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Your ref: Docket Number 52-006
Our ref: DCP/NRC2105

March 18, 2008

Subject: AP1000 DCD Impact Document Submittal of APP-GW-GLE-003, Revision 0

Westinghouse is submitting Revision 0 of APP-GW-GLE-003, "Addition of Site Specific System Designator YFS and FPS change for Administration Building." The purpose of this report is to identify changes to the AP1000 Design Control Document (DCD). These DCD changes provide consistency with the current design in respect to the addition of a site-specific fire protection system for construction and for permanent facilities that support plant operations such as the Administration and Maintenance Buildings.

This report is submitted in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information provided in this report is generic and is expected to apply to all Combined Operating License (COL) applicants referencing the AP1000 Design Certification and the AP1000 Design Certification Amendment Application.

Pursuant to 10 CFR 50.30(b), APP-GW-GLE-003, Revision 0, "Addition of Site Specific System Designator YFS and FPS change for Administration Building," is submitted as Enclosure 1 under the attached Oath of Affirmation.

Questions or requests for additional information related to the content and preparation of this report 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 'Robert B. Sisk'.

Robert B. Sisk, Manager
Licensing and Customer Interface
Regulatory Affairs and Standardization

/Attachment

1. "Oath of Affirmation," dated March 18, 2008

/Enclosure

1. APP-GW-GLE-003, Revision 0, "Addition of Site Specific System Designator YFS and FPS change for Administration Building,"

cc:	P. Buckberg	-	U.S. NRC	1E	1A
	E. McKenna	-	U.S. NRC	1E	1A
	P. Ray	-	TVA	1E	1A
	P. Hastings	-	Duke Power	1E	1A
	R. Kitchen	-	Progress Energy	1E	1A
	A. Monroe	-	SCANA	1E	1A
	J. Wilkinson	-	Florida Power & Light	1E	1A
	C. Pierce	-	Southern Company	1E	1A
	G. Zinke	-	NuStart/Entergy	1E	1A
	R. Grumbir	-	NuStart	1E	1A
	G. Adams	-	Westinghouse	1E	1A
	E. Schmiech	-	Westinghouse	1E	1A

ATTACHMENT 1

“Oath of Affirmation”

ATTACHMENT 1

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of:)
AP1000 Design Certification Amendment Application)
NRC Docket Number 52-006)

APPLICATION FOR REVIEW OF
"AP1000 GENERAL INFORMATION"
FOR AP1000 DESIGN CERTIFICATION AMENDMENT APPLICATION REVIEW

W. E. Cummins, being duly sworn, states that he is Vice President, Regulatory Affairs and 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 and Standardization

Subscribed and sworn to
before me this 18th day
of March 2008.

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal
Patricia S. Aston, Notary Public
Murrysville Boro, Westmoreland County
My Commission Expires July 11, 2011

Member, Pennsylvania Association of Notaries



Notary Public

ENCLOSURE 1

APP-GW-GLE-003

Revision 0

“Addition of Site Specific System Designator YFS and FPS change for Administration Building”

AP1000 DOCUMENT COVER SHEET

TDC: _____ Permanent File: _____

AP1000 DOCUMENT NO. APP-GW-GLE-003	REVISION 0	PAGE 1 of 6	ASSIGNED TO W-ADAMS	OPEN ITEMS (Y/N) N
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ALTERNATE DOCUMENT NUMBER: n/a

WORK BREAKDOWN #:

ORIGINATING ORGANIZATION: AP1000 Licensing & Cust. Interface

TITLE: Addition of Site Specific System Designator YFS and FPS change for Administration Building

ATTACHMENTS:

None

DCP #/REV. INCORPORATED IN THIS DOCUMENT REVISION:

APP-GW-GEE-362 Rev.0

CALCULATION/ANALYSIS REFERENCE:

None

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LEGAL REVIEW T. J. White	SIGNATURE / DATE <i>T. J. White</i> 3-17-08
PATENT REVIEW Doug Ekereth	SIGNATURE / DATE <i>Doug Ekereth</i> 3/14/08

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ORIGINATOR(S) S. Adams	SIGNATURE / DATE <i>S. Adams</i> 3-12-08
REVIEWER(S) G. Adams	SIGNATURE / DATE <i>G. Adams</i> 3-12-08
	SIGNATURE / DATE
	SIGNATURE / DATE
VERIFIER(S) Don Lindgren	SIGNATURE / DATE <i>Don Lindgren</i> 3/14/08
	Verification Method: Independent Review <i>PAGE BY PAGE REVIEW</i>

**Plant Applicability: ☒ All AP1000 plants except: No Exceptions☐ Only the following plants: _____

APPLICABILITY REVIEWER** J. A. Speer	SIGNATURE / DATE <i>J. A. Speer</i> 3/14/08
RESPONSIBLE MANAGER* R. Sisk	SIGNATURE / DATE <i>R. Sisk</i> 3/17/08

* Approval of the responsible manager signifies that the document and all required reviews are complete, the appropriate proprietary class has been assigned, electronic file has been provided to the EDMS, and the document is released for use.

