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Your ref: Project Number 740  
Our ref: DCP/NRC1975

August 21, 2007

Subject: AP1000 COL Responses to Requests for Additional Information (TR #52)

In support of Combined License application pre-application activities, Westinghouse is submitting responses to NRC requests for additional information (RAI) on AP1000 Standard Combined License Technical Report 52, APP-GW-GLR-010, Rev. 0, AP1000 Main Control Room Staff Roles and Responsibilities. 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 RAI-TR52-COLP-01 through RAI-TR52-COLP-11. These responses constitute a complete set for all RAIs received to date for Technical Report 52.

Pursuant to 10 CFR 50.30(b), the responses to requests for additional information on Technical Report 52 is submitted as Enclosure 1 under the attached Oath of Affirmation.

Questions or requests for additional information related to the content and preparation of these responses 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,

*Mont D. Barthey FOR*

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

/Attachment

1. "Oath of Affirmation," dated August 21, 2007

/Enclosure

1. Responses to Requests for Additional Information on Technical Report No. 52

cc:	D. Jaffe	- U.S. NRC	1E	1A
	E. McKenna	- U.S. NRC	1E	1A
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	C. Pierce	- Southern Company	1E	1A
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	G. Zinke	- NuStart/Entergy	1E	1A
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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 August 21, 2007thorized 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 21<sup>st</sup> day  
of August 2007.

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

Responses to Requests for Additional Information on Technical Report No. 52

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-01  
Revision: 0

### Question:

- A. A review of the TR shows that its scope is limited, in that it only addresses the aspect of the COL item pertaining to operations staff roles and responsibilities. The TR does not yet consider the results of the task analyses. Given this limited scope, the COL item can be partially, but not completely closed. Please confirm if this was the intent.
- B. The TR also does not address the majority of the review criteria in NRC SRP Chap.13.1.2-13.1.3, Operating Organization. Please confirm if this was the intent.

### Westinghouse Response:

- A. Preparation of Rev. 2 of the TR did include a review of OSA-1 (the Operations Sequence Analysis). Please see Rev. 2 of TR-52, Pages 6 and 29. The review of OSA-1 was performed to ensure that assumptions and results of the task analyses scheduled as part of the AP1000 HFE program, and completed to date, were appropriately considered in the TR.
- B. Confirmed. The review criteria in SRP Chapter 13.1.2-13.1.3 are not within the scope of TR-52. This will be addressed by FSAR Section 13.1.2 and 13.1.3 as part of the COL Application.

The intent of TR-52 is to address COL item 18.5-2 in the DCD by documenting "the scope and responsibilities of each main control room position, considering the assumptions and results of the task analysis" (see Section 18.5.4 of the DCD and Page 18-38 of the FSER [top paragraph]). Please see Sections 1 and 3 of Rev. 2 of TR-52 for a more complete statement of the intent.

### Reference:

- 1. APP-GW-GLR-010, Rev. 2, "AP1000 Main Control Room Staff Roles and Responsibilities," Westinghouse Electric Company LLC.

### Design Control Document (DCD) Revision:

None

### PRA Revision:

None

### Technical Report (TR) Revision:

None



# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-02  
Revision: 0

### **Question:**

- A. The TR does not address multiple units. Is the same staff to be applied to each AP1000 unit on a multiple-unit site?
- B. Please provide a summary table that gives the staffing levels for SRO, RO, STA, and AO for each of the 3 conditions covered in the TR (minimum, alternate, and maximum). If different staff levels are proposed for operating at power and shutdown, and for different numbers of units on a site, please include that information in the table as well.
- C. The three assumptions in Section 3.0 (A, B, & C) are a subset of the full licensed staff, but as presented give the initial impression of a staff that does not meet 10CFR50.54(m). Please clarify Section 3.0 assumptions.

### **Westinghouse Response:**

A, B, and C.

Staffing levels are not within the scope of TR-52. As stated in Rev. 2 of TR-52:

"The purpose of this document is to describe the scope and responsibilities for each position of the operating staff in the AP1000 Main Control Room (MCR), with consideration of the assumptions and results of the associated task analyses."  
"The intent of this document, per APP-OCS-GBH-001, 'AP1000 Human Factors Engineering Program Plan' (Reference 1, Section 4.10), is to contribute to the development of APP-OCS-GJR-002, 'Concept of Operations' (Reference 2). The 'Concept of Operations' will define the intended operational use of the AP1000 HSI resources at each MCR position."

