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U.S. Nuclear Regulatory Commission
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Your ref: Docket No. 52-006
Our ref: DCP/NRC2096

March 4, 2008

Subject: AP1000 COL Response to Request for Additional Information (SRP 3.7.1)

In support of Combined License application pre-application activities, Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 3.7.1. This RAI response is submitted in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information included in the response is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification and the AP1000 Design Certification Amendment Application.

A response is provided for RAI-SRP-3.7.1-SEB1-01 as sent in an email from Mike Miernicki to Don Lindgren dated January 30, 2008. This response completes all requests received to date for SRP section 3.7.1.

Pursuant to 10 CFR 50.30(b), the response to the request for additional information on SRP Section 3.7.1, is submitted as Enclosure 1 under the attached Oath of Affirmation.

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 handwritten signature in cursive script, appearing to read 'D. Lindgren'.

D. Lindgren, Licensing Lead
Licensing and Customer Interface
Regulatory Affairs and Standardization

/Attachment

1. "Oath of Affirmation," dated March 4, 2008

/Enclosure

1. Response to Request for Additional Information on SRP Section 3.7.1

cc:	D. Jaffe	- U.S. NRC	1E	1A
	E. McKenna	- U.S. NRC	1E	1A
	P. Ray	- TVA	1E	1A
	P. Hastings	- Duke Power	1E	1A
	R. Kitchen	- Progress Energy	1E	1A
	A. Monroe	- SCANA	1E	1A
	J. Wilkinson	- Florida Power & Light	1E	1A
	C. Pierce	- Southern Company	1E	1A
	E. Schmiech	- Westinghouse	1E	1A
	G. Zinke	- NuStart/Entergy	1E	1A
	R. Grumbir	- NuStart	1E	1A
	D. McDermott	- Westinghouse	1E	1A

ATTACHMENT 1

“Oath of Affirmation”

ATTACHMENT 1

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of:)
AP1000 Design Certification Amendment Application)
NRC Docket Number 52-006)

APPLICATION FOR REVIEW OF
"AP1000 GENERAL INFORMATION"
FOR DESIGN CERTIFICATION AMENDMENT 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.

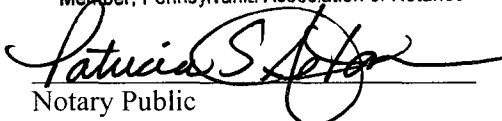


W. E. Cummins
Vice President
Regulatory Affairs & Standardization

Subscribed and sworn to
before me this 4th day
of March 2008.

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Patricia S. Aston, Notary Public
Murrysville Boro, Westmoreland County
My Commission Expires July 11, 2011

Member, Pennsylvania Association of Notaries


Notary Public

ENCLOSURE 1

Response to Request for Additional Information on SRP Section 3.7.1

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-SRP3.7.1-SEB1-01
Revision: 0

Question:

The staff's preliminary review of TR-144 identified that TR-144 presents new design response spectra for hard rock, high frequency (HRHF) sites, which are slightly higher than those presented in TR-115 for the Bellefonte site. As stated in TR-144, on page 5, 2nd paragraph,

"The HRHF GMRS included in the figures provided below for inclusion in Chapter 5 of DCD Tier 1 are modified from the version included in APP-GW-GLR-115 (Reference 4). The spectra in the figures provided below have an increase in amplitude over a portion of the frequency range. The modified spectra bound the site specific spectra for the COL applicants referencing the AP1000 Design Certification with hard rock sites. The use of the figures provided below is supported by the evaluations described in APP-GW-GLR-115. The HRHF GMRS included in these figures are bounded by the response spectra time history used for the evaluations in APP-GW-GLR-115. The same HRHF GMRS are included in revised Figures 3I.1-1 and 3I.1-2."

