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Your ref: Docket No. 52-006 Our ref: DCP NRC 002837

March 26, 2010

Subject: AP1000 Response to Request for Additional Information (SRP 6)

Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 6. 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-SRP6.2.2-CIB1-30

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 6

3/25/2010 4:02 PM

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cc:	D. Jaffe	-	U.S. NRC	1E
	E. McKenna	-	U.S. NRC	1E
	P. Donnnelly	-	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
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## ENCLOSURE 1

## Response to Request for Additional Information on SRP Section 6

# AP1000 TECHNICAL REPORT REVIEW

## **Response to Request For Additional Information (RAI)**

RAI Response Number: RAI-SRP6.2.2-CIB1-30 Revision: 0

#### Question:

The ZOI values currently proposed for the AP1000 are 5D for inorganic zinc coatings and 4D for epoxy coatings. These values conform to the NRC staff guidance issued in March 2008 ("NRC Staff Review Guidance Regarding Generic Letter 2004-02 Closure in the Area of Coatings Evaluation"). However, the staff is reviewing new information regarding ZOI testing provided in a Westinghouse letter dated February 12, 2010 that is likely to change the guidance for inorganic zinc. Given this new information, please discuss your plans for addressing impacts on the ZOIs defined for the AP1000. The response should describe the proposed modifications to the DCD and all relevant licensing basis and supporting documents.

### Westinghouse Response:

Westinghouse letter LTR-NRC-10-10, dated February 12, 2010, stated that there was an inconsistency found in the test rig used to perform LOCA zone of influence (ZOI) jet impingement tests. Westinghouse previously used this test data as the basis for the 5D ZOI for inorganic zinc coatings for AP1000. Due to the inconsistencies found in the test rig, Westinghouse is now using a ZOI of 10D for inorganic zinc coatings for evaluating post-LOCA coatings debris generation for the AP1000 design. The 10D ZOI for coatings can be found in the NRC Safety Evaluation Report (SER) on NEI 04-07 (December 2004). The ZOI for epoxy coatings did not change.

This change was captured in Revision 6 of APP-GW-GLE-002 which was submitted to the NRC staff on February 26, 2010. The proposed change to DCD Tier 2, Section 6.3.2.2.7.1, Item 12 was revised to reflect the inorganic zinc ZOI of 10D. Note that the total amount of ZOI coating debris was maintained at 50 pounds; APP-GW-GLE-002 provides justification.

Also, in Section 2.3.2 of APP-GW-GLR-079, Revision 7, the inorganic zinc coatings debris loading from within the ZOI was changed from 10 lbm to 15 lbm. This increased the total coatings debris from within the ZOI from 41.7 lbm to 46.7 lbm, so the assumed coatings debris load of 50 lbm is still bounding.

At the time of the submittal of AP-GW-GLE-002, Revision 6, this RAI had not been received. Therefore, APP-GW-GLE-002, Revision 7 will make reference to this RAI response with respect to changing the inorganic zinc ZOI from 5D to 10D.



# AP1000 TECHNICAL REPORT REVIEW

## **Response to Request For Additional Information (RAI)**

### **Design Control Document (DCD) Revision:**

None

PRA Revision:

None

#### Technical Report (TR) Revision:

APP-GW-GLE-002, Revision 7 will include a reference to the response to RAI-SRP6.2.2-CIB1-30 with respect to changing the inorganic zinc ZOI from 5D to 10D.



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