Staffing levels for AP1000 will be addressed in Section 13.1 of the FSAR. This will be provided as part of the COL Application. Estimated staff positions for single unit and multiunit sites will be presented in Table 13.1-201 of the FSAR.

### **References:**

- 1. APP-GW-GLR-010, Rev. 2, "AP1000 Main Control Room Staff Roles and Responsibilities," Westinghouse Electric Company LLC.
- 2. APP-OCS-GBH-001, Rev. A, "AP1000 Human Factors Engineering Program Plan," Westinghouse Electric Company LLC.

# **AP1000 TECHNICAL REPORT REVIEW**

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

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

**PRA Revision:**  
None

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



# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-03  
Revision: 0

### **Question:**

The first paragraph of Section 4.1 states that a licensed RO is at the controls of the AP1000 plant at all times in conformance with Regulatory Guide 1.114.

- A. Please clarify that the “main control area” used in the TR is the “at the controls” area defined in RG 1.114.
- B. This statement in Section 4.1 seems to go beyond that required by 10CFR50.54(k) by requiring an operator at the controls also during shutdown. Is this interpretation correct?
- C. Please clarify in the TR if the other aspects of RG 1.114 will be followed (e.g. assignment, relief of operators, etc.). Sufficient detail was not provided in submittal to determine if all or only a portion of the guidance in RG 1.114 will be implemented.

### **Westinghouse Response:**

- A. Correct, the “main control area” used in the TR is the “at the controls” area defined in RG 1.114.
- B. The subject statement was removed from Rev. 2 of TR-52. TR-52 is intended to identify the “roles and responsibilities” of the staff positions. Staffing levels are not within the scope of TR-52. Staffing levels are the responsibility of the COL applicant will be addressed in FSAR Sections 18.6 and 13.1 as part of the COL Application.
- C. These items are beyond the scope of TR-52. It is not intended to determine requirements for the number or qualification of operations staff.

RG 1.114 issues will be addressed in FSAR Section 13.1 as part of the COL Application.

### **Reference:**

- 1. APP-GW-GLR-010, Rev. 2, “AP1000 Main Control Room Staff Roles and Responsibilities,” Westinghouse Electric Company LLC.

# **AP1000 TECHNICAL REPORT REVIEW**

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

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

None

**PRA Revision:**

None

**Technical Report (TR) Revision:**

None

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-04  
Revision: 0

**Question:**

The aspects of NRC regulations that address staffing and duties of reactor operators are included in 50.54 (i) through (m) and seem appropriate to include in this TR. The TR does address subsections (k), (l) and parts of (m) but currently does not address (i), (i-1), (j). Please provide this information.

**Westinghouse Response:**

As explained in the responses to RAIs 1 – 3, these items are beyond the scope of TR-52.

10CFR50.54 compliance will be addressed in Section 13.1 of the FSAR as part of the COL Application.

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

None

**PRA Revision:**

None

**Technical Report (TR) Revision:**

None

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-05  
Revision: 0

**Question:**

TR 52, Section 4.1, plus parts of 4.2, address portions of 50.54(m)(1), portions of (m)(2)(i), and (m)(2)(iii). However, not all parts of 50.54(m) are addressed (e. g., staff during refueling). Please clarify by providing more detail on how the various aspects of 50.54(m) are met.

**Westinghouse Response:**

As explained in the responses to RAIs 1 – 3, these items are beyond the scope of TR-52.

10CFR50.54 compliance will be addressed in Section 13.1 of the FSAR as part of the COL Application.

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

**PRA Revision:**  
None

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

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-06  
Revision: 0

### **Question:**

The third paragraph of Section 4.1 states that an STA is in the plant in accordance with NUREG-0737, Supplement 1 criteria. The STA criteria are in the main volume of NUREG-0737, Item I.A.1.1 not in Supp. 1. Please clarify the reference.

### **Westinghouse Response:**

Determination of the staff requirements needed to perform the STA role and comply with regulatory requirements is beyond the scope of TR-52. This is the responsibility of the COL applicant and will be addressed in FSAR Section 13.1 as part of the COL Application.

The subject statement and reference to NUREG-0737 are not included in Revision 2 of TR-52, since staffing requirements are not in the scope of TR-52. As explained in Section 3.0 of TR-52, Rev. 2:

“...the function of the STA is considered a role that must be performed by the available operating staff and appropriately supported by the OCS HSI design. The intent of the design is to support performance of the STA functions by a staff member dedicated to the STA role if available. If a dedicated STA is not available, the intent of the design is to support performance of the STA functions by a qualified member of the minimal staff set; e.g., the Operations Shift Manager or the MCR Supervisor.”

