

AP1000DCDFileNPEm Resource

From: Adams II, Samuel L. [adamssl@westinghouse.com]
Sent: Monday, October 13, 2008 12:23 PM
To: Phyllis Clark
Cc: Perry Buckberg; Rhonda Carmon
Subject: FW: New RAI - RAI-SRP 4.2-SRSB-07
Attachments: RAI_followup (RAI-SRP4.2-SRSB-07).doc

Hi Phyllis,

I acknowledge receipt of the attached RAI on SRP section 4.2.

I will let you know as soon as possible if a clarification call is necessary.

Thanks.

Sam

From: Phyllis Clark [mailto:Phyllis.Clark@nrc.gov]
Sent: Thursday, October 09, 2008 8:45 PM
To: Adams II, Samuel L.
Cc: Eileen McKenna
Subject: New RAI - RAI-SRP 4.2-SRSB-07

Hi Sam,

Attached is an additional RAI for AP1000 SRP Section 4.2. Please acknowledge that you have received it and if there will be a need for a conference call for additional information.

Thanks,

Phyllis

Hearing Identifier: AP1000_DCD_Review
Email Number: 114

Mail Envelope Properties (15C4FDCCF8DAC64088CF069737A9985B7FA812644C)

Subject: FW: New RAI - RAI-SRP 4.2-SRSB-07
Sent Date: 10/13/2008 12:22:57 PM
Received Date: 10/13/2008 12:23:05 PM
From: Adams II, Samuel L.

Created By: adamssl@westinghouse.com

Recipients:

"Perry Buckberg" <Perry.Buckberg@nrc.gov>
Tracking Status: None
"Rhonda Carmon" <Rhonda.Carmon@nrc.gov>
Tracking Status: None
"Phyllis Clark" <Phyllis.Clark@nrc.gov>
Tracking Status: None

Post Office: SWEC9966.w-intra.net

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MESSAGE	623	10/13/2008 12:23:05 PM
RAI_followup (RAI-SRP4.2-SRSB-07).doc		21568

Options

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

RAI-SRP 4.2-SRSB-07

RAI-SRP4.2-SRSB-02 requested two items in regard to the borosilicate glass WABA design: (1) identification of prior NRC approval for this design for operating reactors, and (2) supporting documentation as to the applicability of borosilicate glass WABAs to the AP1000 design. In response to RAI-SRP4.2-SRSB-02, Westinghouse argued that WCAP-7113 has been consistently referenced by Westinghouse RESARs, which have been previously reviewed and approved by the NRC.

Additionally, the Westinghouse cited WCAP-8183 to provide operational experience data for the borosilicate glass WABAs. This WCAP does provide some amount of operational experience; however it neither speaks to any differences between the operating fleet (or WCAP-7113) and the AP1000 design, nor how these differences are expected to affect (or not affect) the operation of borosilicate glass WABAs in the AP1000 design.

(a) Please provide (or submit) an example of an approved RESAR that references WCAP-7113.

(b) Provide a discussion concerning the applicability of WCAP-7113 to the AP1000 design. Focus on differences in design that are expected. WCAP-7113 was based on test data with 2.72% enriched UO_2 which is well below the maximum enrichment for the AP1000 design. Will the Boron content of the AP1000 borosilicate glass be the same as used in the 1967 WCAP-7113 or will it be increased to offset the higher Uranium enrichments? If more Boron will be included to offset the higher enriched fuel, what is the expected peak rod internal pressure? Are the power distribution, shutdown margin, fuel and clad temperature, and minimum DNB ratio design limits used for WCAP-7113 bounded by those used for AP1000?