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Your ref: Docket No. 52-006
Our ref: DCP_NRC_002571

July 22, 2009

Subject: AP1000 Response to Request for Additional Information (SRP 19)

Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 19. 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(s):

RAI-SRP19.0-SPLA-21
RAI-SRP19.0-SPLA-22

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 that reads 'D.O. Lindgren / FOR'. The signature is written in a cursive, flowing style.

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

/Enclosure

1. Response to Request for Additional Information on SRP Section 19

cc:	D. Jaffe	- U.S. NRC	1E
	E. McKenna	- U.S. NRC	1E
	S. Sanders	- U.S. NRC	1E
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	P. Hastings	- Duke Power	1E
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	A. Monroe	- SCANA	1E
	P. Jacobs	- 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 Request for Additional Information on SRP Section 19

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-SRP19.0-SPLA-21
Revision: 0

Question:

Section 19.55.2, Table 19.55-1 - As part of its design amendment, Westinghouse changed the method of construction for the shield building from a conventionally reinforced concrete structure to a proposed design that uses steel-plated, concrete-filled modules. Provide the basis for the HCLPF values for the shield building, explicitly considering the design change from reinforced concrete to modular construction.

Westinghouse Response:

Westinghouse has agreed to revise Table 19.55-1 of DCD Section 19.55.2 in a revised response to OI-SRP19.0-SPLA-12. The revised Table 19.55-1 will reflect the HCLPF values for the shield building that uses steel-plated, concrete-filled modules. The revised response for OI-SRP19.0-SPLA-12 is scheduled for Mid-December, 2009.

Design Control Document (DCD) Revision: None

PRA Revision: None

Technical Report (TR) Revision: None

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-SRP19.0-SPLA-22
Revision: 0

Question:

The effects of soil-structure interaction (SSI) are now addressed in the DCD, while the previous revision did not consider SSI because it was a fixed-base model for a hard-rock site. The proposed design addresses sites ranging from soft soil to hard rock. When considering the current estimates of seismic hazard for the central and eastern United States, peak ground acceleration values may be higher than those previously considered. When peak ground acceleration is coupled with SSI effects there can be increased seismic demands on structures such as the shield building, in terms of bending and horizontal shear response. Describe how SSI effects are taken into account in the HCLPF values provided in Table 19.55-1.

Westinghouse Response:

Westinghouse has agreed to revise Table 19.55-1 of DCD Section 19.55.2 in a revised response to OI-SRP19.0-SPLA-12. The revised response will reflect the HCLPF values for the soil sites as well as the hard rock sites. The revised response for OI-SRP19.0-SPLA-12 is scheduled for Mid-December, 2009.

Design Control Document (DCD) Revision: None

PRA Revision: None

Technical Report (TR) Revision: None