### **Reference:**

1. APP-GW-GLR-010, Rev. 2, “AP1000 Main Control Room Staff Roles and Responsibilities,” Westinghouse Electric Company LLC.

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

None

### **PRA Revision:**

None

### **Technical Report (TR) Revision:**

None

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-07  
Revision: 0

**Question:**

NRC SRP Chapter 13.0, Section 13.1.2-13.1.3 paragraph II.B.2 states that the responsibilities and authorities of operating organization personnel should conform to the requirements of ANSI N18.7/ANS-3.2, Section 5.2. The most recent version of ANS-3.2 is 1994 and TR 52 addresses most of the responsibilities in Section 5.2. However, a few are not addressed in the TR, e. g., 5.2.1.2(2) and 5.2.1.3(2). Please update TR 52 to include all appropriate operating organization responsibilities of ANS-3.2-1994, Section 5.2.

**Westinghouse Response:**

Organizational responsibilities are not within the scope of TR-52. This will be addressed in FSAR Section 13.1 as part of the COL Application.

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

**PRA Revision:**  
None

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

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-08  
Revision: 0

**Question:**

- A. Section 4.2.2, Main Control Area RO responsibilities, (3) under "Normal Operations" states that the RO identifies less than one hour Technical Specification (TS) action statements when they occur. Why doesn't this responsibility include all TS action statements?
- B. Section 4.2.2, Main Control Area Supervisor responsibilities, (9) under "All Operations" states that the Supervisor tracks inoperable alarms. Why doesn't this also include all active alarms?
- C. Section 4.2.2, Main Control Area Supervisor responsibilities, (1) under "Normal Operations" states that the Supervisor tracks TS LCOs. Why doesn't this also include TS action statements?
- D. Section 4.2.2, Shift Technical Advisor (STA) lists responsibilities for Normal Operations. This does not include the general duty of the STA to be cognizant of plant and equipment status, as noted in NUREG-0737, App. C. Please update.
- E. Section 4.2.2, also lists STA duties and responsibilities for Plant Transients and Emergencies. Item (1) states that the STA reports to the MCA Supervisor. TMI Item I.A.1.1, STA, in NUREG-0737 states that the STA is the on-shift technical advisor to the shift supervisor. Please discuss the decision to have the STA report to a lower level of shift management for AP1000, namely the MCA supervisor.
- F. Section 4.4, MCR Maximum Staffing, Staff Duties and Responsibilities, paragraph 3, states that the NRC and plant management observers will not require HSI devices. These observers will most likely use the existing HSI devices in the MCR. Please clarify this statement (e. g., by inserting "additional" before HSI devices).

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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### Westinghouse Response:

- A. For TR52, Rev. 2, RAI 8A applies to the following item in Section 4.2.2 (RO role for normal operations):

“RO-11. Maintains plant conditions within limitations of plant license and identifies less than one hour technical specification action statements when they occur.”

“Less than one hour technical specification action statements” are called out for the RO role because these are considered to be of immediate concern to the operator at the plant controls. Other key aspects of the RO role with respect to Technical Specifications are identified in RO-12 and RO-17:

“RO-12. Initiates holds during plant evolutions to ensure that the evolution does not threaten plant stability, damage equipment, threaten personnel safety or violate plant Technical Specifications or operating procedures.

RO-17. Understands and maintains system and equipment status required by Technical Specifications for reduced inventory and mid-loop operations during an outage.”

The RO's more general role in monitoring the plant, with respect to Technical Specifications, is addressed by RO-9 and the first part of RO-11. The RO's role regarding more general consideration of Technical Specification action statements is encompassed by these:

“RO-9. Performs operator actions required by system specific or normal (general) operating procedures.

RO-11. Maintains plant conditions within limitations of plant license ...”

Overall tracking and coordination of activities related to the Technical Specifications belongs to the Shift Manager role, per SMGR-1 in Section 4.4.1:

“SMGR-1. Ensures plant operations are conducted in accordance with Technical Specifications and approved procedures.”

Ensuring that associated shift operations are implemented accordingly is the responsibility of the Control Room Supervisor, per MCRS-10 in Section 4.3.2:

“MCRS-10. Ensures shift operations are conducted in accordance with plant procedures and operating license including tracking limiting conditions for operation.”



# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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Although attention to TS action statements is not specifically called out other than in RO-11, appropriate treatment of the TS action statements is encompassed by the above role assignments.

- B. For TR52, Rev. 2, RAI 8B applies to the following item in Section 4.3.1 (MCR Supervisor role for all operations):

“MCRS-7. Tracks inoperable alarms.”

The role of tracking active alarms in general belongs to the Reactor Operator, per RO-1 in Section 4.2.1:

“RO-1d. Performing operator actions required by Alarm Response Procedures.

RO-1e. Prioritizing alarms and interpreting alarm significance.”

The intent of MCRS-7 is to identify that tracking of inoperable alarms is a responsibility of the Control Room Supervisor.

- C. For TR52, Rev. 2, RAI 8C applies to the following item in Section 4.3.2 (MCR Supervisor role for normal operations):

“MCRS-10. Ensures shift operations are conducted in accordance with plant procedures and operating license including tracking limiting conditions for operation.”

As explained above for RAI 8A, although attention to TS action statements is not specifically called out, other than to define the treatment of “less than one hour action statements” in RO-11, appropriate treatment of TS action statements in general is encompassed by the role assignments in RO-12, RO-17, RO-9, SMGR-1 and MCRS-10.

“Tracking limiting conditions” is specifically called out in MCRS-10 because it involves a special activity; i.e., “tracking” (e.g., maintaining awareness of the progressing trend of) the margin to any relevant limiting condition of operation.

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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- D. For TR52, Rev. 2, RAI 8D applies to the following items presented as elements of the STA role in Sections 4.5.1 and 4.5.2:

### “4.5.1 All Operations

STA-1. Assesses possible significant plant abnormalities (e.g., RCS abnormalities) observed during normal operations at the request of the MCR Supervisor.

### 4.5.2 Plant Transients and Emergencies

STA-2. Reports to MCR Supervisor in a technical advisory capacity during emergencies, but has no control or command functions.

STA-3. Independently performs an evaluation of operability of equipment to comply with Technical Specifications.

STA-4. Independently performs investigation of causes of abnormal events and classifies emergency conditions.

STA-5. Independently evaluates effectiveness of AOPs or EOPs to terminate or mitigate events.

STA-6. Independently monitors and validates Critical Safety Function Status Trees and recommends transition to Functional Restoration Procedures.

STA-7. Independently assesses plant parameters to ascertain whether core damage has occurred or is imminent.”

The suggested addition; i.e., for the STA “to be cognizant of plant and equipment status,” is considered an inherent activity for performing the above roles. Maintaining cognizance of the plant and equipment status is also necessary for the Reactor Operator, the Control Room Supervisor and the Shift Supervisor to perform their roles. Therefore, it is considered an inherent requirement for each of the operating staff to perform their respective roles, rather than a role or task to be performed by a specific member.

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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- E. For TR52, Rev. 2, RAI 8E applies to the following item in Section 4.5.2 (STA role for plant transients and emergencies):

“STA-2 Reports to MCR Supervisor in a technical advisory capacity during emergencies, but has no control or command functions.”

The actual reporting structure of the operating staff is outside the scope of TR-52. The staff reporting structure for AP1000 will be addressed in Section 13.1 of the FSAR. This will be provided as part of the COL Application.

The intent of STA-2 is to present the communications role performed by the STA in advising the operating staff who are directly engaged in responding to a plant emergency, based on the current operating experience of personnel who perform these roles in US plants. From this perspective, a key point is that the STA communicates and advises directly with the personnel in the MCA, but does not perform “control or command functions.” These aspects of the STA role may be appropriate considerations when assessing implications for the OCS-HSI design.

- F. For TR52, Rev. 0, RAI 8F applies to the following statement in Section 4.4:

“The NRC observer and the plant management observer do not take active part in operations and will not require HSI devices for their observations of the MCR operations.”

For TR52, Rev. 2, this statement was revised to provide clarification regarding the operations staff interface with the observers based on current operator experience. It now reads (in Section 5.3.2):

“...the Shift Manager will interface with the NRC observer and plant management observer. The observers do not take (an) active part in operations and will not require HSI devices for their observations of the MCR operations.”

HSI resources in the MCR are designed to support the roles of the operating staff. The intent is that no additional HSI devices are needed for the NRC observer or plant management observer to perform their respective roles. They observe the operating staff and the available HSI resources (e.g. the Wall Panel Information System, etc.). Revising the document to add the word “additional” by itself will in no way affect the MCR design or change the HSI resources to support the identified staff roles. The design will meet the intent of this RAI.