*** Electronically approved records are authenticated in the electronic document management system.

Document Number: APP-GW-GLE-003

Revision Number: 0

Title: Addition of Site Specific System Designator YFS and FPS change for Administration Building

Brief Description of the Impact (what is being changed and why):

The need for an AP1000 System Designator to be assigned to a site specific system was identified. It allows the use of the Westinghouse numbering methodology to be consistent through the AP1000 design for systems not in the Westinghouse scope.

Table 1.7-2 of the DCD currently lists several system designators that are partially or wholly out of the scope of the AP1000 design certification. The proposed new designator will be for the Yard Fire Water System (YFS) which is wholly out of Westinghouse scope.

Figure 9.5.1-1 (sheet 2 of 3) of the DCD, Piping and Instrumentation Diagram currently identifies the Administration Building as being supplied from the Standard Plant Fire Protection System (FPS). This building feed is deleted from the Standard Plant FPS scope.

SRP Section Impacted:

Impacts Section 9.5.1 of the Standard Review Plan (SRP).

This evaluation is prepared to document the Design Control Document (DCD) changes to Table 1.7-2 and Figure 9.5.1-1 (sheet 2 of 3). These changes are intended to be included in the revision 17 of the DCD or be included as generic information in plant specific FSARs.

I. TECHNICAL DESCRIPTION

The YFS is not described or contained in the identified AP1000 scope. This system is site specific.

The AP1000 requirements do not address meeting fire protection requirements during construction other than reference to National Fire Protection Association (NFPA) code 804, nor does it address permanent facilities to support plant operations (circulating water, raw water, maintenance, administration buildings, switchyard(s) and others). The Nuclear Electric Insurance Limited (NEIL) Standard presents loss prevention requirements for those construction and permanent facilities.

To ensure no impact to the FPS, as presented in the AP1000 DCD, and still meet the different requirements of permanent plant facilities, the YFS is being designed to be a separate and independent system from the FPS system. These differing requirements originate from the DCD, NEIL, State and Building Codes, and NFPA Code requirements.

II. JUSTIFICATION

The YFS is being designed and installed as a completely separate system solely meeting the NEIL, State, Local and property protection requirements and does not require any part of the FPS functionality or supplementation, thereby eliminating the potential impact to the currently approved FPS design.

In an attempt to provide a consistent numbering system for the Owners, this system needs to be assigned a system designator (YFS) consistent with the Westinghouse methodology.

YFS will be used for fire protection during construction activities and for permanent site-specific facilities that are not covered in the DCD such as the Administration and Maintenance Buildings.

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III. REGULATORY IMPACT

- A. EVALUATION OF DEPARTURE FROM TIER 2 INFORMATION (Check correct response and provide justification for that determination under each response)

10 CFR Part 52, Appendix D, Section VIII. B.5.a. provides that an applicant for a combined licensee who references the AP1000 design certification may depart from Tier 2 information, without prior NRC approval, if it does not require a license amendment under paragraph B.5.b. The questions below address the criteria of B.5.b.

1. Does the proposed departure result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the plant-specific DCD? ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system do not alter accident precursors or the design function of the FPS.

2. Does the proposed departure result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety and previously evaluated in the plant-specific DCD? ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system do not increase the likelihood of an occurrence of a malfunction of a structure, system, or component important to safety. The addition of the YFS system designator and the associated changes to the FPS system will not effect accident precursors.

3. Does the proposed departure result in more than a minimal increase in the consequences of an accident previously evaluated in the plant-specific DCD? ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system do not alter the design function of the FPS or increase the consequences of an accident previously evaluated in the plant-specific DCD.

4. Does the proposed departure result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the plant-specific DCD? ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system do not increase the consequences of a malfunction of an SSC important to safety previously evaluated in the plant-specific DCD.

5. Does the proposed departure create a possibility for an accident of a different type than any evaluated previously in the plant-specific DCD? ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system do not alter the design function of the FPS. The addition of the YFS system designator and the associated changes to the FPS system do not add or modify accident precursors.

