ArevaEPRDCPEm Resource

From: Sent:	WILLIFORD Dennis (AREVA) [Dennis.Williford@areva.com] Wednesday, June 29, 2011 3:16 PM
То:	Tesfaye, Getachew
Cc:	BENNETT Kathy (AREVA); DELANO Karen (AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA); KOWALSKI David (AREVA)
Subject:	Response to U.S. EPR Design Certification Application RAI No.462, FSAR Ch. 6, Supplement 3
Attachments:	RAI 462 Supplement 3 Response US EPR DC.pdf
Importance:	High

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the ten questions in RAI No. 462 on February 25, 2011. Supplement 1 and Supplement 2 responses to RAI No. 462 were sent on April 14, 2011 and May 19, 2011, respectively, to provide a revised schedule.

The attached file, "RAI 462 Supplement 3 Response US EPR DC.pdf" provides a technically correct and complete FINAL response to Question 06.04-5.

Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which supports the response to RAI 462 Question 06.04-5.

The following table indicates the respective pages in the response document, "RAI 462 Supplement 3 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 462 — 06.04-5	2	3

The schedule for technically correct and complete responses to the remaining nine questions has changed and is provided below:

Question #	Response Date
RAI 462 — 06.02.03-7	July 21, 2011
RAI 462 — 06.02.03-8	July 21, 2011
RAI 462 — 06.04-6	July 21, 2011
RAI 462 — 06.04-7	July 21, 2011
RAI 462 — 06.04-8	July 21, 2011
RAI 462 — 06.05.01-2	July 21, 2011
RAI 462 — 06.05.01-3	July 21, 2011
RAI 462 — 06.05.01-4	July 21, 2011
RAI 462 — 06.05.01-5	July 21, 2011

Sincerely,

Dennis Williford, P.E. U.S. EPR Design Certification Licensing Manager AREVA NP Inc.

7207 IBM Drive, Mail Code CLT 2B Charlotte, NC 28262 Phone: 704-805-2223 Email: Dennis.Williford@areva.com From: WELLS Russell (RS/NB)
Sent: Thursday, May 19, 2011 7:19 AM
To: Tesfaye, Getachew
Cc: WILLIFORD Dennis (RS/NB); KOWALSKI David (RS/NB); BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No.462, FSAR Ch. 6, Supplement 2

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the ten questions in RAI No. 462 on February 25, 2011. Supplement 1 response to RAI No. 462 was sent on April 14, 2011 to provide a revised schedule.

A revised schedule for technically correct and complete responses to the ten questions is provided below.

Question #	Response Date
RAI 462 — 06.02.03-7	June 30, 2011
RAI 462 — 06.02.03-8	June 30, 2011
RAI 462 — 06.04-5	June 30, 2011
RAI 462 — 06.04-6	June 30, 2011
RAI 462 — 06.04-7	June 30, 2011
RAI 462 — 06.04-8	June 30, 2011
RAI 462 — 06.05.01-2	June 30, 2011
RAI 462 — 06.05.01-3	June 30, 2011
RAI 462 — 06.05.01-4	June 30, 2011
RAI 462 — 06.05.01-5	June 30, 2011

Sincerely,

Russ Wells U.S. EPR Design Certification Licensing Manager AREVA NP, Inc. 3315 Old Forest Road, P.O. Box 10935 Mail Stop OF-57 Lynchburg, VA 24506-0935 Phone: 434-832-3884 (work) 434-942-6375 (cell) Fax: 434-382-3884 Russell.Wells@Areva.com

From: WELLS Russell (RS/NB)
Sent: Thursday, April 14, 2011 6:23 AM
To: 'Tesfaye, Getachew'
Cc: KOWALSKI David (RS/NB); BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No.462, FSAR Ch. 6, Supplement 1

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the ten questions in RAI No. 462 on February 25, 2011.

To provide additional time to interact with the NRC, a revised schedule is provided in this e-mail.

The schedule for technically correct and complete responses to the ten questions is provided below.

