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Your ref: Docket No. 52-006
Our ref: DCP/NRC2172

June 20, 2008

Subject: AP1000 Response to Requests for Additional Information (SRP3.6.3)

Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 3.6.3. 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-SRP3.6.3-CIB1-01 as sent in an email from Mike Miernicki to Sam Adams dated May 1, 2008. This response completes all requests received to date for SRP Section 3.6.3.

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 black ink, appearing to read 'Robert Sisk'.

Robert Sisk, Manager
Licensing and Customer Interface
Regulatory Affairs and Standardization

/Enclosure

1. Response to Requests for Additional Information on SRP Section 3.6.3

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

Response to Requests for Additional Information on SRP Section 3.6.3

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-SRP3.6.3-CIB1-01
Revision: 0

Question:

By letter dated July 19, 2006, Westinghouse Electric Company, LLC (Westinghouse) submitted for staff review Report APP-GW-GLR-022, Revision 1 "AP1000 Leak-Before-Break Evaluation of As-Designed Piping," to provide justification for close out of Combined License (COL) Information Item 3.6-2 which requires an as-designed Leak-Before-Break (LBB) evaluation. Westinghouse proposed to reference APP-GW-GLR-022 as the LBB Evaluation Report in Tier 2, Section 3.6.4.2 of the AP1000 DCD, Revision 16. By referencing this report in the DCD, the portion of COL Information Item 3.6-2 requiring an as-designed LBB evaluation will be considered complete for COL applicants referencing the AP1000 DCD. Westinghouse proposed to revise Section 3.6.4.2 of the AP1000 DCD as follows:

The Combined License information requested in this subsection has been completely addressed in APP-GW-GLR-022 (Reference 15), and the applicable changes are incorporated into the DCD. No additional work is required by the Combined License applicant.

The staff's evaluation of report APP-GW-GLR-022 is based on the piping stress analysis results using seismic loadings associated with an AP1000 plant situated on a hard-rock site. Because the seismic loadings for a plant situated on a soil site are likely to be higher than those for a plant situated on a hard-rock site, the LBB analyses for AP1000 plants situated on soil sites (or other sites other than hard-rock) would likely be affected. Thus, the staff's evaluation of the LBB analyses considered seismic loadings for hard-rock sites only.

As a result of this evaluation, the staff finds that the proposed change to Section 3.6.4.2 of the AP1000 DCD is applicable only to plants situated on a hard-rock-site. Staff requests Westinghouse to revise the AP1000 seismic design to include plants situated on other-than-hard-rock sites or revise the first paragraph of Section 3.6.4.2 as follows:

The Combined License information requested in this subsection has been completely addressed in APP-GW-GLR-022 (Reference 15), *for AP1000 plants situated on hard-rock sites*, and the applicable changes are incorporated into the DCD. No additional work is required by the COL applicant *whose AP1000 plant is situated on a hard-rock site. The AP1000 LBB evaluation results of the as-designed piping for other-than-hard-rock sites will be addressed by the COL applicant or in a later revision to the AP1000 DCD.*

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

Westinghouse Response:

The staff has reviewed and accepted the methodology identified in the DCD for evaluating the LBB piping and reviewed and accepted results for AP1000 plants situated on hard-rock sites. The other-than-hard-rock site seismic spectra are included in the piping analysis that is within the piping DAC review. The LBB evaluation results will indicate that the bounding analysis curves for piping that was evaluated for the other-than-hard-rock seismic input are acceptable and can be addressed as part of the piping DAC review.

Design Control Document (DCD) Revision:

None

PRA Revision:

None

Technical Report (TR) Revision:

None