



Westinghouse Electric Company  
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U.S. Nuclear Regulatory Commission  
ATTENTION: Document Control Desk  
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Your ref: Docket No. 52-006  
Our ref: DCP\_NRC\_003003

August 6, 2010

Subject: AP1000 Response to Request for Additional Information (SRP 19)

Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 19. These RAI responses are submitted in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information included is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification and the AP1000 Design Certification Amendment Application.

Responses are provided for:

RAI-SRP19F-AIA-02  
RAI-SRP19F-AIA-03  
RAI-SRP19F-AIA-04  
RAI-SRP19F-AIA-05  
RAI-SRP19F-AIA-06

RAI-SRP19F-AIA-07  
RAI-SRP19F-AIA-08  
RAI-SRP19F-AIA-09  
RAI-SRP19F-AIA-10

Enclosure 1 contains sensitive unclassified non-safeguards information relative to the physical protection of an AP1000 Nuclear Power Plant that should be withheld from public disclosure pursuant to 10 CFR 2.390(d). Enclosure 2 provides the redacted version (public version).

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 handwritten signature in black ink, appearing to read 'Robert Sisk'.

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

/Enclosure

DO63  
NRD

## 1. Security Related Information – Withhold Under 10 CFR 2.390

RAI-SRP19F-AIA-02  
RAI-SRP19F-AIA-03  
RAI-SRP19F-AIA-04  
RAI-SRP19F-AIA-05  
RAI-SRP19F-AIA-06  
RAI-SRP19F-AIA-07  
RAI-SRP19F-AIA-08  
RAI-SRP19F-AIA-09  
RAI-SRP19F-AIA-10

## 2. Redacted Version – Withheld Under 10 CFR 2.390

RAI-SRP19F-AIA-02  
RAI-SRP19F-AIA-03  
RAI-SRP19F-AIA-04  
RAI-SRP19F-AIA-05  
RAI-SRP19F-AIA-06  
RAI-SRP19F-AIA-07  
RAI-SRP19F-AIA-08  
RAI-SRP19F-AIA-09  
RAI-SRP19F-AIA-10

cc:	D. Jaffe	- U.S. NRC	1E
	E. McKenna	- U.S. NRC	1E
	S. Sanders	- U.S. NRC	1E
	T. Spink	- TVA	1E
	P. Hastings	- Duke Power	1E
	R. Kitchen	- Progress Energy	1E
	A. Monroe	- SCANA	1E
	P. Jacobs	- Florida Power & Light	1E
	C. Pierce	- Southern Company	1E
	E. Schmiech	- Westinghouse	1E
	G. Zinke	- NuStart/Entergy	1E
	R. Grumbir	- NuStart	1E
	T. Ray	- Westinghouse	1E

ENCLOSURE 2

Redacted Version – Withheld Under 10 CFR 2.390

RAI-SRP19F-AIA-02  
RAI-SRP19F-AIA-03  
RAI-SRP19F-AIA-04  
RAI-SRP19F-AIA-05  
RAI-SRP19F-AIA-06  
RAI-SRP19F-AIA-07  
RAI-SRP19F-AIA-08  
RAI-SRP19F-AIA-09  
RAI-SRP19F-AIA-10

## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-02  
Revision: 0

**Question:**

SRI

**Westinghouse Response:**

SRI

## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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SRI

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

See RAI-SRP19F-AIA-01 for DCD markup of Section 19F.4.3.

**PRA Revision: None**

**Technical Report (TR) Revision: None**

REDACTED VERSION – WITHHELD UNDER 10 CFR 2.390

## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-03  
Revision: 0

**Question:**

SRI

**Westinghouse Response:**

SRI



Westinghouse

RAI-SRP19F-AIA-03  
Page 1 of 2

**REDACTED VERSION – WITHHELD UNDER 10 CFR 2.390**

## **AP1000 TECHNICAL REPORT REVIEW**

### **Response to Request For Additional Information (RAI)**

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

See RAI-SRP19F-AIA-01 for DCD markup of Section 19F.4.2 and Section 19F.4.4.

**PRA Revision:** None

**Technical Report (TR) Revision:** None



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RAI-SRP19F-AIA-03  
Page 2 of 2

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## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-04  
Revision: 0

**Question:**

SRI

**Westinghouse Response:**

SRI



**Westinghouse**



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## AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

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SRI



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

See RAI-SRP19F-AIA-01 for DCD markup of Section 19F.4.2.

**PRA Revision:** None

**Technical Report (TR) Revision:** None



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## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-05  
Revision: 0

**Question:**

[Redacted content]

SRI

**Westinghouse Response:**

[Redacted content]

SRI

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

See RAI-SRP19F-AIA-01 for DCD markup of Section 19F.4.2.

**PRA Revision:** None

**Technical Report (TR) Revision:** None



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## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-06  
Revision: 0

**Question:**

[Redacted Question Content]

SRI

**Westinghouse Response:**

[Redacted Westinghouse Response Content]

SRI

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

See RAI-SRP19F-AIA-01 for DCD markup of Sections 19F.4.1 and 19F.4.2.

**PRA Revision:** None

**Technical Report (TR) Revision:** None

REDACTED VERSION – WITHHELD UNDER 10 CFR 2.390

## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-07  
Revision: 0

**Question:**

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SRI

**Westinghouse Response:**

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SRI

**Design Control Document (DCD) Revision:** None

**PRA Revision:** None

**Technical Report (TR) Revision:** None

REDACTED VERSION – WITHHELD UNDER 10 CFR 2.390

## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-08  
Revision: 0

**Question:**

	SRI
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**Westinghouse Response:**

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

See RAI-SRP19F-AIA-01 for DCD markup of Sections 19F.4.2 and 19F.4.6.

**PRA Revision:** None

**Technical Report (TR) Revision:** None



**Westinghouse**

## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-09  
Revision: 0

**Question:**

[Redacted content]

SRI

**Westinghouse Response:**

[Redacted content]

SRI

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

Section 9.5.1.2.1.1

Outside of the primary containment and the main control room, the arrangement of plant equipment and routing of cable are such that safe shutdown can be achieved with all components (except those protected by 3-hour fire barriers) in any one fire area rendered inoperable by fire.

Openings and penetrations through fire barriers are protected in accordance with the guidelines of BTP CMEB 9.5-1. Penetrations through the following fire barriers are rated to withstand a differential pressure of 5 psid to support the conclusions in Appendix 19F:

- Wall 1 between column lines 4 and 5 from elevation 117'6" to 153'0"
- Wall 5 from elevation 100'0" to 153'0" These locations are depicted on DCD Figure 1.2-9, Nuclear Island General Arrangement Plan at Elevation 117'-6" with Equipment

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## **AP1000 TECHNICAL REPORT REVIEW**

### **Response to Request For Additional Information (RAI)**

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The fire protection analysis contains a description of plant fire areas, fire zones, fire barriers, and the protection of fire barrier openings, as well as a description of the separation between redundant safe shutdown components.

**PRA Revision: None**

**Technical Report (TR) Revision: None**



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RAI-SRP19F-AIA-09  
Page 2 of 2

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## AP1000 TECHNICAL REPORT REVIEW

### Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP19F-AIA-10  
Revision: 0

**Question:**

SRI

**Westinghouse Response:**

SRI

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

Please refer to RAI-SRP19F-AIA-01 for the complete DCD markup.

**PRA Revision:** None

**Technical Report (TR) Revision:** None