Question #	Response Date
RAI 462 — 06.02.03-7	May 19, 2011
RAI 462 — 06.02.03-8	May 19, 2011
RAI 462 — 06.04-5	May 19, 2011
RAI 462 — 06.04-6	May 19, 2011
RAI 462 — 06.04-7	May 19, 2011
RAI 462 — 06.04-8	May 19, 2011
RAI 462 — 06.05.01-2	May 19, 2011
RAI 462 — 06.05.01-3	May 19, 2011
RAI 462 — 06.05.01-4	May 19, 2011
RAI 462 — 06.05.01-5	May 19, 2011

Sincerely,

Russ Wells U.S. EPR Design Certification Licensing Manager AREVA NP, Inc. 3315 Old Forest Road, P.O. Box 10935 Mail Stop OF-57 Lynchburg, VA 24506-0935 Phone: 434-832-3884 (work) 434-942-6375 (cell) Fax: 434-382-3884 Russell.Wells@Areva.com

From: WELLS Russell (RS/NB)
Sent: Friday, February 25, 2011 2:57 PM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); BRYAN Martin (External RS/NB); KOWALSKI David (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No.462, FSAR Ch. 6

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 462 Response US EPR DC," provides a schedule since technically correct and complete responses to the ten questions are not provided.

The following table indicates the respective pages in the response document, "RAI 462 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 462 — 06.02.03-7	2	2
RAI 462 — 06.02.03-8	3	3

RAI 462 — 06.04-5	4	5
RAI 462 — 06.04-6	6	6
RAI 462 — 06.04-7	7	7
RAI 462 — 06.04-8	8	8
RAI 462 — 06.05.01-2	9	9
RAI 462 — 06.05.01-3	10	10
RAI 462 — 06.05.01-4	11	11
RAI 462 — 06.05.01-5	12	14

The schedule for technically correct and complete responses to these questions is provided below.

Question #	Response Date
RAI 462 — 06.02.03-7	April 14, 2011
RAI 462 — 06.02.03-8	April 14, 2011
RAI 462 — 06.04-5	April 14, 2011
RAI 462 — 06.04-6	April 14, 2011
RAI 462 — 06.04-7	April 14, 2011
RAI 462 — 06.04-8	April 14, 2011
RAI 462 — 06.05.01-2	April 14, 2011
RAI 462 — 06.05.01-3	April 14, 2011
RAI 462 — 06.05.01-4	April 14, 2011
RAI 462 — 06.05.01-5	April 14, 2011

Sincerely,

Russ Wells U.S. EPR Design Certification Licensing Manager **AREVA NP, Inc.** 3315 Old Forest Road, P.O. Box 10935 Mail Stop OF-57 Lynchburg, VA 24506-0935 Phone: 434-832-3884 (work) 434-942-6375 (cell) Fax: 434-382-3884 Russell.Wells@Areva.com

From: Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Wednesday, January 26, 2011 3:04 PM
To: ZZ-DL-A-USEPR-DL
Cc: ODriscoll, James; Jackson, Christopher; McKirgan, John; Carneal, Jason; Colaccino, Joseph; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No.462(5258_5259_5260), FSAR Ch. 6

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on December 8, 2010, and on January 20, 2011, you informed us that the RAI is clear and no further clarification is needed. As a result, no change is made to the draft RAI. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

Thanks, Getachew Tesfaye Sr. Project Manager NRO/DNRL/NARP (301) 415-3361 Hearing Identifier: AREVA_EPR_DC_RAIs Email Number: 3170

Mail Envelope Properties (2FBE1051AEB2E748A0F98DF9EEE5A5D47AF351)

Subject: Supplement 3	Response to U.S. EPR Design Certification Application RAI No.462, FSAR Ch. 6,
Sent Date:	6/29/2011 3:16:10 PM
Received Date:	6/29/2011 3:16:19 PM
From:	WILLIFORD Dennis (AREVA)

Created By: Dennis.Williford@areva.com

Recipients:

"BENNETT Kathy (AREVA)" <Kathy.Bennett@areva.com> Tracking Status: None "DELANO Karen (AREVA)" <Karen.Delano@areva.com> Tracking Status: None "ROMINE Judy (AREVA)" <Judy.Romine@areva.com> Tracking Status: None "RYAN Tom (AREVA)" <Tom.Ryan@areva.com> Tracking Status: None "KOWALSKI David (AREVA)" <David.Kowalski@areva.com> Tracking Status: None "Tesfaye, Getachew" <Getachew.Tesfaye@nrc.gov> Tracking Status: None

