

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: 412-374-6306 Direct fax: 412-374-5005 e-mail: sterdia@westinghouse.com

Your ref: Project Number 740 Our ref: DCP/NRC1992

September 7, 2007

Subject: AP1000 COL Responses to Requests for Additional Information (TR #97)

In support of Combined License application pre-application activities, Westinghouse is submitting responses to NRC requests for additional information (RAI) on AP1000 Standard Combined License Technical Report 97, APP-GW-GLN-022, Rev. 1, DAS Platform Technology and Remote Indication Change. These RAI responses are submitted as part of the NuStart Bellefonte COL Project (NRC Project Number 740). The information included in the responses is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification.

The responses are provided for requests for additional information RAI-TR97-ICE-01 through RAI-TR97-ICE-03, as agreed upon during a teleconference between Westinghouse and Dave Jaffe on August 14, 2007. These responses complete all requests received to date for Technical Report 97.

Pursuant to 10 CFR 50.30(b), the responses to requests for additional information on Technical Report 97 is submitted as Enclosure 1 under the attached Oath of Affirmation.

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,

Month & Bartlen FOR

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



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/Attachment

1. "Oath of Affirmation," dated September 7, 2007

/Enclosure

1. Responses to Requests for Additional Information on Technical Report No. 97

cc:	D. Jaffe E. McKenna	-	U.S. NRC U.S. NRC	1E 1E	1A 1A
	G. Curtis	-	TVA	1E	1 A
	P. Hastings	-	Duke Power	1 E -	1 A
	C. Ionescu	-	Progress Energy	1E	1 A
	A. Monroe	-	SCANA	1E	1A
	M. Moran	-	Florida Power & Light	1E	1A
	C. Pierce	-	Southern Company	1E	1 A
	E. Schmiech	-	Westinghouse	1E	1 A
	G. Zinke	-	NuStart/Entergy	1E	1 A
	J. Ewald	-	Westinghouse	1E	1A

ATTACHMENT 1

"Oath of Affirmation"

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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.

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W. E. Cummins Vice President Regulatory Affairs & Standardization

Subscribed and sworn to before me this **7**th day of September 2007.

COMMONWEALTH OF PENNSYLVANIA Notarial Seal Patricia S. Aston, Notary Public Murrysville Boro, Westmoreland County My Commission Expires July 11, 2011 Member, Pennsylvania Association of Notarles

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Notary Public

ENCLOSURE 1

Responses to Requests for Additional Information on Technical Report No. 97

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-TR97-ICE-01 Revision: 0

Question:

In TR-97 Section 2.1, 2nd sentence from the end of this section states that the 14 instrumentation signals and the 12 squib valve firing circuits are routed through this containment penetration. IEEE standard 317-1983 requires that electric penetration assembly having conductors of more than one voltage rating in the assembly shall be design with a ground barrier separating the conductors of each voltage rating. Provide an analysis including a sketch of the proposed electric penetration assembly to demonstrate that proper separation between the instrumentation signals and the squib valve firing circuits.

Westinghouse Response:

The instrumentation voltage category is defined as any voltage less than 50 volts. The squib valve firing circuits are 10 volts. This means that the DAS instrumentation signals and the firing circuits are both in the instrumentation range and can be combined in the same penetration.

Design Control Document (DCD) Revision: None

PRA Revision: None

Technical Report (TR) Revision: None



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AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-TR97-ICE-02 Revision: 0

Question:

In TR-97 Section 4.1.1 added the electrical penetration P03 to Table 2.2.1-1. However, many columns marked "-" (means not applicable) for this entrance. Reevaluate these entrances to be properly represented. In staff's opinion, this table should indicate "yes" for remotely operated valve, "yes" for safety related display, "yes" for control PMS/DAS, and define proper entrances for "Active Function" and "Loss of Motive Power Position."

Westinghouse Response:

The table in question is in the Tier 1 section "System Based Design Descriptions and ITACC." The sub-section is containment, so the table listing must be viewed in reference to the containment aspects of the Equipment. From this perspective the physical construction of the penetration is being evaluated, not the associated components that are supplied or connected to the wires running through the penetration. Therefore the penetration itself would not have an operation, indication, or active function.

Design Control Document (DCD) Revision: None

PRA Revision: None

Technical Report (TR) Revision: None



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AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-TR97-ICE-03 Revision: 0

Question:

In TR-97 Section 4.2.5 Figure 7.2-1 update. Note 4 was not in DCD Revision 15, but is in DCD Revision 16. Note 5 was not in DCD Revision 15 and Revision 16. Is there a DCD Revision 17 in the future date?

Westinghouse Response:

TR-97 should say "Add Note 4." Therefore TR-97 will be revised to reflect this. TR-97 should state that the additional portion of Note 4 and all of Note 5 is to be added in the next revision. Therefore TR-97 will be revised to reflect this.

Design Control Document (DCD) Revision:

None

PRA Revision: None

Technical Report (TR) Revision:

4.2.5 Figure 7.2-1

Revise Figure 7.2-1 (Sheet 20) as follows:

In DCD Revision 16

Add Note 4 to read: "Note 4. Logical "and" function performed by squib valve controller."

In the next DCD Revision

Revise Note 4 to read: "Note 4. Logical "and" function performed by squib valve controller. Additional manual squib valve capability provided at the squib valve control panel."

Add Note 5 to read: "Note 5. Indication is provided in the main control room and at the DAS instrumentation cabinet."



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