

## **PMBelCOL PEmails**

---

**From:** Ravindra Joshi  
**Sent:** Tuesday, August 05, 2008 7:09 AM  
**To:** Ray, Phillip M; Eddie R Grant; bob Hirman  
**Cc:** BelCol Resource; Timothy Frye; Edward Roach  
**Subject:** Draft RAIs related to Chapter 12-- Bellefonte Project  
**Attachments:** RAI 863.doc; RAI 611.doc; RAI 866.doc

To All,

Attached are the Draft RAIs related to SRP 12. Please let me know if you would like to discuss the RAIs before they are made official.

Ravi Joshi  
415-6191

**Hearing Identifier:** Bellefonte\_COL\_Public\_EX  
**Email Number:** 784

**Mail Envelope Properties** (CEEA97CC21430049B821E684512F6E5E979D8C445F)

**Subject:** Draft RAIs related to Chapter 12-- Bellefonte Project  
**Sent Date:** 8/5/2008 7:09:29 AM  
**Received Date:** 8/5/2008 7:09:33 AM  
**From:** Ravindra Joshi

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

**Recipients:**

"BelCol Resource" <BelCol.Resource@nrc.gov>  
Tracking Status: None  
"Timothy Frye" <Timothy.Frye@nrc.gov>  
Tracking Status: None  
"Edward Roach" <Edward.Roach@nrc.gov>  
Tracking Status: None  
"Ray, Phillip M" <pmray@tva.gov>  
Tracking Status: None  
"Eddie R Grant" <erg-xl@cox.net>  
Tracking Status: None  
"bob Hirman" <bobhirman@live.com>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	183	8/5/2008 7:09:33 AM
RAI 863.doc	30714	
RAI 611.doc	27642	
RAI 866.doc	30202	

**Options**

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

Request for Additional Information No. 863

Bellefonte Units 3 and 4  
TVA  
Docket No. 52-014 and 52-015  
SRP Section: 12.03-12.04 - Radiation Protection Design Features  
Application Section: FSAR

QUESTIONS from Health Physics Branch (CHPB)

12.03-12.04-\*\*\*

The NRC has previously submitted RAIs requesting that each DCD applicant provide a general description of how each of the main design objectives contained in Regulatory Guide 4.21 will be met. Each DCD applicant was also requested to address the objectives that are more operational or procedural in nature by providing COL information items in the appropriate sections of the DCD. A detailed description of how each of these COL information items will be resolved should be included in the appropriate sections of the COL FSAR where the COL applies, with a listing identifying each of these COL information items included in Section 12.3 of the COL FSAR. For example, an acceptable description of a groundwater monitoring program should include implementation considerations and a description of the key components of the program such as types and periodicity of routine samples to be taken, threshold activities to be detected, actions to be taken upon detection of leakage into the groundwater, and a description of quality assurance practices to be used to ensure reasonable assurance of prompt identification of leakage into the groundwater.

Using the guidance provided in Regulatory Guide 4.21, "Minimization of Contamination and Radioactive Waste Generation: Life Cycle Planning" (June 2008), or using alternate acceptable guidance, provide a description of all the operational programs and COL information items necessary to demonstrate how TVA meets the requirements of 10 CFR 20.1406.

12.03-12.04-\*\*\*

Currently there is insufficient detail to allow for a determination of whether STD COL information item 12.3-4 is satisfied by the information submitted by the applicant.

Appendix 12AA.5.4.14 describes in general terms the procedures that are (will be) established to document operational events that are of interest for decommissioning, beyond those required by 10 CFR 50.75. The intent of these records is to enable efficient review of historical occurrences and operational events when planning for the decommissioning of the facility. The records should identify any remediation of leaks

that have the potential to contaminate groundwater. The procedures that govern retention of these records, and the records themselves, should specify the retention period needed to assure availability when they may be required (e.g., life of facility plus 30 years). There is insufficient detail addressing these records.

