

ArevaEPRDCPEm Resource

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Sent: Friday, March 27, 2009 8:57 AM
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Cc: Hien Le; Richard Laura; Peter Hearn; Joseph Colaccino; ArevaEPRDCPEm Resource
Subject: Draft - U.S. EPR Design Certification Application RAI No. 207 (2453), FSAR Ch. 16
Attachments: Draft RAI_207_CTSB_2453.doc

Attached please find draft RAI No. 207 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,
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Request for Additional Information No. 207 (2453), Revision 0

3/27/2009

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 16 - Technical Specifications
Application Section: TS 3.5

QUESTIONS for Technical Specification Branch (CTSB)

16-292

In the AREVA's response to RAI No. 142, Question 19-269, regarding the application of Criteria 4 of 10 CFR 50.36(c)(2)(ii) for selection of plant SSC to be included in a TS LCO, three additional LCO requirements were proposed in the EPR GTS Section 3.5 (3.5.6, 3.5.7 and 3.5.8), which establish OPERABILITY of the MHSI pumps and the IRWST in Modes 5 and 6. The following additional information is needed regarding the content of these newly proposed TS requirements:

1. TS 3.5.6, IRWST – Shutdown, MODE 5

Regarding SR 3.5.6.1, justify not including verification of IRWST water temperature as specified in SR 3.5.4.1 or revise TS 3.5.6 and the associated bases B 3.5.6, as appropriate.

In the proposed SR 3.5.6.1, the verification of IRWST water temperature in accordance with SR 3.5.4.1 was not included in the applicable SR list. The reason for the omission was not discussed in the response mentioned above. Further, one shutdown key assumption in EPR FSAR section 19.1.6.2.5 states "IRWST cooling is not required when the RPV head is off" which is applicable only for Mode 6.

This information is being requested to ensure accuracy and completeness of SR 3.5.6.1.

2. TS 3.5.6, IRWST – Shutdown, MODE 5

Explain how the described Required Action C.1 can successfully resolve the situation listed in Condition C. Revise TS 3.5.6 and the associated TS bases B 3.5.6, as appropriate.

The action to restore IRWST to OPERABLE status was already found to be unsuccessful by the entry into Condition C which states "Required Action and associated Completion Time not met" for an earlier listed Condition A or B. Further, an action comparable to Required Action C.1 of TS 3.5.7 (e.g. Increasing RCS water inventory to a level consistent with other shutdown Mode TS in the EPR GTS) appears to be effective to counter the effect of losing safety injection flow paths.

This information is being requested to ensure adequacy of Required Action C.1.

3. TS 3.5.8, ECCS – Shutdown, MODES 5 and 6

Demonstrate the successful resolution of each of the situations listed in Condition B by the described Required Action B.1. Revise TS 3.5.8 and the associated TS bases B 3.5.8, as appropriate.

Condition B should be for "Two inoperable MHIS pumps" only. Required Action B1 was automatically satisfied even when the Completion Time for Required Action A1 was expired.

The "Required Action and associated Completion Time not met" should be placed separately in a new Condition C with its Required Action compatible with similar conditions established in TS 3.5.6 and TS 3.5.7.

This information is being requested to ensure consistency and completeness of all related TS requirements in TS 3.5.6 through TS 3.5.8.

4. TS 3.5.8, ECCS – Shutdown, MODES 5 and 6

Justify not proposing to add the "RCS Hot Leg Low Level" signal to the TS 3.3.1 for the EPR Protection System (PS) or revise the applicable TS and bases, as appropriate.

The TS bases B 3.5.8, Applicable Safety Analyses section, Second paragraph states, in part, "MHIS is automatically actuated by the PS."

Also, EPR FSAR section 19.1.6.1.7 states, in part, "SIAS - The safety injection signal is changed in the MHIS model to low delta P(sat) in POS CA and to low loop level in POS CB, POS D, and POS E." The "low delta P(sat)" signal that is used to auto start the MHIS pumps in Mode 4 is included in TS 3.3.1. Therefore, the "low loop level" signal that is used to auto start the MHIS pumps in Modes 5 and 6 should be included in the EPR GTS.

This information is being requested to ensure consistency and completeness of TS requirements specified in TS 3.5.8 and other related TS in the EPR GTS.

5. TS 3.5.6, IRWST – Shutdown, MODE 5

In the TS bases B 3.5.6, Applicable Safety Analyses section, the statement "The IRWST in MODE 5 is included pursuant to 10 CFR 50.36 (b)" should be revised to read "The IRWST in MODE 5 satisfies Criteria 4 of 10 CFR 50.36(c)(2)(ii)."

This information is needed for consistency with the discussion provided in the AREVA's response mentioned above. This is applicable also to TS 3.5.7 and TS 3.5.8.

6. Correct the following editorial errors:

Page B 3.5.7-1, Applicable Safety Analyses section, first sentence: Revise to read "For postulated shutdown events in MODE 6, RCS heat removal is provided by

injection of borated water from the IRWST by Medium Head Safety Injection (MHSI)." This change is for consistency with the respective discussions in the bases for TS 3.5.4 and TS 3.5.6.

Page B 3.5.8-2, Applicability section, third paragraph: Delete the first sentence. The second paragraph is being revised to cover Modes 5 and 6.