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U.S. Nuclear Regulatory Commission
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Your ref: Project Number 740
Our ref: DCP/NRC1843

March 9, 2007

Subject: AP1000 COL Response to Request for Additional Information (TR #3)

In support of Combined License application pre-application activities, Westinghouse is submitting a response to an NRC request for additional information (RAI) on AP1000 Standard Combined License Technical Report 3, APP-GW-S2R-010, Rev. 0, Extension of Nuclear Island Structures Seismic Analysis. This RAI response is submitted as part of the NuStart Bellefonte COL Project (NRC Project Number 740). The information included in the response is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification.

The response is provided for request TR3-18, transmitted in NRC letter dated December 5, 2006 from Steven D. Bloom to Andrea Sterdis, Subject: Westinghouse AP1000 Combined License (COL) Pre-application Technical Report 3 – Request for Additional Information (TAC No. MD2358).

Pursuant to 10 CFR 50.30(b), the responses to requests for additional information on Technical Report 3 are submitted as Enclosure 1 under the attached Oath of Affirmation.

It is expected that when the RAIs on Technical Report 3 are complete, the technical report will be revised as indicated in the response and submitted to the NRC. The RAI response will be included in the document.

Questions or requests for additional information related to the content and preparation of this response should be directed to Westinghouse. Please send copies of such questions or requests to the prospective applicants for combined licenses referencing the AP1000 Design Certification. A representative for each applicant is included on the cc: list of this letter.

Very truly yours,

A. Sterdis, Manager
Licensing and Customer Interface
Regulatory Affairs and Standardization

D079

/Attachment

1. "Oath of Affirmation," dated March 9, 2007

/Enclosure

1. Response to Request for Additional Information on Technical Report No. 3, RAI-TR03-018

cc:	S. Bloom	-	U.S. NRC	1E	1A
	S. Coffin	-	U.S. NRC	1E	1A
	G. Curtis	-	TVA	1E	1A
	P. Grendys	-	Westinghouse	1E	1A
	P. Hastings	-	Duke Power	1E	1A
	C. Ionescu	-	Progress Energy	1E	1A
	D. Lindgren	-	Westinghouse	1E	1A
	A. Monroe	-	SCANA	1E	1A
	M. Moran	-	Florida Power & Light	1E	1A
	C. Pierce	-	Southern Company	1E	1A
	E. Schmiech	-	Westinghouse	1E	1A
	G. Zinke	-	NuStart/Entergy	1E	1A

ATTACHMENT 1

"Oath of Affirmation"

ATTACHMENT 1

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of:	)
NuStart Bellefonte COL Project	)
NRC Project Number 740	)

APPLICATION FOR REVIEW OF
"AP1000 GENERAL COMBINED LICENSE INFORMATION"
FOR COL APPLICATION PRE-APPLICATION REVIEW

W. E. Cummins, being duly sworn, states that he is Vice President, Regulatory Affairs & Standardization, for Westinghouse Electric Company; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission this document; that all statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.

W. E. Cummins
Vice President
Regulatory Affairs & Standardization

Subscribed and sworn to
before me this 9th day
of March 2007.

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Debra McCarthy, Notary Public
Monroeville Boro, Allegheny County
My Commission Expires Aug. 31, 2009
Member, Pennsylvania Association of Notaries

Debra McCarthy
Notary Public

ENCLOSURE 1

Response to Request for Additional Information on Technical Report No. 3

RAI-TR03-018

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-TR03-018
Revision: 0

Question:

Item 3 of page 83 of Page 154 indicates that if plant is founded on top of rock with velocity of 3,500 ft/sec and there are thin layers of soft materials overlying the rock, the site specific peak ground acceleration and spectra may be developed at the top of the competent rock and shown at the foundation level to be less than or equal to those given in Figures DCD 3.7.1 and 3.7.2. The hard rock design was based on the assumed rock shear velocity of 8,000 ft/sec. Westinghouse is requested to provide basis for changing the rock shear velocity.

Westinghouse Response:

Westinghouse will revise the 3,500 ft/sec to 8000 ft/sec as shown in the revisions to the DCD and technical reports below.

Reference:

1. APP-GW-GLR-044, Rev 0, Nuclear Island Basemat And Foundation Report, October, 2006

Design Control Document (DCD) Revision:

Revisions to DCD Section 2.5 are shown in Section 5 of the nuclear island basemat and foundation report (Reference 1). The last paragraph of subsection 2.5.2.1 will be revised to read as follows:

The Combined License applicant must demonstrate that the proposed site meets the following requirements:

1. The free field peak ground acceleration at the finished grade level is less than or equal to a 0.30g SSE.

2. The site design response spectra at the finished grade level in the free-field are less than or equal to those given in Figures 3.7.1-1 and 3.7.1-2.

3. In lieu of (1) and (2) above, for a site where the nuclear island is founded on ~~competent~~ **hard** rock with shear wave velocity greater than **8000**~~3500~~ feet per second and there are thin layers of soft material overlying the rock, the site specific peak ground acceleration and spectra may be developed at the top of the competent rock and shown at the foundation level to be less than or equal to those given in Figures 3.7.1-1 and 3.7.1-2.

4. Foundation material layers are approximately horizontal (dip less than 20 degrees) and the shear wave velocity of the soil is greater than or equal to 1000 feet per second.

PRA Revision:
None

Technical Report (TR) Revision:

In Section 5 of the Technical Report, on page 83 of 154 revise item (3) to read:

3. In lieu of (1) and (2) above, for a site where the nuclear island is founded on ~~competent~~ **hard** rock with shear wave velocity greater than **8000**~~3500~~ feet per second and there are thin layers of soft material overlying the rock, the site specific peak ground acceleration and spectra may be developed at the top of the competent rock and shown at the foundation level to be less than or equal to those given in Figures 3.7.1-1 and 3.7.1-2.