hr), see Table 9.2.2-2. The applicant should consider an explanatory note to the FSAR table for clarification of these heat loads.

e. The dedicated heat exchanger capacity is missing from FSAR Tier 2 Table 9.2.2-1. This information should be added to the FSAR.

f. For Table 9.2.2-2, sheet 1 identifies LHSI Hx heat load and flow values for the two cooldown conditions below. Explain in the RAI response the difference for the CCW heat load and flow being significantly less when the CCW train is connected to both the SIS users and the common header and when compared to only being connected to the SIS users (difference of 116 E6 BTU/hr). The applicant should consider adding an explanatory note to the FSAR Table.

Condition	Heat Load (MBTU/Hr)	Flow (10^6 Lb/Hr)
Normal Cooldown when CCW train is only connected to SIS users	152.8	2.984
Normal Cooldown when CCW train is also connected to the common header	36.54	2.1906

09.02.02-111

Follow-up to RAI 334, Question 9.2.2-65 and RAI 174, Question 9.2.2-16

Part (b): In Part (b) of RAI 9.2.2-16 of RAI 174 the staff asked the applicant if a previously non-running ESW pump would also be automatically started (i.e. in addition to the associated CCWS pump) upon failure of the CCWS pump in the opposite train. In the response to RAI 174 (Supplement 2) the applicant confirmed that the ESWS pump is 'automatically' actuated when the associated CCWS train is started. However, based on its review of the applicant's response, the staff provided follow-up RAI 9.2.2-65 (RAI 334) noting that a specific description of this design feature could not be located in FSAR Tier 2 Section 9.2.1 or Section 9.2.2 or ITAAC. In response to RAI 9.2.2-65 Part (b), the applicant in turn referenced the response to RAI 09.02.02-61 Part 3 (RAI 334), which included a full revision of Section 9.2.2.6.1, "Control Features and Interlocks." However, the staff's review of the markup of Section 9.2.2.6.1 could not locate a description of this specific scenario; therefore, the applicant should add this information to the Tier 1 and Tier 2 of the FSAR.

09.02.02-112

Follow-up to RAI 334, Question 9.2.2-67 and RAI 174, Question 9.2.2-18

In RAI 174, RAI 9.2.2-18 the staff requested that the applicant provide the bases for the design of the CCWS Surge Tanks including details such as pump NPSH available, level setpoints. Internal volume, inleakage thermal expansion and contraction volumes accounted for and the leakage rate assumptions. In general, the applicant's response to various parts of RAI 9.2.2-18 discussed considerations that would be taken into account by calculations later in the design. Consequently, the staff initiated follow-up RAI 9.2.2-67. The following items remain open based on the staff's review of the applicant's response to RAI 9.2.2-67 provided by Supplement 1 of RAI 334.

Part (c)1 and (c)2: In Part (c)1 of follow-up RAI 9.2.2-67 the applicant was asked to provide justification for the assumed 1 gpm leak rate and to consider the need to account for leakage through large diameter closed switchover valves. For Part (c)2 the applicant was asked to similarly consider the impact of any revised leak rate from (c)1 on volume loss from the tank until the initiation of emergency makeup. In response the applicant identified a revised position that assumed leakage of 5 gpm through each of four closed switchover valves (2-24" and 2-16" diameter valves) for a total of 20 gpm per train. This equated to an one hour surge tank leak rate of 1200 gallon.

As previously identified in RAI 9.2.2-107 (4644/17637), the staff concluded that the use of a NSR/ Seismic Category II surge tank makeup water source is inconsistent with guidance provided in SRP 9.2.2 paragraph III.3C for a safety related seismic makeup source. Accordingly, the applicant needs to specify that the makeup water source is safety related, seismic category I. The applicant should also identify the flow rate and water volume that is available from the finally selected makeup source to confirm that the requirements of the CCWS system can be met. Based on a 20

GPM loss for valve seat leakage only for 7 days 201,600 gallons is required for make-up for one train.

Other considerations for this water make-up should include;

a. Describe the surge tank level at the start of the scenario knowing that the non-safety make-up starts to make-up at MIN1 (if available) as described in Tier 2 FSAR Section 9.2.2.6.1 and that the non safety users isolate at MIN2 (based on delta flow) and switchover valves do not isolate until MIN3 is reached in the surge tank.

b. For Item (C)2, describe the basis for total required makeup volume for 7 days and that continuous outleakage must be assumed for the 7 day period as discussed in SRP 9.2.2.

c. The applicant should also discuss pump seal and valve packing leakage.

