

AP1000DCDFFileNPEm Resource

From: Adams II, Samuel L. [adamssl@westinghouse.com]
Sent: Wednesday, September 03, 2008 9:48 AM
To: Sikhindra Mitra
Cc: Perry Buckberg; Rhonda Carmon
Subject: FW: Hydrology RAI SRP 2.4 _AP1000_cbc.doc
Attachments: Hydrology RAI SRP 2.4 _AP1000_cbc.doc

Hi S.K.

I acknowledge that the attached RAI on SRP2.4 was received on August 26, 2008.

We do not need a clarification call on this RAI.

Our current schedule is to provide a response by September 19, 2008.

Thanks.

Sam

From: Sikhindra Mitra [mailto:Sikhindra.Mitra@nrc.gov]
Sent: Tuesday, August 26, 2008 2:14 PM
To: Adams II, Samuel L.
Cc: Sisk, Robert B.; Eileen McKenna; Christopher Cook; Mark Thaggard; Kenneth See; Lindgren, Donald A.; Perry Buckberg; Rhonda Carmon
Subject: Hydrology RAI SRP 2.4 _AP1000_cbc.doc

Hi Sam,

As per our phone discussion on August 21, 2008, please find the attached RAI for SRP Section 2.4. Please acknowledge receipt and let us know if you need further clarification. Thanks

S.K.Mitra
301-415-2783

Hearing Identifier: AP1000_DCD_Review
Email Number: 105

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Subject: FW: Hydrology RAI SRP 2.4 _AP1000_cbc.doc
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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
"Sikhindra Mitra" <Sikhindra.Mitra@nrc.gov>
Tracking Status: None

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RAI-SRP 2.4-RHEB-01

Based on requirements associated with 10 CFR 52.47, GDC 2, and 10 CFR 100.20(c), Westinghouse developed AP1000 site parameters associated with flooding. On June 27, 2008 Westinghouse submitted letter APP-GW-GLE-012, Rev 0, which identified a proposed change to the probable maximum precipitation site parameter. This value is presented in Table 5.0-1 of DCD Tier 1 and Table 2-1 of Tier 2. NRC staff held a phone call with Westinghouse staff with on August 21, 2008 to discuss technical issues related to this site parameter change. As a follow-up to that phone call, NRC requests the following be provided:

Surface Water:

- 1) Briefly describe the background associated with specifying the Table 3.3-5, Tier 1, ITAAC Design Commitment 2.b tolerance of ± 3.5 ft between the Design Plant Grade and the Site Grade.
- 2) Specify where on the site the ITAAC Design Commitment 2.b should be met, and which buildings the Commitment should be applied to. This discussion should be tied to site flooding.
- 3) Describe the expected vertical distance and tolerance between: (a) the Design Plant Grade, (b) the to-be-built Site Grade, and (c) the maximum surface-water elevation associated with a flood (see Table 5.0-1, Tier 1). Specify which buildings these distances and tolerances apply to.

Ground Water:

- 1) Table 5.0-1 of Tier 1 states that the maximum ground water level is plant elevation 100 ft., however Section 2.4 of Tier 2 states "The AP1000 is designed for a normal groundwater elevation up to plant elevation 98 ft." NRC requests that Westinghouse clarify their definition of normal ground water elevation in Tier 2.
- 2) Specify which buildings the Table 5.0-1, Tier 1 maximum ground water level elevation should be applied to. This discussion should consider that an applicant may slope the site to encourage drainage and prevent local flooding.
- 3) Normal elevation can be interpreted to imply that short-period excursions above the specified elevation are permissible without an increase in safety risk. If the normal water table elevation is allowed to exceed plant elevation 98 ft, what is the maximum allowed (up to site grade)? Also, please quantify the meaning of short-period (one hour, one day, one week, etc.).