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Your ref: Docket Number 52-006
Our ref: DCP_NRC_003046

September 29, 2010

Subject: Revised RAI Response to RAI-SRP3.9.1-EMB-03, Rev. 2

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.

Westinghouse requests that the NRC withdraw the response to RAI-SRP3.9.1-EMB-03, Rev. 2, transmitted March 5, 2009 via letter DCP/NRC2398 and replace it with the attached revision. This revision removes the DCD markup that adds WESTEMS to Table 3.9-15 of the DCD. The analyses in question in the subject RAI have been identified as COL information item 3.9-7 in the DCD and will not be addressed within the scope of the Design Certification Amendment.

With the removal of WESTEMS from the AP1000 Design Certification Review, Westinghouse requests the NRC to retract the following SER Open Items pertaining to WESTEMS:

OI-SRP3.9.1-EMB-05
OI-SRP3.9.1-EMB-07

The NRC issued three additional SER open items on WESTEMS (OI-SRP3.9.1-EMB-03, OI-SRP3.9.1-EMB-04, OI-SRP3.9.1-EMB-06), but the responses submitted by Westinghouse have been found to be satisfactory by the NRC in order to close them.

Enclosure 1 provides the response for the following RAI:

RAI-SRP3.9.1-EMB-03 R2

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.

DO63
NR0

Very truly yours,



R. F. Ziesing
Director, U.S. Licensing

/Enclosure

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

cc:	P. Clark	- U.S. NRC	1E
	D. Jaffe	- U.S. NRC	1E
	E. McKenna	- U.S. NRC	1E
	T. Spink	- TVA	1E
	P. Hastings	- Duke Energy	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
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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 SRP3.9.1-EMB1-03
Revision: 2

Question:

During the on-site technical review held the week of October 20, 2008, of ASME Class 1 piping for the AP1000 DCA, the NRC staff found the applicant used a computer program called WESTEMS for fatigue analysis of seismic Category I components and supports. This program is not discussed in subsection 3.9.1.2 of the DCD, nor is it contained in Table 3.9-15. The Staff requests that the applicant address this DCD conformance issue.

Additional question:

As a result of the on-site technical review on October 20, 2008, the NRC staff found that the fatigue analyses for the design of AP1000 seismic Category I components and supports were performed using a computer program called WESTEMS, which was not discussed in the AP1000 DCD subsection 3.9.1.2, "Computer Code Used in Analyses," nor listed in Table 3.9-15, "Computer Programs for Seismic Category I Components."

In its response to the staff's RAI-SRP3.9.1-EMB1-03, Westinghouse indicated that the DCD will be revised to add WESTEMS computer program to Table 3.9-15. Since the program has been used for design of AP1000 Seismic Cat I components, confirm whether the computer code WESTEMS was previously reviewed and approved by the NRC staff. If yes, provide dates and versions of the program that was reviewed and approved by the staff and the prior plant license applications using WESTEMS. If not, Westinghouse is requested to provide evidence of the computer code verification and validation documentation for design of the ASME Class 1, 2 and 3 components and piping in accordance with Appendix B to 10 CFR 50.55a, or ASME code NQA-1 Code. Confirm that the documentation of the computer code WESTEMS is available for staff review. The information should include the author, source code, dated version, and facility; the program users manual and theoretical description, the extent and limitation of the program application; and the benchmarking problems, the QA control and maintenance of the program.

Westinghouse Response:

~~WESTEMS is used for fatigue analysis of seismic Category I components. It is not used for fatigue analysis of supports.~~

~~Westinghouse will revise Table 3.9-15 in the DCD to does not need to be revised to include this fatigue analysis program because the analyses in question are identified as COL information item 3.9-7 in the DCD and are not within the scope of the Design Certification Amendment. Westinghouse will use an appropriate analytical tool for performing the aforementioned analyses and the COL applicant has responsibility to close out the COL information item.~~

~~The text in Section 3.9.1.2 does not need to be revised, because it addresses the verification~~



AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

~~and benchmarking of analysis programs used in standard static and dynamic piping analysis.~~

~~Additional response:~~

Design Control Document (DCD) Revision:

None

PRA Revision:

None

Technical Report (TR) Revision:

None