BellefonteRAIsPEm Resource

From: Brian Anderson
Sent: Thursday, January 08, 2009 4:11 PM
To: BellefonteRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 143 RELATED TO SRP SECTION 18 FOR THE BELLEFONTE UNITS 3 AND 4 COMBINED LICENSE APPLICATION
Attachments: BLN-RAI-LTR-143.doc

Importance: High

Hearing Identifier: Bellefonte_COL_RAI_Public
Email Number: 130

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Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 143 RELATED TO SRP SECTION 18 FOR THE BELLEFONTE UNITS 3 AND 4 COMBINED LICENSE APPLICATION
Sent Date: 1/8/2009 4:11:20 PM
Received Date: 1/8/2009 4:11:21 PM
From: Brian Anderson

Created By: Brian.Anderson@nrc.gov

Recipients:
"BellefonteRAIsPEm Resource" <BellefonteRAIsPEm.Resource@nrc.gov>
Tracking Status: None

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Files	**Size**	**Date & Time**
MESSAGE	3	1/8/2009 4:11:21 PM
BLN-RAI-LTR-143.doc	60410	

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

January 8, 2009

Ms. Andrea L. Sterdis
Manager, Nuclear Licensing & Industry Affairs
Nuclear Generation Development & Construction
Tennessee Valley Authority
1101 Market Street
Chattanooga, Tennessee 37402-2801

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 143 RELATED TO SRP SECTION 18 FOR THE BELLEFONTE UNITS 3 AND 4 COMBINED LICENSE APPLICATION

Dear Ms. Sterdis:

By letter dated October 30, 2007, as supplemented by letters dated November 2, 2007, January 8, 2008 and January 14, 2008, Tennessee Valley Authority (TVA) submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advance passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 45 days of the date of this letter. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, you may contact me at 301-415-9967 or you may contact Joesph Sebrosky, the lead project manager for the Bellefonte combined license at 301-415-1132.

Sincerely,

/**RA**/

Brian C. Anderson, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-014
52-015

eRAI Tracking No. 1728

Enclosure:
Request for Additional Information

CC: see next page

If you have any questions or comments concerning this matter, you may contact me at 301-415-9967 or you may contact Joesph Sebrosky, the lead project manager for the Bellefonte combined license at 301-415-1132.

Sincerely,

/**RA**/

Brian C. Anderson, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-014
52-015

eRAI Tracking No. 1728

Enclosure:
Request for Additional Information

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NRO-002

OFFICE	COLP/BC		NWE1/PM	OGC	NWE1/L-PM
NAME	MJunge*		BAnderson*	AHodgdon*	JSebrosky*
DATE	12/01/08		12/01/08	12/05/08	01/08/09

*Approval captured electronically in the electronic RAI system.

OFFICIAL RECORD COPY

Request for Additional Information
Bellefonte Units 3 and 4
Tennessee Valley Authority
Docket No. 52-014 and 52-015
SRP Section: 18 - Human Factors Engineering
Application Section: 18.2 - HFE Program Management

QUESTION for Operating Licensing and Human Performance Branch (AP1000 Projects) (COLP)

18-4

NUREG-0711 section 2.4.1 (3): The HFE program should address the ... technical support center (TSC) and the emergency operations facility (EOF).....

This is a supplemental request for information on site specifc activities associated with the HFE program as applied to the TSC and EOF. It supplements NRC RAI NUMBER 18-03 (accession #: ML082001068) addressing COL action item BLN COL 18.2-2 which states:

"The Combined License applicant referencing the AP1000 certified design is responsible for designing the emergency operations facility, including specification of the location and communication with the facility, in accordance with the AP 1000 human factors engineering program."

BACKGOUND:

RAI 18-03 (EPM 357) was issued on 7/18/08 requesting information on BLN COL action item 18.2-2 which states:

"The Combined License applicant referencing the **AP1000** certified design is responsible for designing the emergency operations facility, including specification of the location and communication with the facility, in accordance with the AP 1000 human factors engineering program."

Specifically the staff was seeking clarification on the applicant's participation and commitment to the following Westinghouse documents:

- APP-OCS-GGR-110-P, "AP 1000 Technical Support Center and Emergency Operations Facility Work Shop," revision 1, in February 2008
- APP-GW-GLR-136, "AP 1000 Human Factors Program Implementation for the Emergency Operations Facility and Technical Support Center," revision 1, issued October 26, 2007 (TR-136)

There were a number of questions on these documents that had been sent to Westinghouse as part of the AP1000 DCD review and this RAI also served to notify the RCOL applicant of these questions.

An RAI response received on 9/2/08 stated that the plant HFE program would be established based on the approved AP 1000 HFE program described in DCD Chapter 18 for the Main Control Room and other scoped- in items as described in AP1000 HFE program. The COL applicant's scope of work includes implementation and verification of applicable TSC/EOF displays per AP 1000 HFE program. The TSC and EOF functions and tasks that are not within the scope of the AP1000 HFE Program will be subject to HFE principles and practices as described in NUREG-0737.

Supplemental RAI

In the RAI response of 9/2/08, the COL applicant states that its scope of work includes implementation and verification of applicable TSC/EOF displays per the AP1000 HFE program. TSC and EOF functions and tasks that are not within the scope of the AP1000 HFE Program will be subject to HFE principles and practices as described in NUREG- 0737. This NUREG does not have specific HFE guidance similar to that of NUREG-0711 and thus potentially leaves EOF/TSC design elements out of the HFE program scope. For example, TR-136 specifically states that the Westinghouse DCD does not cover all aspects of the HSI design (such as panel layouts, room configuration, and indications/controls) as identified in the following quotes:

- "The task analysis will inevitably identify task steps not related to the display or provision of plant data, such as the need to use the communication facilities or to utilize the displays of system in the TSC or EOF that are not a part of the AP1000 systems (e.g., dose assessment software). For completeness, these tasks will be identified but not considered in any detail." (section 2.4.2)
- "The COL applicant possesses overall responsibility for the human factors adequacy of the TSC and EOF." (Section 2.4.4)

These elements could require application of NUREG-0711 program elements. The applicant's current position does not address elements that are outside the AP1000 DCD scope. Westinghouse has confirmed that it does not intend to address elements outside the AP1000 scope. Please address how these elements will be addressed relative to HFE principles of NUREG-0711.