



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](mailto:sterdia@westinghouse.com)

Your ref: Project Number 740  
Our ref: DCP/NRC1918

June 4, 2007

Subject: AP1000 COL Response to Requests for Additional Information (TR #39)

In support of Combined License application pre-application activities, Westinghouse is submitting another set of responses to NRC requests for additional information (RAI) on AP1000 Standard Combined License Technical Report 39, APP-GW-GLN-004, Rev. 0, Instrumentation and Control Design Changes. 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 TR39-ICE1-01 and TR39-ICE1-02, transmitted by email dated May 4, 2007 from David Jaffe to Don Lindgren.

Pursuant to 10 CFR 50.30(b), the responses to requests for additional information on Technical Report 39 are submitted as Enclosure 1 under the attached Oath of Affirmation. The detailed requests for additional information are included with the appropriate responses in Enclosure 1.

It is expected that when the RAIs on Technical Report 39 are complete, the technical report will be revised as indicated in the responses and submitted to the NRC. The RAI responses will be included in the document.

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

/Attachment

1. "Oath of Affirmation," dated June 4, 2007

/Enclosure

1. Response to Requests for Additional Information on Technical Report No. 39

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

ATTACHMENT 1

“Oath of Affirmation”

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.



W. E. Cummins  
Vice President  
Regulatory Affairs & Standardization

Subscribed and sworn to  
before me this 4<sup>th</sup> day  
of June 2007.

COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Debra McCarthy, Notary Public  
Monroeville Boro, Allegheny County  
My Commission Expires Aug. 31, 2009  
Member, Pennsylvania Association of Notaries

  
Notary Public

ENCLOSURE 1

Responses to Requests for Additional Information on Technical Report No. 39

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

---

RAI Response Number: RAI-TR39-ICE1-01  
Revision: 0

### **Question:**

The February response to the NRC Request for Additional Information (RAI) stated, "... page connects were changed to more easily show what function on a connecting page a signal goes to or comes from". While this is helpful, in Figure 7.2-1 the lack of a unique output signal label or number on a sheet that exactly matches the corresponding input signal label or number on a connecting sheet (good human factors engineering practice) left some uncertainties. The NRC staff added a number to each output signal in Figure 7.2-1, as "(APP PMS J1 119 - 3)" and checked that each output signal had a corresponding input signal on the connecting sheet. In Figure 7.2-1 Sheet 13 of 20 [Revised Version] an output signal is labeled "RNS CONTAINMENT ISOLATION (APP PMS J1 119)". Please identify the exact input signal on Sheet 19 corresponding to this output signal from Sheet 13. How will the labeling inconsistency be addressed?

### **Westinghouse Response:**

The discrepancy arises from the fact that the Figure 7.2-1 sheets are derived from the APP-PMS-J1 drawings and the references shown on Figure 7.2-1 sheets are tied to these parent drawings and not the sheets. Westinghouse has provided a cross reference table to match the APP-PMS-J1 drawing to its corresponding Figure 7.2-1 sheet. The table shown on the next page is included in Revision 16 of the DCD.

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

---

Reference:

None

### Design Control Document (DCD) Revision:

Final Paragraph of Section 7.2.1:

Figure 7.2-1 sheets are derived from the APP-PMS-J1 drawing and the references shown on Figure 7.2-1 sheets are tied to these parent drawings and not the sheets. Table 7.2-5 provides a cross reference to match the APP-PMS-J1 drawing to its corresponding Figure 7.2-1 sheet.

Table 7.2-5

<b>FIGURE 7.2-1 CROSS REFERENCES</b>	
<b>APP-PMS-J1 Drawing Number</b>	<b>Figure 7.2-1 Sheet Number</b>
APP-PMS-J1-101	1
APP-PMS-J1-102	2
APP-PMS-J1-103	3
APP-PMS-J1-104	4
APP-PMS-J1-105	5
APP-PMS-J1-106	6
APP-PMS-J1-107	7
APP-PMS-J1-108	8
APP-PMS-J1-109	9
APP-PMS-J1-110	10
APP-PMS-J1-111	11
APP-PMS-J1-112	12
APP-PMS-J1-113	13
APP-PMS-J1-114	14
APP-PMS-J1-115	15
APP-PMS-J1-116	16
APP-PMS-J1-117	17
APP-PMS-J1-119	18
APP-DAS-J1-102	19
APP-DAS-J1-103	20

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

---

**PRA Revision:**

None

**Technical Report (TR) Revision:**

None



# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

---

RAI Response Number: RAI-TR39-ICE1-02  
Revision: 0

**Question:**

The February response to the NRC Request for Additional Information (RAI) stated "... page connects were changed to more show what function on a connecting page a signal goes to or comes from". In Figure 7.2-1 Sheet 12 of 20 [Revised Version] two output signals do not have these function labels, but just the same labeled (APP PMS J1 111)". One is from the LOW-1 PRESSURIZER WATER LEVEL logic string and the other is from the LOW-2 PRESSURIZER WATER LEVEL logic string. On Sheet 11 the corresponding input signal was identified for the signal from the LOW-2 PRESSURIZER WATER LEVEL logic string. Please identify the exact input signal on Sheet 11 for the output signal from the LOW-1 PRESSURIZER WATER LEVEL logic string. How will the labeling inconsistency be addressed?

**Westinghouse Response:**

The Low-1 signal is incorrect and has been corrected. This as well as other changes to Sheet 12 of Figure 7.2-1 are detailed in TR-80.

**Reference:**

None

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

None

**PRA Revision:**

None

**Technical Report (TR) Revision:**

None