

BellefonteRAIsPEm Resource

From: Ravindra Joshi
Sent: Wednesday, May 27, 2009 6:40 AM
To: BellefonteRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 159 RELATED TO SRP SECTION 06.04 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Attachments: BEL-RAI-LTR-159.doc

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Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 159 RELATED TO
SRP SECTION 06.04 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Sent Date: 5/27/2009 6:40:29 AM
Received Date: 5/27/2009 6:40:31 AM
From: Ravindra Joshi

Created By: Ravindra.Joshi@nrc.gov

Recipients:
"BellefonteRAIsPEm Resource" <BellefonteRAIsPEm.Resource@nrc.gov>
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Expiration Date:
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May 27, 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. 159 RELATED TO
SRP SECTION 06.04 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 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 Joseph 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. 2734

Enclosure:
Request for Additional Information

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NRO-002

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NAME	CJackson *	RJoshi*	AHodgdon*	JSebrosky*
DATE	4/30/09	5/14/09	5/15/09	5/15/09

*Approval captured electronically in the electronic RAI system.

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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: FSAR 6.4

QUESTION from PRA Containment and Ventilation Branch 1 (SPCV)
06.04-6

Bellefonte Nuclear Plant, Units 3 & 4 COL Application FSAR 6.4.4.2 “Toxic Chemical Habitability Analysis”

Utilizing the method provided in Regulatory Guide 1.78 Appendix A, FSAR Figure 6.4-201 indicates the presence of chlorine in the atmosphere (human detection threshold is 3.5 ppm; at approximately 12 minutes on Figure 6.4-201). As indicated in Regulatory Guide 1.78, it is expected that a control room operator will take protective measures within two minutes after detection. Procedures require that control room personnel manually activate VES in the event of a chlorine gas release that affects the control room environment.

Figure 6.4-201 only simulates VBS operation for more than 20 minutes. Control room chlorine concentration after the switching from VBS to VES is missing. Please provide the computer simulation that should continue to cover the VES portion of operation to demonstrate chlorine concentration in the control room does not exceed the limit.

Also, the control room leakage rates are not considered for the VBS simulation. The VBS leakage is higher than the leakage rate during VES operation per DCD. Westinghouse is revising (Westinghouse letter dated May 4, 2009) its design to allow 15 cfm control room unfiltered leakage (10 cfm through control room envelope plus 5 cfm through vestibule doors ingress/egress) during VES operation. Any revised VBS and VES control room leakage should be considered in the computer simulations.