Part (c)3- See the follow-up to RAI 9.2.2-59 Part (d) In regard to the proposed use of the fire protection system as the source of Surge Tank Emergency Makeup.

Part (c)4- See the follow-up to RAI 9.2.2-59 Part (d) In regard to the proposed use of the fire protection system as the source of Surge Tank Emergency Makeup.

Parts (d and e)- In Parts (d) and (e) of follow-up RAI 9.2.2-67 in regard to loss of a common header the applicant was requested to provide a description of the necessary operator actions to transfer thermal barrier cooling to the common header that remains operable, the time available to complete these actions before overheating and to address the impact on continued plant operation due to loss of CCWS cooling to other important common header loads that may impact continued plant operation (e.g. RCP motor and bearing oil coolers). In response the applicant provided a detailed explanation which included the potential for RCP trips on high bearing temperature due to loss of CCWS to bearing oil coolers on two RCPs supplied by the common header that was lost. The staff found the applicant's response needed to be clarified.

In response to Parts d and e of RAI 9.2.2-67, the applicant stated "In the event that two CCWS trains supplying the same common header are inoperable, reactor coolant pump (RCP) thermal barrier cooling must be aligned to the CCWS common header that has two operable CCWS trains. There is no time requirement to transfer the thermal barrier cooling in this event since the non-safety chemical and volume control system (CVCS) seal injection to the RCPs is available from the CVCS train that is supplied by the available CCWS common header."

The applicant's positions is that "there is no time requirement to transfer the thermal barrier cooling in this event since the non-safety chemical and volume control system (CVCS) seal injection to the RCPs is available…" does not appear consistent with the plant design. While CVCS seal injection and CCWS thermal barrier cooling provide equivalent thermal barrier cooling (FSAR Tier 2 Section 5.4.1), only CCWS is safety related and relied upon to remain operable under post accident conditions. For an accident the CVCS pumps are not automatically loaded on the EDGs (FSAR Tier 2 Section 7.3.1.2) and seal injection is isolated on a Stage 2 Containment Isolation signal (FSAR Tier 2 Section 9.3.4). RCP seal cooling is necessary to provide assurance of seal integrity during accident conditions. Furthermore the staff noted that the 72 hour LCO condition identified in Technical Specification 3.7.7 Note A-1 appeared only to be intended to minimize the unavailability time of the automatic switchover feature of the two CCWS trains that support the common header supplying the RCP thermal barriers. In other words flow to all RCP thermal barriers is still present when Note A-1 is applicable. In contrast, with both trains inoperable no RCP thermal barrier cooling would be present until operators took manual action to swap the thermal barrier supply to the other common header. These actions would also need to be performed if an accident were to occur during this condition. In conclusion, the staff requests that the applicant clarify the response to Parts d and e of RAI 9.2.2-67 based on the preceding discussion related to time requirements to transfer the thermal barrier cooling if CVCS in not available.

09.02.02-113

Follow-up to RAI 334, Question 9.2.2-68 and RAI 174, Question 9.2.2-19

Part (a)- See follow-up RAI to Part 3 of 9.2.2-61 for Page 9.2-45 of FSAR Markup.

Part (d)- In Part (d) of follow-up RAI 9.2.2-68 the staff asked the applicant to add a qualifying discussion for the RCP thermal barrier loads to the statement in FSAR Section 9.2.2 that indicate common header 1b cools RCPs 1 and 2 while common header 2b cools RCPs 3 and 4. While these statements are correct for other CCWS cooling loads on the RCPs, they require modification to recognize the exception for the Thermal Barriers. In response the applicant FSAR markup included new Table 9.2.2-3, “CCWS Common Header Users,” listing the 1.b and 2.b common header users. The staff found Table 9.2.2-3 misleading since it does not include the thermal barriers which can be supplied by either common 1.b or 2.b. Accordingly, the applicant is requested to address the RCP thermal barrier loads in Table 9.2.2-3 of the FSAR markup.

