PMBelCOL PEmails

From: Ravindra Joshi
Sent: Friday, June 06, 2008 12:48 PM
To: BelCol Resource
Cc: Joseph Sebrosky
Subject: FW: RAI Letter No. 032 related to SRP section 6.4 for the Bellefonte Units 3 and 4 combined License Application
Attachments: BEL-RAI-LTR-032.pdf

From: Ravindra Joshi
Sent: Friday, June 06, 2008 12:47 PM
To: andrea sterdis; Eddie R Grant; Hastings, Peter S; Ray, Phillip M; rgrumbir@gmail.com
Subject: RAI Letter No. 032 related to SRP section 6.4 for the Bellefonte Units 3 and 4 combined License Application

To All,
Attached is RAI Letter No. 032 related to SRP Section 6.4 for Bellefonte Units 3 and 4. The ADAMS Accession number is ML081580317.

Ravindra G. Joshi
Project Manager
NRO/DNRL/NWE1
US NRC
301-415-6191

Hearing Identifier: Bellefonte_COL_Public_EX
Email Number: 702

Mail Envelope Properties (CEEA97CC21430049B821E684512F6E5E8525DF0432)

Subject: FW: RAI Letter No. 032 related to SRP section 6.4 for the Bellefonte Units 3 and 4 combined License Application
Sent Date: 6/6/2008 12:48:00 PM
Received Date: 6/6/2008 12:48:01 PM
From: Ravindra Joshi

Created By: Ravindra.Joshi@nrc.gov

Recipients:
"Joseph Sebrosky" <Joseph.Sebrosky@nrc.gov>
Tracking Status: None
"BelCol Resource" <BelCol.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	517	6/6/2008 12:48:01 PM
BEL-RAI-LTR-032.pdf	138717	

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

BellefonteRAIsPEm Resource

From: Ravindra Joshi
Sent: Friday, June 06, 2008 12:31 PM
To: BellefonteRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 032 RELATED TO SRP SECTION 6.4 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Attachments: BEL-RAI-LTR-032.doc

Hearing Identifier: Bellefonte_COL_RAI_Public
Email Number: 7

Mail Envelope Properties (CEEA97CC21430049B821E684512F6E5E8525DF03F1)

Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 032 RELATED TO SRP SECTION 6.4 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Sent Date: 6/6/2008 12:30:38 PM
Received Date: 6/6/2008 12:30:39 PM
From: Ravindra Joshi

Created By: Ravindra.Joshi@nrc.gov

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

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	3	6/6/2008 12:30:39 PM
BEL-RAI-LTR-032.doc	52218	

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

June 6, 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. 032 RELATED TO SRP SECTION 6.4 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 30 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

CC: see next page

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. 327

Enclosure:
Request for Additional Information

Distribution:

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NRO-002

OFFICE	SFPT/BC	NWE1/PM	OGC	NWE1/L-PM
NAME	CJackson *	RJoshi*	PMoulding*	JSebrosky*
DATE	5/21/08	5/23/08	5/27/08	5/28/08

*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: 06.04 - Control Room Habitability System
Application Section: 6.4

QUESTIONS from Containment and Ventilation Branch 1 (SPCV)

06.04-2
The application concludes that "as permitted by Regulatory Guide 1.78, toxic gas monitoring for chlorine is not included in the control room design." Regulatory Guide 1.78 states that "human detection, i.e., smell, may be appropriate when no detection instruments are available in the control room for given chemical types." According to the application, control room operators could sense the chlorine from the identified chlorine event only 5½ minutes before the concentration would reach the threshold for the onset of health effects (Immediately Dangerous to Life and Health or IDHL). Also according to the application, if it is assumed that the operators can don respirators in two minutes after the operators detect the smell of a chlorine gas release, there would be only 3.5 minutes following that assumed action before chlorine concentrations reach the IDHL level of 10 ppm. Please explain how the proposed Bellefonte procedures can achieve the necessary operator actions within these time frames, and elaborate on the basis for TVA's conclusion that chlorine monitors should not be included in the control room design.

06.04-3
Provide details of the analysis that generated Figure 6.4-201, including input conditions and assumptions, in sufficient detail to permit independent confirmatory analysis. These details should include the size of the spill, the wind conditions (speed and direction), the dilution of the chlorine, the normal air intake flow rate of the ventilation system, the size of the control room, and the control room in-leakage rate.

06.04-4
The capability of the control room habitability systems to maintain a suitable environment for prolonged occupancy throughout the toxic gas release, as well as during the other events identified in Chapter 15, is based on a maximum of 11 operators in the control room. Do Bellefonte's plant procedures specify the maximum number of operators allowed in the control room in circumstances when the habitability systems are intended to protect the control room occupants?

06.04-5
Table 6.4-201 of the COL, Input Values Used in Analyses of Chlorine, states that the value assumed for inleakage is 0.0023 m^3/sec. Will 0.0023 m^3/sec be confirmed in control room air tightness testing, and how will the effects of wind pressure and temperature differences (including expansion of outside cold air after entering the control room) be accounted for?