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Your ref: Project Number 740
Our ref: DCP/NRC1784

September 27, 2006

Subject: AP1000 COL Response to Requests for Additional Information (TR #6)

In support of Combined License application pre-application activities, Westinghouse is submitting responses to an NRC request for additional information (RAIs) on AP1000 Standard Combined License Technical Report 6, APP-GW-GLR-021, Rev. 0, AP1000 As-Built COL Information Items. 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 TR6-2 transmitted in an NRC letter from Steven D. Bloom to Andrea Sterdis, Subject: Westinghouse AP1000 Combined License (COL) Pre-application Technical Report 6 – Request for Additional Information (TAC No. MD2174).

Pursuant to 10 CFR 50.30(b), the response to the request for additional information on Technical Report 6 numbered RAI-TR06-002 is submitted as Enclosure 1 under the attached Oath of Affirmation.

It is expected that when the RAIs on Technical Report 6 are complete, the technical report will be revised as indicated in the responses 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 these responses 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,

D. F. Hutchings for

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

0040-ldk.doc

D079

/Attachment

1. "Oath of Affirmation," dated September 27, 2006

/Enclosure

1. Response to Request for Additional Information on Technical Report No. RAI-TR06-002

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 27nd day
of September 2006.

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

Notary Public

ENCLOSURE 1

Response to Request for Additional Information on Technical Report No. 6

RAI-TR06-002

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information

RAI Number: RAI-TR06-002
Revision: 0

Question:

On page 4 of the report, you propose to delete COL Information Item 3.6-3 regarding the as-built evaluation of leak-before-break piping systems. COL Information Item 3.6-3 has three elements: "1) verification that the as-built stresses, diameter, wall thickness, material, welding process, pressure, and temperature in the piping are bounded by the leak-before-break bounding analysis; 2) a review of the Certified Material Test Reports or Certifications from the Material Manufacturer to verify that the ASME Code, Section III strength and Charpy toughness requirements are satisfied; and 3) complete the leak-before-break evaluation by comparing the results of the final piping stress analysis with the bounding analysis curves documented in Appendix 3B." Report APP-GW-GLR-022 addressed only the third requirement in COL Information Item 3.6-3, and the ITAAC regarding LBB piping systems does not specifically address the first and the second requirements. Please justify your proposed deletion of this COL information item by explaining how the first and second requirements (elements 1 and 2 above) are addressed by your phrase "several ITAAC items."

Westinghouse Response:

The completion of Element 3 of AP1000 Design Control Document (DCD) (APP-GW-GLR-700, Reference 2) COL Information Item 3.6-3, "3) complete the leak-before-break evaluation by comparing the results of the final piping stress analysis with the bounding analysis curves documented in Appendix 3B," requires the verification of as-built information in Element 1 of COL Information Item 3.6-3 and requires the material review included in Element 2 of COL Information Item 3.6-3. The technical report will be revised to state that these activities are included in the activities required to complete the leak-before-break evaluation.

As noted in the Regulatory Impact section of TR6 (APP-GW-GLR-021, Reference 2) under COL Information Item 3.6-3, the ITAACs in Tier 1 of the DCD that require a leak-before-break evaluation are Item 6 in Table 2.1.2-4 for the reactor coolant system, Item 6 in Table 2.2.3-4 for the passive core cooling system, Item 6 in Table 2.2.4-4 for the steam generator system, and Item 6 in Table 2.3.6-4 for the normal residual heat removal system.

Reference:

1. APP-GW-GLR-700, AP1000 Design Control Document, Revision 15.
2. APP-GW-GLR-021, AP1000 As-Built COL Information Items, Revision 0.

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information

Technical Report Revision:

Revise the Technical Justification under COL Information Item 3.6-3 as shown in the following:

Technical Justification

The as-built evaluation of leak-before–break characteristics includes activities that require fabrication and installation of the piping including evaluation of changes in support locations and construction deviations. The activities that require procurement or fabrication include verification of the stresses, diameter, wall thickness, material, welding process, pressure, and temperature of the as-built piping. The activities that require procurement or fabrication also include a review of the Certified Material Test Reports or Certifications from the material manufacturer to verify that the ASME Code, Section III strength and Charpy toughness requirements are satisfied. The as-built evaluation of leak-before–break characteristics will be completed after construction of the associated piping systems as required by the ITAACs. Deleting the redundant COL information item requiring completion of the as-built evaluation does not alter the methods of evaluations documented in the report including stress and fatigue analysis and preparation of floor response spectra and seismic analysis. Deleting the redundant COL information item requiring completion of the as-built evaluation does not alter the as-designed leak-before-break evaluation.

Design Control Document (DCD) Revision:

None in addition to the mark-up in TR6 (APP-GW-GLR-021) previously provided.

PRA Revision:

None