09.02.02-114

Follow-up to RAI 334, Question 9.2.2-69 and RAI 174, Question 9.2.2-20

In follow-up RAI 9.2.2-69 the staff concluded that the response and markup of FSAR Tier 2 Section 9.2.2 provided by the applicant for RAI 9.2.2-20 did not specifically demonstrate satisfying the guidance of SRP 9.2.2 Section II 4.G ii. In follow-up RAI 9.2.2-69 the staff noted examples of information needed in the FSAR markup to more completely identify the CCWS thermal barrier cooling design including; (1) Specifically state the CCWS associated with the RCPs can withstand a single, active failure or a moderate-energy crack as defined in Branch Technical Position ASB 3-1, (2) Also credit Seismic Category I, Quality Group C, and ASME Section III Class 3 requirements and (3) to identify that future RCP seal SBO testing would be performed.

The applicant’s response to RAI 9.2.2-69 included a detailed explanation and revised markup of FSAR Tier 2 Section 9.2.2. However, the staff’s review of this response identified the follow-up questions listed below:

a. In regard to the discussion in the response about mid position failure of a thermal barrier containment isolation valve (CIV) upon attempting transfer of thermal barrier cooling to the other common header:

   1. Describe the type of actions (and priority) that would be needed if the failure occurred with the valve nearly closed resulting in insufficient cooling to all thermal barriers while still preventing transfer to the other common header, that is, permissive not satisfied. Describe if this is considered a common mode loss of thermal barrier cooling.

   2. Describe in the FSAR the acceptability of taking credit for CVCS seal injection in this scenario when the CVCS is only considered an operational system that may not be present in post accident conditions.

   3. Describe in the FSAR if the plant design basis requires CCWS thermal barrier cooling to be functional in post accident conditions (besides during all plant operating modes when the RCPs are running).

   4. The applicant's response stated that failure of a CCWS CIV to fully close does not place the plant in a four hour TS action statement to close the other CIV in that flowpath but TS 3.6.3 Containment Isolation does apply. The applicant should provide the basis for these conclusions and explain the aspect of TS 3.6.3 that does apply including the applicable LCO duration.

   5. Describe in the FSAR if the RCP standstill seal (discussed in the original response) is credited as a safety-related design basis accident mitigation feature or is it intended only for conditions that are beyond the normal design basis.

b. Provide an explanation in the RAI response that demonstrates that the guidance of SRP 9.2.2, Section II 4.G is satisfied by testing that the RCPs can withstand a complete loss of cooling water for 20 minutes without operator action or state that in lieu of testing the CCWS meets Section ii.4.G, item ii. This was not addressed as requested by RAI 9.2.2-69.

09.04.01-2

Follow-up to RAI 277, Question 09.04.01-1

Provide the HVAC Filter Design Feature and Anticipated Operating Procedure.

10 CFR 52.47(a)(6) and 10 CFR 20.1406 , "Minimization of Contamination," require applicant to demonstrate that the facility design and procedures for operation will minimize, to the extent practicable, contamination of the facility and the environment.

The staff noted from the applicant's RAI response that the HVAC filters would be designed, fabricated, and tested in accordance with ASME AD-1. During operation, a negative pressure with respect to the adjoin environment will be created in the housing. However, the response did not indicate if there exists any design feature and anticipated operating procedures to minimize the possibility for HVAC system filter element from failure during operation. Provide this area of information to have reasonable assurance that the consequences with respect to the spread of contamination with a filter failure will be minimized.

09.05.01-77

Follow-up to RAI 337, Question 09.05.01-74

The applicant's RAI 09.05.01-74 response stated the following: In addition, NUREG -1805 stated: "The burning rate of deep-seated fires can be reduced by the presence of a clean agent, and they may be extinguished if a high concentration can be maintained for an adequate soaking time. However, it is normally not practical to maintain a sufficient concentration for a sufficient time to extinguish deep-seated fires." However, this is not a direct quote. The applicant needs to remove the quotes and qualify statement such as follows: In addition, NUREG -1805 stated, in context, that: The burning rate of deep-seated fires can be reduced by the presence of a clean agent, and they may be extinguished if a high concentration can be maintained for an adequate soaking time. However, it is normally not practical to maintain a sufficient concentration for a sufficient time to extinguish deep-seated fires.

FSAR Table 9.5.1-1, RG Section C.3.3.2 for Gaseous Fire Suppression shows that the EPR Design status is in "Compliance" but since RG 1.189 Regulatory Positiion C.3.3.2 guidance is not met since the manually actuated gaseous suppression system is not acting as a backup to automatic water-based fire suppression systems the status needs to be "Alternate Compliance." The applicant needs to revise FSAR Table 9.5.1-1 RG Section C.3.3.2 status to "Alternate Compliance."