Post Office: auscharmx02.adom.ad.corp

FilesSizeMESSAGE7958RAI 462 Supplement 3 Response US EPR DC.pdf

Date & Time 6/29/2011 3:16:19 PM 900932

Options	
Priority:	High
Return Notification:	No
Reply Requested:	No
Sensitivity:	Normal
Expiration Date:	
Recipients Received:	

Response to

Request for Additional Information No. 462 (5258, 5259, 5260), Supplement 3

1/26/2011

U.S. EPR Standard Design Certification AREVA NP Inc. Docket No. 52-020 SRP Section: 06.02.03 - Secondary Containment Functional Design SRP Section: 06.04 - Control Room Habitability System SRP Section: 06.05.01 - ESF Atmosphere Cleanup Systems

Application Section: 6.2.3

QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects) (SPCV)

Question 06.04-5:

Follow-up to RAI 24, Question 13.03-03

In RAI 24, Question 13.03-03, the staff requested that the applicant identify details of the proposed TSC, located in the Control Room Envelope (CRE) Integrated Operations Area, sufficient to review criteria contained in NUREG-0696. Section 2.4, "TSC Size". The staff has reviewed the response to RAI 24, Question 13.03-03, dated June 27, 2008 that included a discussion on the proposed TSC size and FSAR revision 2 and the following information is required:

- 1. The content in the RAI response is need for the Staff to reach a finding on compliance with NUREG 0696. Therefore the following information, contained in the response should be added to FSAR Tier 2
 - a. A comprehensive statement that the proposed TSC area is designed in accordance with NUREG-0696
 - b. A statement that the TSC area that is within integrated operations area of at least 174.2 m² (1875ft²) is allocated to the TSC.
 - c. A statement that justifies the above size as it compares to NUREG guidance, similar to what was in your RAI response: "Thus the TSC is large enough to provide space for 25 personnel at 75 ft² per person. Additionally, the size of the TSC makes the center large enough to meet the acceptance criteria of section 2.4 of NUREG-0696."
 - d. Add the above information to FSAR Tier 2 Section 6.4, which discusses design requirements for the EPR CRE, or propose another location within Tier 2 for this information.
- The EPR FSAR Tier 2 Revision 2 Section 6.4.1, CRE Design basis states the following: The CRE is protected from toxic gases released which include CO and CO₂ to permit access and occupancy of the MCR under accident conditions"
 - a. In regards to Occupancy and CO₂ production, please provide additional information for the staff to evaluate the performance of the CRE under accident conditions that include CRE isolation in conjunction with manning of the CRE TSC area at levels prescribed by NUREG-0696. (25 persons).
 - b. Note that as stated in Tier 2 Section 6.4.2.1, the CRE total free-air volume is approximately 200,000 ft³. The staff reviews this volume against guidance contained in SRP 6.4 Acceptance Criterion 2 as it relates to Control Room Personnel Capacity. Section III of SRP 6.4 states: "A control room designed with complete isolation capability from the outside air to provide radiation and toxic gas protection, is reviewed to determine if the buildup of carbon dioxide could present a problem. The air inside a 2830 m³ (100,000 cubic foot) control room would support five persons for at least six days. Thus, CO₂ buildup in an isolated emergency zone is not normally considered a limiting problem." Due to the co-location of the TSC and the MCR in the CRE, this may not be the case for the EPR CRE and CO2 production by a large number of personnel during the accident period may adversely affect MCR operator performance.
 - c. Provide this additional information in the FSAR in order to allow the staff to review GDC 19 as it applies to CRE personnel capacity.

Response to Question 06.04-5:

