BellefonteRAIsPEm Resource

From: Ravindra Joshi
Sent: Friday, June 20, 2008 11:30 AM
To: BellefonteRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 048 RELATED TO SRP SECTION 03.11 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Attachments: BEL-RAI-LTR-048.doc

Hearing Identifier: Bellefonte_COL_RAI_Public
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Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 048 RELATED TO SRP SECTION 03.11 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Sent Date: 6/20/2008 11:29:58 AM
Received Date: 6/20/2008 11:29:59 AM
From: Ravindra Joshi

Created By: Ravindra.Joshi@nrc.gov

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

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

June 20, 2008

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. 048 RELATED TO SRP SECTION 03.11 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION

Dear Ms. Sterdis:

By letter dated September 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 301-415-6191 or you may contact Joesph Sebrosky, the lead project manager for the Bellefonte combined license at 301-415-1132.

Sincerely,

/**RA**/

Ravindra G. Joshi, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-014
52-015

Enclosure:
Request for Additional Information

If you have any questions or comments concerning this matter, you may contact me at 301-415-6191 or you may contact Joesph Sebrosky, the lead project manager for the Bellefonte combined license at 301-415-1132.

Sincerely,

/**RA**/

Ravindra G. Joshi, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-014
52-015
eRAI Tracking No. 198

Enclosure:
Request for Additional Information

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NRO-002

OFFICE	CIB1/BC	NWE1/PM	OGC	NWE1/L-PM
NAME	DTerao *	RJoshi*	PMoulding*	JSebrosky*
DATE	5/2/08	5/6/08	5/8/08	5/8/08

*Approval captured electronically in the electronic RAI system.

OFFICIAL RECORD COPY

Bellefonte Units 3 and 4
Tennessee Valley Authority
Docket No. 52-014 and 52-015
SRP Section: 03.11 – Environmental Qualification of Mechanical and Electrical Equipment
Application Section: FSAR 3.11

QUESTION from Component Integrity, Performance & Testing Branch 1 (CIB1)

03.11-1
Section 3.11, "Environmental Qualification of Mechanical and Electrical Equipment," in the Final Safety Analysis Report (FSAR) of the combined license (COL) application for the Bellefonte Nuclear Plant, Units 3 and 4, incorporates by reference Subsection 3.11.2.2, "Environmental Qualification of Mechanical Equipment," in the AP1000 Design Control Document (DCD) Tier 2, which references Appendix 3D, "Methodology for Qualifying AP1000 Safety-Related Electrical and Mechanical Equipment," to AP1000 DCD Tier 2. Please specify the process for implementation of the provisions for environmental qualification of safety-related mechanical equipment (such as by procurement specifications) with consideration of the acceptance criteria in SRP Section 3.11. Describe or provide a reference to the following information (or indicate the status of and schedule for its availability) related to the environmental qualification (EQ) operational program for mechanical equipment for the Bellefonte Nuclear Plant, Units 3 and 4, including (a) process to determine the suitability of environmentally sensitive mechanical equipment needed for safety-related functions and to verify that the design of such materials, parts, and equipment is adequate, such as (i) identifying safety-related mechanical equipment located in harsh environmental areas, (ii) identifying nonmetallic subcomponents of such equipment, (iii) identifying environmental conditions and process parameters for which this equipment must be qualified, (iv) identifying nonmetallic material capabilities, and (v) evaluating the environmental effects on the nonmetallic components of the equipment; and (b) documentation for the successful completion of qualification tests and/or analysis, and qualification status for each type of equipment.

03.11-2
Subsection 3D.6.2.3, "Analysis of Safety-Related Mechanical Equipment," in Appendix 3D, "Methodology for Qualifying AP1000 Safety-Related Electrical and Mechanical Equipment," to Chapter 3, "Design of Structures, Components, Equipment and Systems," in the AP1000 DCD summarizes the environmental qualification of safety-related mechanical equipment by analysis methods, but does not discuss implementation of the environmental qualification approach. For example, American Society of Mechanical Engineers Standard QME-1-2007, "Qualification of Active Mechanical Equipment used in Nuclear Power Plants," provides one approach for the environmental qualification of safety-related mechanical equipment. Discuss TVA's implementation of the environmental qualification approach, including the application of industry standards, prescribed in Subsection 3D.6.2.3, "Analysis of Safety-Related Mechanical Equipment," in Appendix 3D, "Methodology for Qualifying AP1000 Safety-Related Electrical and Mechanical Equipment," to Chapter 3, "Design of Structures, Components, Equipment and Systems," in the AP1000 DCD.

03.11-3
Subsection 3D.6.3, "Operating Experience in the Equipment Qualification Program," in Appendix 3D to Chapter 3 in the AP1000 DCD states that the COL applicant will provide documentation of the environmental qualification methodology where seismic experience data are used. If applicable, describe or provide a reference to the information (or indicate the status of and schedule for its availability) related to documentation of the environmental qualification methodology where seismic experience data are used.