6. Does the proposed departure create a possibility for a malfunction of an SSC important to safety with a different result than any evaluated previously in the plant-specific DCD? ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system do not alter operating conditions or design functions of SSCs important to safety. Therefore there is no new malfunction.

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7. Does the proposed departure result in a design basis limit for a fission product barrier as described in the plant-specific DCD being exceeded or altered? ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system do not alter the pressure boundary integrity design function of the reactor coolant system or other SSCs important to safety.

8. Does the proposed departure result in a departure from a method of evaluation described in the plant-specific DCD used in establishing the design bases or in the safety analyses? ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system do not alter the methodology of the evaluation of the pressure boundary integrity of the safety analysis.

B. IMPACT ON RESOLUTION OF A SEVERE ACCIDENT ISSUE

10 CFR Part 52, Appendix D, Section VIII. B.5.a. provides that an applicant for a combined licensee who references the AP1000 design certification may depart from Tier 2 information, without prior NRC approval, if it does not require a license amendment under paragraph B.5.c. The questions below address the criteria of B.5.c.

1. Does the proposed activity result in an impact to features that mitigate severe accidents. If the answer is Yes answer Questions 2 and 3 below. ☐ YES ☒ NO

There is no change to the response of safety systems used to mitigate severe accidents due to the addition of the YFS system designator and the associated changes to the FPS system.

2. Is there is a substantial increase in the probability of a severe accident such that a particular severe accident previously reviewed and determined to be not credible could become credible? ☐ YES ☐ NO ☒ N/A

3. Is there is a substantial increase in the consequences to the public of a particular severe accident previously reviewed? ☐ YES ☐ NO ☒ N/A

C. SECURITY ASSESSMENT

1. Does the proposed change have an adverse impact on the security assessment of the AP1000. ☐ YES ☒ NO

The addition of the YFS system designator and the associated changes to the FPS system will not alter barriers or alarms that control access to protected areas of the plant.

D. OTHER REGULATORY CRITERIA

N/A

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IV. DCD MARK-UP

1. Introduction and General Description of the Plant AP1000 Design Control Document

Table 1.7-2 (Sheet 3 of 3)

AP1000 SYSTEM DESIGNATORS AND SYSTEM DIAGRAMS

Designator	System (Note 1)	DCD Section	DCD Figure (Note 2)
TDS	Turbine Island Vents, Drains and Relief System	9.2.9.2.2, 10.4.2.2.1, 10.4.3.1.2, 10.4.3.2.2, 10.4.6.3	None
TOS	Main Turbine Control and Diagnostics System	10.2.2.4	None
TVS	Closed Circuit TV System (Wholly out of scope)	None	None
VAS	Radiologically Controlled Area Ventilation System	9.4.3	9.4.3-1
VBS	Nuclear Island Nonradioactive Ventilation System	9.4.1	9.4.1-1
VCS	Containment Recirculation Cooling System	9.4.6	9.4.6-1
VES	Main Control Room Emergency Habitability System	6.4	6.4-2
VFS	Containment Air Filtration System	9.4.7	9.4.7-1
VHS	Health Physics and Hot Machine Shop HVAC System	9.4.11	9.4.11-1
VLS	Containment Hydrogen Control System	6.2.4	6.2.4 - various
VRS	Radwaste Building HVAC System	9.4.8	9.4.8-1
VTB	Turbine Building Ventilation System	9.4.9	9.4.9-1
VLS	Containment Leak Rate Test System	6.2.5	6.2.5-1
VWS	Central Chilled Water System	9.2.7	9.2.7-1
VXS	Annex/Auxiliary Non-Radioactive Ventilation System	9.4.2	9.4.2-1
VYS	Hot Water Heating System	9.2.10	None
VZS	Diesel Generator Building Ventilation System	9.4.10	9.4.10-1
WGS	Gaseous Radwaste System	11.3	11.3-2
WLS	Liquid Radwaste System	11.2	11.2-2
WRS	Radioactive Waste Drain System	9.3.5, 11.2	9.3.5-1
WSS	Solid Radwaste System	11.4	11.4-1
WWS	Waste Water System (Partially out of scope)	9.2.9	None
YFS	Yard Fire Water System (Wholly out of scope)	None	None
ZAS	Main Generation System (Note 3)	8.1	None
ZBS	Transmission Switchyard and Offsite Power System (Wholly out of scope)	8.2	None
ZOS	Onsite Standby Power System	8.2.1, 8.3.1	8.3.1-4, 8.3.1-5
ZVS	Excitation and Voltage Regulation System	10.2.2.3	None

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Revision Number: 0

Remove Administration Building Feed From Figure 9.5.1-1 (Sheet 2 of 3)