- 1. In response to RAI 462, Question 06.04-5, Item 1, the design of the Technical Support Center (TSC) is intended to comply with NUREG-0696. For clarification, the U.S. EPR FSAR Tier 2 will be revised as follows:
 - a. U.S. EPR FSAR Tier 2, Sections 6.4.1 and 13.3 will be revised to clarify that the proposed TSC area is designed to comply with NUREG-0696, Section 2.4.
 - b. U.S. EPR FSAR Tier 2, Sections 6.4.1 and 13.3 will be revised to clarify that "a space of at least 1875 ft²" is allocated for the TSC, within the integrated operations area.
 - c. U.S. EPR FSAR Tier 2, Sections 6.4.1 and 13.3 will be revised to clarify that the TSC is large enough to provide space for 25 persons at 75 ft² per person. Additionally, as indicated in the response to Item 1a, U.S. EPR FSAR Tier 2, Section 13.3 will be revised to clarify that the TSC area complies with the acceptance criteria of Section 2.4 of NUREG-0696.
 - d. The above information will be added to U.S. EPR FSAR Tier 2, Sections 6.4.1 and 13.3. NUREG-0696 will be added to the References in U.S. EPR FSAR Tier 2, Sections 6.4.7 and 13.8.
- 2.
- a. An additional calculation has been completed to evaluate the performance of the control room envelope (CRE) while operating in a full recirculation alignment. Full recirculation alignment includes CRE isolation in conjunction with manning the CRE Technical Support Center (TSC) area at levels prescribed by NUREG-0696 (25 persons). The calculation was performed for the entire CRE with a total free open volume of 200,000 ft³, 5 persons in the main control room (MCR) area, and 25 persons in the TSC area.
- b. The CRE is not designed to isolate the outside air during a radiological event; therefore, CO₂ buildup is not a concern in this operating alignment. During an CRE isolation for a toxic gas event (determined by the COL applicant), with the outside air inlets closed and the MCR air conditioning system in a recirculation alignment, the air inside the CRE can support 5 persons in the MCR and 25 persons in the TSC for at least one and one-half days.
- c. U.S. EPR FSAR Tier 2, Section 6.4.1 will be revised to include this information.

FSAR Impact:

U.S. EPR FSAR Tier 2, Sections 6.4.1, 6.4.7, 13.3, and 13.8 will be revised as described in the response and indicated on the enclosed markup.

U.S. EPR Final Safety Analysis Report Markups



The main control room (MCR) habitability systems are designed to allow control room operators to remain in the MCR to operate the plant safely under normal conditions and to maintain the plant in a safe state under accident conditions.

The habitability systems protect the control room operators from the effects of accidental releases of toxic and radioactive gases. The systems also provide the necessary support for the Technical Support Center (TSC) personnel in case of an accident or abnormal event. The TSC is contained within the control room envelope (CRE).

The term "habitability systems" refers to equipment, supplies, and procedures. The habitability equipment is defined in Section 6.4.2.1.

Control room habitability system objectives include:

- Missile protection and radiation shielding (Section 3.8).
- Air filtration (Section 6.5.1, Section 9.4.1).
- Pressurization and air conditioning (Section 9.4.1).
- Fire protection (Section 9.5.1).
- Radiation monitoring (Section 12.3.4).
- Detection of and protection from toxic gases (to include carbon monoxide (CO) and carbon dioxide (CO₂)) (Section 9.4.1).
- Detection of <u>Ss</u>moke (Section 9.4.1).
- Lighting (Section 9.5.3).
- Personnel support.

6.4.1 Design Basis

I

Control room habitability is provided, so that the plant can be operated safely under normal conditions, and maintained safely under accident conditions or abnormal events. These design bases relate to MCR habitability:

• Habitability systems are designed to accommodate the effects of environmental conditions associated with normal operation, maintenance, testing, and postulated accidents and are protected against dynamic effects that may result from equipment failures and from events and conditions outside the nuclear power unit (GDC 4).

Tier 2



The MCR habitability systems are not shared among multiple nuclear power units • (GDC 5). The CRE is protected from toxic gases release which include CO and CO_2 to • permit access and occupancy of the MCR under accident conditions (GDC 19). • The CRE is protected from hazardous chemical releases to permit access and occupancy of the MCR. The MCR air conditioning system (CRACS) provides the capability to isolate the CRE from the surrounding areas, pressurize the CRE to prevent in-leakage, and filter supply air to remove radioactive halogens (10 CFR 50.34(f)(2)(xxviii)). The air intake structures are physically separated and located away from potential 06.04-05, Item 1 radiological sources, (10 CFR 50.34(f) (2) (xxviii)). The TSC is designed in accordance with NUREG-0696 (Reference 6). A space of at least 1875 ft², within the integrated operations area, is allocated to the TSC. Therefore, the TSC is large enough to provide space for 25 personnel at 75 ft² per person. The CRE design permits periodic testing and in-service inspection to confirm 06.04-05. Item 2 integrity. The volume of the CRE is approximately 200,000 ft³. With the CRE operating in a full recirculation alignment, the air inside the CRE can support five persons in the MCR and twenty-five persons in the TSC (Integrated Support Center) for at least one and one-half days.

