Westinghouse Electric Company
Nuclear Power Plants
P.O. Box 355
Pittsburgh, Pennsylvania 15230-0355
USA

U.S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, D.C. 20555

Direct tel: 412-374-6206
Direct fax: 412-374-5005
e-mail: sisk1rb@westinghouse.com

Your ref: Docket No. 52-006
Our ref: DCP/NRC2394

April 3, 2009

Subject: AP1000 Response to Request for Additional Information (SRP3)

Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 3. This RAI response is submitted in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information included in this response is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification and the AP1000 Design Certification Amendment Application.

Enclosure 1 provides the response for the following RAI:

RAI-SRP3.8.3-SEB1-01

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,

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

/Enclosure

1. Response to Request for Additional Information on SRP Section 3

D063
NRO

cc:	D. Jaffe	- U.S. NRC	1E
	E. McKenna	- U.S. NRC	1E
	B. Gleaves	- U.S. NRC	1E
	C. Proctor	- U.S. NRC	1E
	T. Spink	- TVA	1E
	P. Hastings	- Duke Power	1E
	R. Kitchen	- Progress Energy	1E
	A. Monroe	- SCANA	1E
	P. Jacobs	- Florida Power & Light	1E
	C. Pierce	- Southern Company	1E
	E. Schmiech	- Westinghouse	1E
	G. Zinke	- NuStart/Entergy	1E
	R. Grumbir	- NuStart	1E
	D. Lindgren	- Westinghouse	1E

ENCLOSURE 1

Response to Request for Additional Information on SRP Section 3

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-SRP-3.8.3-SEB1-01
Revision: 0

Question:

DCD Sections 3.8.3.2 and 3.8.4.2 describe the codes, standards, and specifications used for structural components of AP1000. In view of the extension of the AP1000 design to soil sites, reanalysis for updated seismic spectra, design changes made to structures, and to ensure that the AP1000 meets the safety requirements in current staff positions, the staff requests Westinghouse identify whether the AP1000 plant meets industry standards listed below subject to any superseding provisions in NRC regulatory guidance documents. If not, then Westinghouse is requested to provide a detailed technical basis for concluding that the standards currently listed in DCD Section 3.8 provide sufficient conservatism or equivalent levels of safety.

1. AISC-N690-1994 including Supplement No. 2 (2004) versus AISC-N690-1994 currently in DCD Rev. 16.

2. More recent versions of applicable AWS standards than are currently listed in DCD Rev. 16.

If your response to this request for additional information will reference Revision 17 to the AP1000 DCD, please provide an exact reference.

Westinghouse Response:

The references to AISC-N690-1994 and the other applicable codes standards and specifications in the Design Control Document (DCD) Subsection 3.8.3.2 are not changed in DCD Revision 16 and Revision 17. These codes and standards are the same as specified DCD Revisions 14 and 15. The reference to AISC-N690-1994 is designated as Tier 2* information which means that Westinghouse is not permitted to change this information without NRC approval.

On page 3-128 of the AP1000 Design Certification FSER (Reference 1) the citation of the applicable codes and standards is copied from DCD Subsection 3.8.3.2 using the same editions and dates as the DCD. On Page 3-129 of Reference 1 the NRC staff found that these codes and standards are acceptable in the following statement: "The staff finds that the Codes, standards, and specifications identified in the DCD for the design of the CIS are consistent with the guidelines in SRP Section 3.8.3.II.2 and RG 1.142, Revision 2, in which the staff's review guidelines for the applicable Codes, standards, and specifications are provided. DCD Tier 2, Section 3.8.4.2, discusses the use of ACI-349-01 for the design of reinforced concrete structures, and for the reasons set forth in Section 3.8.4.2 of this report, the staff finds it acceptable. Therefore, the staff concludes that the Codes, standards, and specifications used in the AP1000 design are acceptable."

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

The references to AISC-N690-1994 and the other applicable codes standards and specifications in the Design Control Document (DCD) Subsection 3.8.4.2 are not changed in DCD Revision 16 and Revision 17. These codes and standards are the same as specified DCD Revisions 14 and 15. The reference to AISC-N690-1994 is designated as Tier 2* information which means that Westinghouse is not permitted to change this information without NRC approval.

On page 3-169 and 3-170 of the AP1000 Design Certification FSER (Reference 1) the citation of the applicable codes and standards is copied from DCD Subsection 3.8.4.2 using the same editions and dates as the DCD. On Page 3-173 of Reference 1 the NRC staff found that these codes and standards are acceptable in the following statement: "The staff finds the referenced codes and standards to be acceptable because they are consistent with the acceptance criteria of SRP Section 3.8.4."

The design on the containment internal structures included in DCD Revision 16 and 17 do not include significant changes from the certified design documented in DCD Revision 15. The design of the containment internal structures included in DCD Revision 16 and 17 do not required the use of codes and standard different from those listed in DCD Subsection 3.8.3.2.

The revised shield building roof and connections design information included in DCD Revision 16 and 17 to incorporate the enhanced Shield Building design uses requirements and criteria included in the editions and revisions of the codes and standards cited in the DCD. The revised shield building roof and connections design features and details are similar to design features and details previously used in the AP1000 structures design. The revised shield building roof and connections design uses analysis methods and criteria consistent with the use of the editions and revisions of the codes and standards cited in the DCD.

Westinghouse does not intend to revise the applicable codes and standards provided in Subsections 3.8.3.2 and 3.8.4.2 of the DCD. Westinghouse does not intend to evaluate conformance to later editions and revisions of these codes and standards. The technical basis for concluding that the standards currently listed in DCD Section 3.8 provides sufficient conservatism or equivalent levels of safety is same basis used by the NRC in Reference 1 to accept the use of these codes and standards.

References:

1. NUREG-1793, Final Safety Evaluation Report Related to the AP1000 Standard Design U. S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, September, 2004.

Design Control Document (DCD) Revision: None

PRA Revision: None

Technical Report (TR) Revision: None