The applicant has not demonstrated that "The HRHF GMRS included in these figures is bounded by the response spectra time-history used for the evaluations in APP-GW-GLR-115." Without presenting any details, the applicant simply indicates that the response spectra of the time history used for the AP1000 high frequency design analyses bound the new design response spectra presented in TR-144, and consequently, all results and conclusions presented in TR-115 remain valid for the new high-frequency design spectra. To assist the staff in evaluating the applicant's conclusion, the staff requests the applicant to submit a graphical comparison at 5% damping of (1) the response spectra (2 horizontal and vertical) of the synthetic time histories, (2) the high-frequency design response spectra (horizontal and vertical) in TR-115, and (3) the high-frequency design response spectra (horizontal and vertical) in TR-144.

Westinghouse Response:

In Figures RAI-SRP 3.7.1-SEB1-01-1 through RAI-SRP 3.7.1-SEB1-01-3 are the comparisons requested. Note that the vertical spectra for TR 144 and TR 115 are the same, and therefore, TR 144 spectrum is over top of the TR 115 spectrum. The seismic response spectra labeled TR 115 Spectra are the smooth response spectra that were presented in Westinghouse Technical Report 115 (Reference 1). The seismic response spectra labeled TR144 Spectra are the smooth response spectra that was presented in Westinghouse Technical report 144 (Reference 2). The spectra labeled TR115 TH Based is the calculated seismic response spectra associated with the synthetic time histories that are used for the HRHF evaluation documented in Reference 1.

