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U.S. Nuclear Regulatory Commission  
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Your ref: Project Number 740  
Our ref: DCP/NRC1758

June 30, 2006

Subject: AP1000 COL Standard Technical Report Submittal

In support of Combined License application pre-application activities, Westinghouse is submitting AP1000 Standard Combined License Technical Report. This report completes and documents, on a generic basis, activities required for COL Information Item 7.2-1 in the AP1000 Design Control Document. This report is submitted as part of the NuStart Bellefonte COL Project (NRC Project Number 740). The information included in this report is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification.

The purpose for the submittal of this report is explained in a March 8, 2006 letter from NuStart to the U.S. Nuclear Regulatory Commission.

Pursuant to 10 CFR 50.30(b), APP-GW-GLR-018, Rev. 0, "Failure Modes and Effects Analysis and Software Hazards Analysis for AP1000 Protection System," Technical Report Number 43 is submitted as Enclosure 1 under the attached Oath of Affirmation.

It is expected that when the NRC review of this Technical Report 43 is complete, the portion of COL Information Item 7.2-1 requiring information about the methodology used for experience-based qualification and identification of the equipment for which it is used, will be considered complete for all COL applicants referencing the AP1000 Design Certification. The portion of COL Information Item 7.2-1 that requires filing of experience data will be deferred.

Questions or requests for additional information related to the content and preparation of these reports 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 handwritten signature in black ink, appearing to read 'P.A. Sterdis', written over a circular stamp or mark.

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

## /Attachment

1. "Oath of Affirmation," dated June 30, 2006

## /Enclosure

1. APP-GW-GLR-018, Rev. 0, "Failure Modes and Effects Analysis and Software Hazards Analysis for AP1000 Protection System," Technical Report Number 43

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

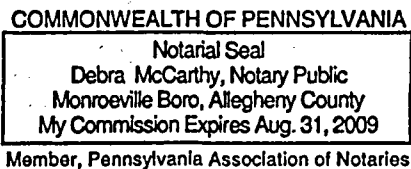
In the Matter of: )  
NuStart Bellefonte COL Project )  
NRC Project Number 740 )

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

Bruce W. Bevilacqua, being duly sworn, states that he is Vice President, New Plants Engineering, 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.

*Bruce W. Bevilacqua*  
Bruce W. Bevilacqua  
Vice President  
New Plants Engineering

Subscribed and sworn to  
before me this 30<sup>th</sup> day  
of June 2006.



\_\_\_\_\_  
Notary Public

DCP/NRC1758  
June 30, 2006

ENCLOSURE 1

APP-GW-GLR-018, Rev. 0

“Failure Modes and Effects Analysis and Software Hazards Analysis for AP1000 Protection System”

Technical Report Number 43

# AP1000 DOCUMENT COVER SHEET

TDC: Permanent File: APY  
RFS#: RFS ITEM #:

AP1000 DOCUMENT NO. APP-GW-GLR-018	REVISION NO. 0	Page 1 of 6	ASSIGNED TO W-Winters
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ALTERNATE DOCUMENT NUMBER: WORK BREAKDOWN #: GW

ORIGINATING ORGANIZATION: Westinghouse Electric Company

TITLE: Failure Modes and Effects Analysis and Software Hazards Analysis for AP1000 Protection System

ATTACHMENTS:	DCP #/REV. INCORPORATED IN THIS DOCUMENT REVISION:
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CALCULATION/ANALYSIS REFERENCE:
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ELECTRONIC FILENAME	ELECTRONIC FILE FORMAT	ELECTRONIC FILE DESCRIPTION
APP-GW-GLR-018a.doc	WORD	Text file

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PATENT REVIEW <i>Frederick L. Carpentino</i>	SIGNATURE/DATE <i>Signature on File</i>

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REVIEWERS <i>LEGAL - J.C. VALENTINE</i>	SIGNATURE/DATE <i>J.C. Valentine</i> 6/29/2006	
VERIFIER D. Lindgren	SIGNATURE/DATE <i>D. Lindgren</i> 6/26/06	VERIFICATION METHOD <i>PAGE BY PAGE REVIEW</i>
AP1000 RESPONSIBLE MANAGER T. Schulz	SIGNATURE <i>T. Schulz</i>	APPROVAL DATE 6/29/06

\* Approval of the responsible manager signifies that document is complete, all required reviews are complete, electronic file is attached and document is released for use.