The CRACS design bases are presented in Section 9.4.1.

6.4.2 System Design

6.4.2.1 Definition of Control Room Envelope

The MCR contains the equipment necessary to monitor and control the plant during all operating conditions and to bring the plant to a safe shutdown state.

The CRE comprises these areas:

- Main control room.
- Shift supervisor's office.
- Integrated operations area including:
 - Technical support center.
 - NRC office area.



The CRE is designed, maintained and tested in accordance with RG 1.196 and RG 1.197. Habitability systems provide the capability to detect and protect personnel within the CRE boundaries from external fires, smoke, toxic gases and airborne radioactivity.

A COL applicant that references the U.S. EPR design certification will confirm that the radiation exposure of MCR occupants resulting from a DBA at a nearby unit on a multi-unit site is bounded by the radiation exposure from the postulated design basis accidents analyzed for the U.S. EPR; or confirm that the limits of GDC 19 are met.

The evaluation of potential toxic chemical accidents is addressed by the COL applicant in Section 2.2.3 and includes the identification of toxic chemicals. A COL applicant that references the U.S. EPR design certification will evaluate the results of the toxic chemical accidents from Section 2.2.3 and address their impact on control room habitability in accordance with RG 1.78.

6.4.5 Testing and Inspection

Testing and inspection of the CRACS are described in Section 9.4.1. Refer to Section 14.2 (test abstract #082) for initial plant testing.

Periodic testing to confirm CRE integrity is performed using testing methods and at testing frequencies consistent with RG 1.197. The air in-leakage test (tracer gas test) of the CRE boundary is performed in accordance with ASTM E741 (Reference 3). Air quality testing is performed in accordance with ANSI/ASHRAE 52.2 (Reference 4) and ASME N510 (Reference 5).

The control room envelope habitability program in Technical Specifications Section 5.5.17 defines testing requirements.

6.4.6 Instrumentation Requirements

The instrumentation and control features of the CRACS are described in Section 9.4.1. Radiation monitoring equipment for the CRE is described in Section 12.3.4.

Toxic chemicals whose release has the potential to affect control room operators are monitored by toxic gas sensors. A COL applicant that references the U.S. EPR design certification will identify the type(s) of Seismic Category I Class IE toxic gas sensors (i.e., the toxic chemical(s) of concern) necessary for control room operator protection.

6.4.7 References

1. NUREG-0654/FEMA-REP-1 Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," U.S. Nuclear Regulatory Commission, November 1980.



2	. ASME AG-1-2003, "Nuclear Air and Gas Treatment," The American Society of Mechanical Engineers, 2003ASME AG-1, "Code on Nuclear Air and Gas Treatment," The American Society of Mechanical Engineers, 1997 (including the AG-1a-2000, "Housings" Addenda).
3	. ASTM E741–2000, "Standard Test Methods for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution," American Society for Testing and Materials, 2000.
4	. ANSI/ASHRAE 52.2-1999, "Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size," American Society of Heating, Refrigerating and Air-Conditioning Engineers, 1999.
5 06.04-05, Item 1	. ASME N510-1989 (R1995), "Testing of Nuclear Air-Treatment Systems," The American Society of Mechanical Engineers, 1989.
6	. NUREG-0696, "Functional Criteria for Emergency Response Facilities," U.S. Nuclear Regulatory Commission, February 1981.

13.3 Emergency Planning

A COL applicant that references the U.S. EPR design certification will provide a sitespecific emergency plan in accordance with 10 CFR 50.47 and 10 CFR 50 Appendix E. Emergency planning is, in part, within the scope of a COL applicant. Design features, facilities, functions and equipment that are technically relevant to the design and are not site-specific, and which affect some aspect of emergency planning or the capability of a licensee to cope with plant emergencies are described in this section.