This item should be included in and describe the operational and design COL information items that fully meet the recordkeeping objectives of Regulatory Guide 4.21, Revision 0, "Minimization of Contamination and Radioactive Waste Generation: Life Cycle Planning," or describe an equivalent practice to meet the guidance.

Request for Additional Information No. 611

Bellefonte Units 3 and 4  
TVA  
Docket No. 52-014 and 52-015  
SRP Section: 01 - Introduction and Interfaces  
Application Section: Table 1.9

QUESTION from Health Physics Branch (CHPB)

01-\*\*\*

SRP Section 1.9, page 1AA-18, Revision 0, lists the conformance with various radiation protection related regulatory guides (RG).

TVA states that it will conform in general with RG 8.28, Rev 0, August 1981- *Audible Alarm Dosimeters*.

Bellefonte FSAR Part 2, states that it conforms with ANSI N13.7-1981 which was reaffirmed in 1992.

ANSI N13.7-1983 is the *American National Standard for Radiation Protection- Photographic Film Dosimeters Criteria for Performance*.

RG 8.28, Rev 0, August 1981 actually endorses ANSI N13.27-1981, *Performance Specifications for Pocket-Sized Alarming Dosimeters/Ratemeters*.

Which ANSI standard does Bellefonte intend to meet?

Please update Table 1.9 (currently page 1AA-18) in SRP section 1.0 to clearly identify with which ANSI standard or regulatory guide TVA intends to conform.

Request for Additional Information No. 866

Bellefonte Units 3 and 4  
TVA  
Docket No. 52-014 and 52-015  
SRP Section: 12.05 - Operational Radiation Protection Program  
Application Section: FSAR

QUESTIONS from Health Physics Branch (CHPB)

12.05-1\*\*\*

The applicant has not provided sufficient information to allow for a determination of whether its ALARA program sets an appropriate threshold for determining significant exposure.

The applicant indicates that this STD COL item 12.5-1 is addressed in Appendix 12AA of the COL application. This appendix incorporates by reference NEI 07-03, Revision 3, "Generic FSAR Template Guidance for Radiation Protection Program Description," which is currently under review by the NRC staff. The applicant took several exceptions to the text of the reference NEI 07-03, Revision 3.

The NRC staff reviewed STD COL information item 12.5-1 dealing with radiation protection program description, using the text added in Appendix 12AA.

However, the statement from 12AA that "Significant exposures are described by the functional manager in charge of radiation protection procedures," does not provide sufficient guidance related to maintaining ALARA as described in NEI 07-03, "Generic FSAR Template Guidance for Radiation Protection Program Description" to which the applicant has committed in section 1.6 of the FSAR. The applicant provides no site specific information regarding what constitutes a significant exposure (e.g., 1500 mrem cumulative exposure for maintenance or refueling tasks).

Please provide site specific information regarding what constitutes a significant exposure.

12.05-2\*\*\*

The applicant has not described the radiation protection procedures to be implemented at each phase of the operational program implementation in accordance with Table 13.4-201. Appendix 12AA lists the milestones but does not provide sufficient detail to allow for a determination of whether adequate procedures will be implemented prior to each milestone. Please describe the program aspects to be implemented prior to each milestone.

The applicant has not addressed this operational program directly; however Appendix 12AA "Radiation Protection Program Description," discusses items related to this operational program. In this appendix the applicant incorporates by reference NEI 07-03, "Generic FSAR Template Guidance for Radiation Protection Program Description, Revision 3," which is currently under review by the NRC staff. (See Table 1.6-201). The applicant indicates that Table 13.4-201 provides milestones for radiation protection

program implementation. The description of the operational program and proposed implementation milestone for the radiation protection program is reviewed in accordance with 10 CFR 20.1101. Its implementation is required by a license condition. The applicant has not described the radiation protection procedures/programs to be implemented at each phase of the operational program implementation in accordance with Table 13.4-201. Please provide such a description.