

## BellefonteRAIsPEm Resource

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**From:** Joshi, Ravindra  
**Sent:** Wednesday, June 17, 2009 6:53 AM  
**To:** BellefonteRAIsPEm Resource  
**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 161 RELATED TO SRP SECTION 12.03-12.04 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION  
**Attachments:** BEL-RAI-LTR-161.doc

**Hearing Identifier:** Bellefonte\_COL\_RAI\_Public  
**Email Number:** 148

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**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 161 RELATED TO  
SRP SECTION 12.03-12.04 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE  
APPLICATION

**Sent Date:** 6/17/2009 6:52:35 AM

**Received Date:** 6/17/2009 6:52:37 AM

**From:** Joshi, Ravindra

**Created By:** Ravindra.Joshi@nrc.gov

**Recipients:**

"BellefonteRAIsPEm Resource" <BellefonteRAIsPEm.Resource@nrc.gov>

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**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

June 17, 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. 161 RELATED TO  
SRP SECTION 12.03-12.04 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 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 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. 2753

Enclosure:  
Request for Additional Information

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NRO-002

OFFICE	CHPB/BC	NWE1/PM	OGC	NWE1/L-PM
NAME	TFrye *	RJoshi*	AHodgdon*	JSebrosky*
DATE	5/06/09	5/7/09	5/15/09	6/4/09

\*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: 12.03-12.04- Radiation Protection Design features**  
**Application Section: FSAR 12.4**

**QUESTION from Health Physics Branch (CHPB)**

12.03-12.04-6

Section 4.5 of Part 3, Environmental Report, of the Bellefonte COL application provides an analysis of the expected average annual dose that will be received by a construction worker at Bellefonte Unit 4 during the construction period. The applicant states that the maximum estimated annual dose to the construction worker of 7.1 mrem will be from direct radiation and additional exposure from the liquid and gaseous effluents from the operating Bellefonte Unit 3 will still not exceed the standards of 10 CFR 20.1301 for members of the public. Section 4.5.6, Environmental Report, states that there will be a radiation protection and ALARA program for BLN Unit 4 construction workers that will meet the requirements of 10 CFR 20.1302. Section 4.6, Environmental Report, Table 4.6-1 describes specific measures and controls.

BLN FSAR Section 12.4 does not contain any description of a construction worker program to address minimizing exposure during Unit 4 construction.

Describe the program to ensure that the construction worker site (i.e., the general area where construction workers will be located during the construction of BLN Unit 4) will be monitored for radiation during the construction period to ensure that exposures to the construction workers are minimized and maintained ALARA in accordance with the requirements of 10 CFR Part 20.1101 (b). Revise BLN FSAR Chapter 12 to describe the radiation protection and ALARA program for construction of BLN Unit 4.