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/NRC1811

December 18, 2006

Subject: AP1000 COL Response to Request for Additional Information (TR #36)

In support of Combined License application pre-application activities, Westinghouse is submitting a response to the NRC request for additional information (RAI) on AP1000 Standard Combined License Technical Report 36, APP-GW-GLR-016, Rev. 0, Pressurizer Configuration. This RAI response is submitted as part of the NuStart Bellefonte COL Project (NRC Project Number 740). The information included in the response is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification.

A response is provided for request TR36-12, transmitted in NRC letter dated October 16, 2006 (ML062840413) from Steven D. Bloom to Andrea Sterdis, Subject: Westinghouse AP1000 Combined License (COL) Pre-application Technical Report 36 – Request for Additional Information (TAC No. MD2109) (Please note that in this letter, the RAI was incorrectly numbered TR36-11, there was already a TR36-11).

Pursuant to 10 CFR 50.30(b), the response to request for additional information on Technical Report 36 numbered RAI-TR36-012 is submitted as Enclosure 1 under the attached Oath of Affirmation.

It is expected that when the RAI on Technical Report 36 is complete, the technical report will be revised as indicated in the response and submitted to the NRC. The RAI response 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,

Monte D Bartley FOR

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

D079

/Attachment

1. "Oath of Affirmation," dated December 18, 2006

/Enclosure

1. Response to Request for Additional Information on Technical Report No. 36, RAI-TR36-012

cc:	S. Bloom	-	U.S. NRC	1E	1A
	S. Coffin	-	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

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	)

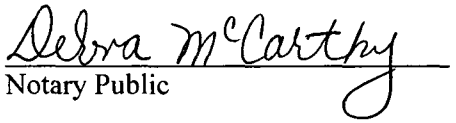
APPLICATION FOR REVIEW OF
"AP1000 GENERAL COMBINED LICENSE INFORMATION"
FOR COL APPLICATION PRE-APPLICATION REVIEW

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 18th day
of December 2006.

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

Response to Request for Additional Information on Technical Report No. 36

RAI-TR36-012

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-TR36-012
Revision: 0

Question:

In the request for additional information (RAI) response in the Enclosure 1 to September 22, 2006 letter, Westinghouse qualitatively discussed the effects of the pressurizer design changes on the depressurization and Automatic Depressurization System (ADS) flow rates, and categorically stated the chapter 15 analysis remains valid and bounding.

The pressurizer changes affect many parameters such as the cross-sectional area of the pressurizer, pressurizer vessel height, initial pressurizer water level, pressurizer setpoints, ADS stages 1, 2, and 3 elevation and pressurizer heater length. We are concerned about the combined effects of the values changed for the above parameters on the thermal hydraulic response during transient and accident conditions. We determined that the qualitative statement in the RAI response is not sufficient to resolve the RAI issue. We request Westinghouse perform the quantitative analyses for the limiting event for each of the following Standard Review Plan chapter 15 event categories:

(1) increased heat removal from the primary system
(2) decreased heat removal by the secondary system
(3) decreased reactor coolant system flow
(4) reactivity and power distribution anomalies
(5) increase in reactor coolant inventory
(6) decrease in reactor coolant inventory including loss-of-coolant accidents
(7) anticipated transients without scram

and demonstrate that the applicable acceptance criteria for each limiting event are met or the existing analysis is bounding.

Westinghouse Response:

Westinghouse will perform quantitative analyses of the limiting events to demonstrate that the pressurizer design change does not significantly impact the Chapter 15 analysis results.

Design Control Document (DCD) Revision:
None

PRA Revision:
None

Technical Report (TR) Revision:
None