# **AP1000 TECHNICAL REPORT REVIEW**

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

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**Reference:**

1. APP-GW-GLR-010, Rev. 2, "AP1000 Main Control Room Staff Roles and Responsibilities,"  
Westinghouse Electric Company LLC.

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

None

**PRA Revision:**

None

**Technical Report (TR) Revision:**

None

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-09  
Revision: 0

### **Question:**

NRC SRP Chapter 13.0, Section 13.1.2-13.1.3 paragraph II.B.3.a states that a shift supervisor (SS) with an SRO license, who is also a member of the station supervisory staff, shall be on site at all times when at least one unit is loaded with fuel. The TR does not address the SS being a member of the station supervisory staff. Please explain/address.

### **Westinghouse Response:**

Determination of requirements for the number and qualification of operating staff is beyond the scope of TR-52. This will be addressed in Section 13.1 of the FSAR as part of the COL Application.

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

**PRA Revision:**  
None

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

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-10  
Revision: 0

### **Question:**

Section 4.5, Remote Shutdown Workstation (RSW) Staffing, Staff Duties and Responsibilities, states that the MCA RO and MCA Supervisor duties remain unchanged from the minimum staffing assumptions (given for these individuals in the MCR). It further notes that operators will not have to mitigate accidents from the RSW. Please provide the basis for the RSW and what actions the operators are expected to perform there, so that one can judge whether the duties from the MCR are sufficient.

### **Westinghouse Response:**

Please refer to Section 7.4.3 of the AP1000 DCD for design basis information for the RSW.

Section 7.4.3.1.1 of the DCD includes the following in its description of the RSW:

“The remote shutdown workstation equipment is similar to the operator workstations in the main control room and is designed to the same standards.

One remote shutdown workstation is provided. The remote shutdown workstation contains controls, displays, and alarms for the safety-related equipment required to establish and maintain safe shutdown. Additionally, control of nonsafety-related components is available, allowing operation and control when ac power is available. The design basis for the remote shutdown workstation does not require the installation of safety-related, dedicated, fixed-position displays, alarms, and controls. The remote shutdown workstation has the same capabilities as the reactor operator’s workstation in the main control room.. The controls, displays, and alarms listed in Table 18.12.2-1 are retrievable from the remote shutdown workstation. Subsection 18.12.3 provides more discussion on the remote shutdown workstation displays, alarms, and controls.

The remote shutdown workstation is provided for use only following an evacuation of the main control room. No actions are anticipated from the remote shutdown workstation during normal, routine shutdown, refueling, or maintenance operations.

The remote shutdown workstation has sufficient communication circuits to allow the operator to effectively establish safe shutdown conditions.”

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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Section 18.12.3 of the DCD provides the following summary regarding RSW displays, alarms, and controls:

“[Subsection 7.4.3 discusses safe shutdown using the remote shutdown workstation following an evacuation of the main control room.

The main control room provides the capability to perform accident mitigation and safe shutdown tasks for design basis events. The only types of events that would require evacuation of the main control room and control from the remote shutdown workstation are localized emergencies where the main control room environment is unsuitable for the operators or where the main control room workstations and equipment become damaged.

Evacuation of the main control room is not expected to occur coincidental with any other design basis events. Subsection 9.5.1 of the Standard Review Plan (NUREG-0800) specifically excludes consideration of other design basis events coincident with a fire.

The design capability for the remote shutdown workstation is to provide the capability to establish and maintain safe shutdown conditions following a main control room evacuation, as described in subsection 7.4.3.1.1. The controls, displays, and alarms listed in Table 18.12.2-1 are retrievable from the remote shutdown workstation.]”

### Design Control Document (DCD) Revision:

None

### PRA Revision:

None

### Technical Report (TR) Revision:

None

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-TR52-COLP-11  
Revision: 0

**Question:**

Slide 45 from the public meeting in Pittsburgh, in Nov. 2006, noted that a revision to TR 52 would be completed in Feb., 2007 based on Westinghouse design review comments. Please provide this revision.

**Westinghouse Response:**

The subject revision, Revision 2 of TR-52, was submitted to the NRC under transmittal letter DCP/NRC 1943, dated June 15, 2007.

Reference:  
None

Design Control Document (DCD) Revision:  
None

PRA Revision:  
None

Technical Report (TR) Revision:  
None