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

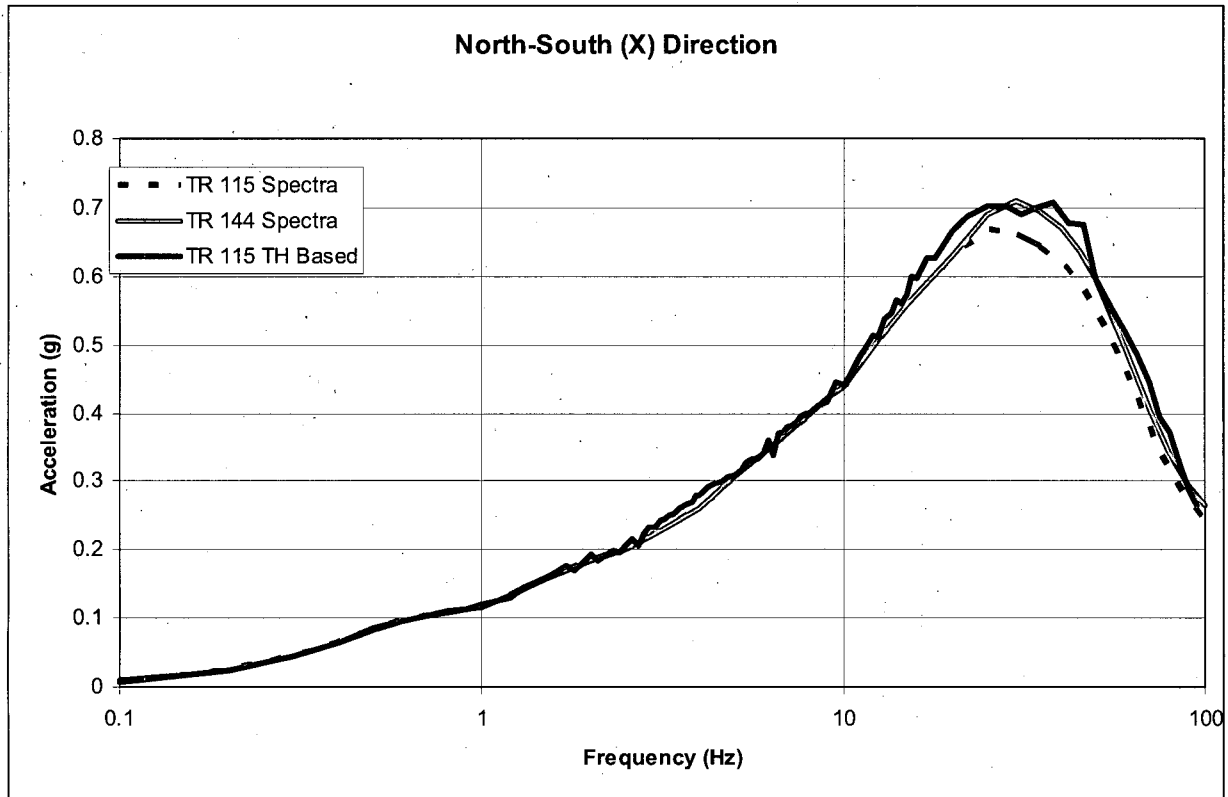


Figure RAI-SRP 3.7.1-SEB1-01-1 - Horizontal (X-Direction) Comparison of HRHF Spectra

AP1000 TECHNICAL REPORT REVIEW

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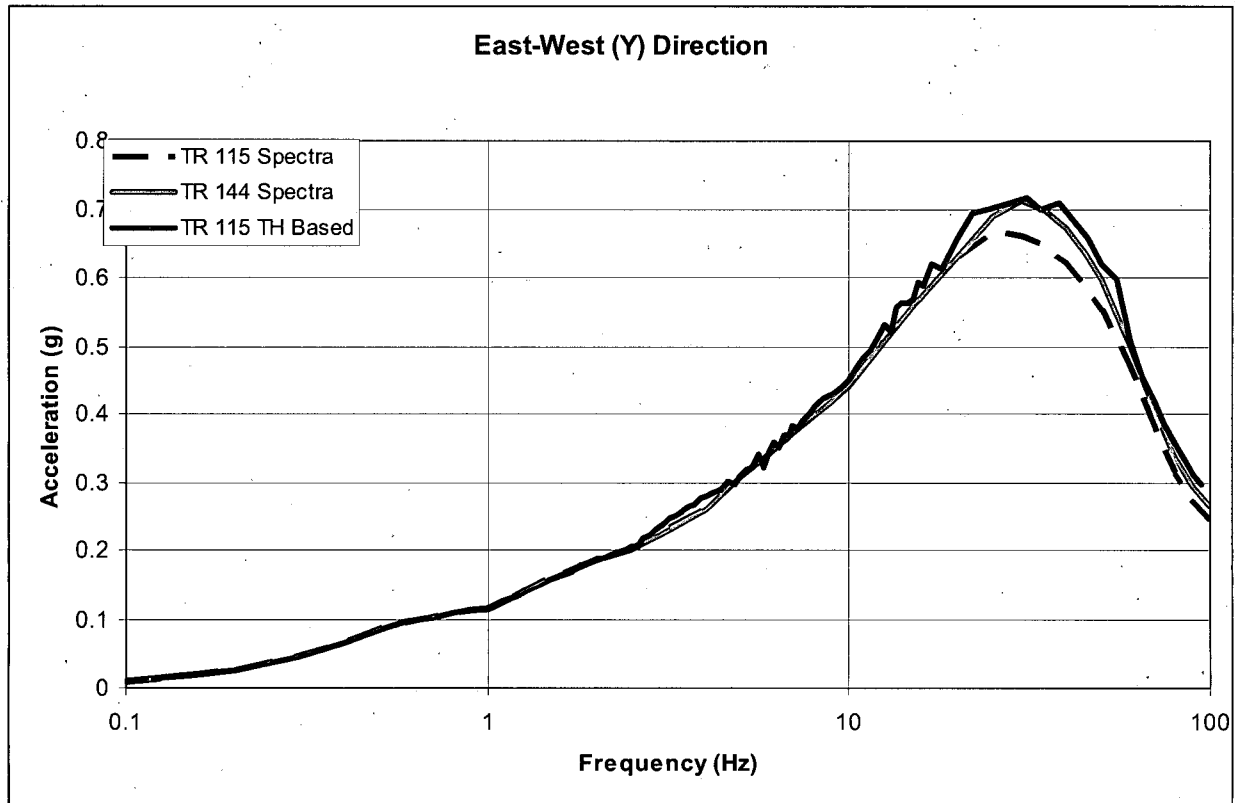