06.04-05, Items 1a & 1c

06.04-05, Item 1b

06.04-05, Item 1c

Space A space of at least 1875 ft² suitable for a technical support center (TSC), which demonstrates compliance with the design requirements of NUREG-0696, Section 2.4
 (Reference 1) for staffing levels consistent with current operating practices, and of 25 persons (20 utility and 5 NRC) at 75 ft² per person, and Revision 1 of NUREG-0654/
 FEMA REP-1 (Reference 2), is provided within the integrated operations area adjacent to the main control room (MCR). This space is within the Safeguard Building. It is also within the control room envelope (CRE) which maintains habitability during normal, off-normal and emergency conditions; refer to Figure 6.4-1—Control Room Envelope Plan View 1 and Figure 6.4-2—Control Room Envelope Plan View 2. A detailed description of CRE habitability, including radiological protective provisions, is provided in Section 6.4. The control room air conditioning system is described in Section 9.4.1.

Voice communications between the TSC and the plant, local and offsite emergency response facilities, local and state governments and the NRC are provided by the plant telephone, paging and radio systems. These are described in Section 9.5.2.2.1 through Section 9.5.2.2.4.

Data communications within the TSC is provided through the process information and control system (PICS), which is described in Section 7.1.1.3.2. This non-safety related digital I&C system provides a screen-based interface capable of monitoring plant parameters during: normal, off-normal and emergency conditions. It electronically provides MCR safety parameter information to the TSC and to the NRC through the emergency response data system (ERDS). Safety-related information systems are described in detail in Section 7.5, with accident monitoring systems described in Section 7.5.1.2 and information systems provided in the emergency response facilities described in Section 7.5.1.3.

Space suitable for an operational support center (OSC), which demonstrates conformance with the design requirements for staffing levels consistent with current operating practices of NUREG-0654/FEMA REP-1 Revision 1 (Reference 2), is provided within the Access Building. This building also contains a personnel decontamination area. Adequate voice communications in these facilities is provided by the plant telephone, paging and radio systems as described in Section 9.5.2.2.1 through Section 9.5.2.2.4. The Access Building is described in Section 12.3.1.6.

Next File



06.04-05, Items 1a & 1c 13.8 References 1. Deleted.NUREG-0696, "Functional Criteria for Emergency Response Facilities," U.S. Nuclear Regulatory Commission, February 1981. 2. NUREG-0654/FEMA REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, U.S. Nuclear Regulatory Commission, November 1980. 3. Letter from Ronnie L. Gardner (AREVA NP Inc.) to Document Control Desk (NRC), "U.S. EPR Vital Equipment List (Safeguards Information)," dated November 30, 2007. 4. Letter OG-1789, Tony Stallard, Chairman, B&WOG Operator Support Committee, to Chief, Reactor Systems Branch (NRC), "Transmittal of B&W Owners Group Emergency Operating Procedures Technical Bases Document, Revision 9," dated April 26, 2000 and attachments (ML003711891). 5. Letter from Richards, Stuart A. (NRC) to Kelly, Michael, Chairman, B&W Owners Group Operator Support Committee, "Completion of Review of the Babcock and Wilcox Emergency Operating Procedures Guidelines (TAC No. M54946)," with attachment, dated November 5, 1999. 6. NUREG-0711, "Human Factors Engineering Program Review Model," Revision 2, U.S. Nuclear Regulatory Commission, February 2004. 7. NUREG-0737, "Clarification of TMI Action Plan Requirements," U.S. Nuclear Regulatory Commission, November 1980. 8. NUREG-0737, "Clarification of TMI Action Plan Requirements: Supplement 1," U.S. Nuclear Regulatory Commission, January 1983. 9. ANS 3.2-1994, "Administrative Controls and Quality Assurance for the Operational Phase of NPPs," American Nuclear Society, 1994. 10. NUREG-0800, "Standard Review Plan", Section 13.5.2.1, "Operating and Emergency Operating Procedures, Appendix A, Review Procedures for the Evaluation of Procedures Generation Packages," Revision 2, U.S. Nuclear Regulatory Commission, March 2007. 11. NUREG-1358, "Lessons Learned from the Special Inspection Program for Emergency Operating Procedures," Supplement 1, U.S. Nuclear Regulatory Commission, 1992. 12. NUREG-1358, "Lessons Learned From the Special Inspection Program for Emergency Operating Procedures," U.S. Nuclear Regulatory Commission, April 1989.

13. NUREG-0899, "Guidelines for the Preparation of Emergency Operating Procedures," U.S. Nuclear Regulatory Commission, August 1982.