Figure RAI-SRP 3.7.1-SEB1-01-2 - Horizontal (Y-Direction) Comparison of HRHF Spectra

AP1000 TECHNICAL REPORT REVIEW

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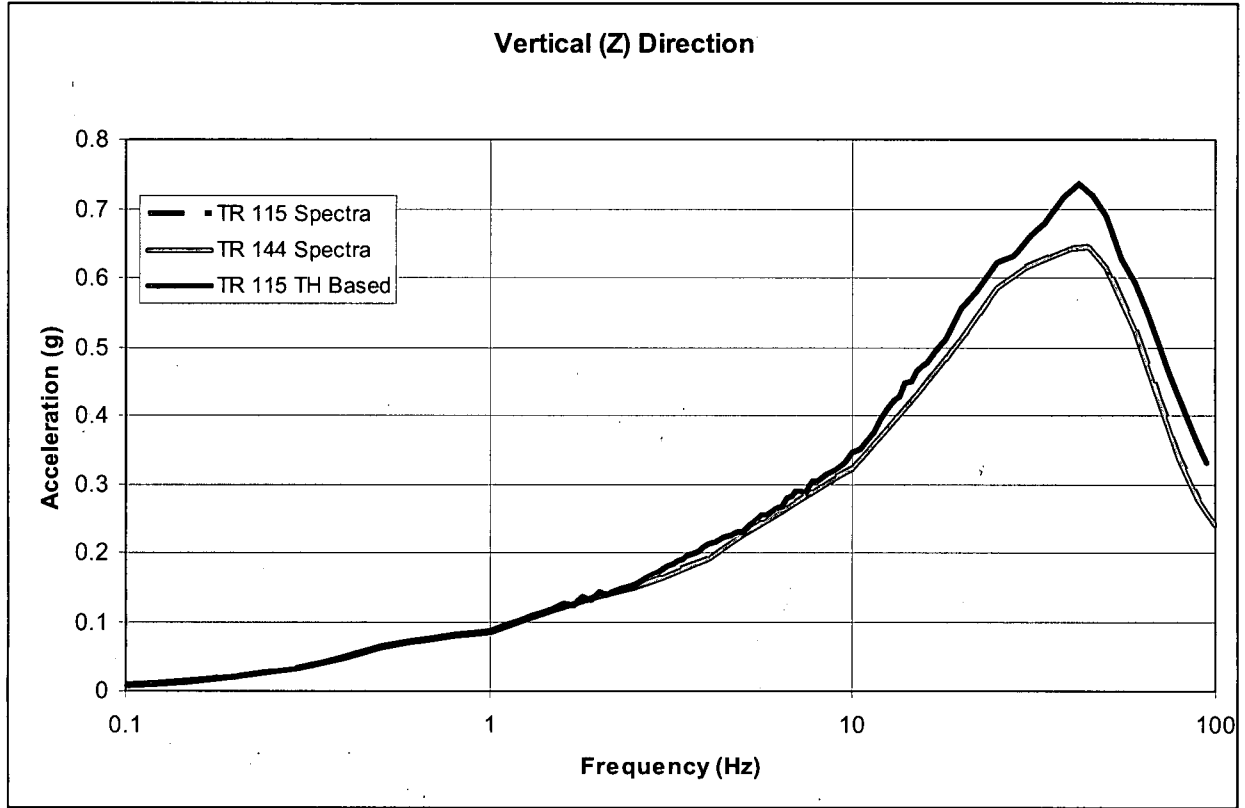


Figure RAI-SRP 3.7.1-SEB1-01-3 - Vertical (Z-Direction) Comparison of HRHF Spectra

Reference(s):

1. APP-GW-GLR-115 (TR 115), "Effect of High Frequency Seismic Content on SSCs," Rev.0
2. APP-GW-GLN-144 (TR 144), "AP1000 Design Control Document High Frequency Seismic Tier 1 Changes," Rev.0

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

Design Control Document (DCD) Revision:
None

PRA Revision:
None

Technical Report (TR) Revision:
None