

April 23, 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. 005 RELATED TO  
SRP SECTIONS 05.03.02 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 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

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. 107

Enclosure:  
 Request for Additional Information

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NRO-002

OFFICE	CPIB/BC		NWE1/PM	OGC	NWE1/L-PM
NAME	DTERao*		RJoshi*	PMoulding*	JSebrosky*
DATE	4/18/08		4/21/08	4/22/08	4/23/08

\*Approval captured electronically in the electronic RAI system.

**OFFICIAL RECORD COPY**

**Request for Additional Information**  
**Bellefonte Units 3 and 4**  
**Tennessee Valley Authority**  
**Docket Nos.52-014 and 52-015**  
**SRP Section: 05.03.02 - Pressure-Temperature Limits, Upper-Shelf Energy, and Pressurized Thermal Shock**  
**Application Section: 5.3.6.1**

**QUESTION from Component Integrity, Performance & Testing Branch 1**

05.03.02-1

The NRC staff's understanding is that a) Westinghouse intends to submit for NRC staff review and approval a generic Pressure Temperature Limit Report (PTLR) for the AP1000 reactor vessel using the bounding properties and b) Westinghouse intends to seek NRC approval to update the AP1000 DCD to include the use of the generic AP1000 PTLR by all COL applicants. In light of these assumptions, please explain whether TVA will revise the proposed license condition in the Bellefonte Nuclear Plant, Units 3 and 4 Application, Part 10, Section 2, COL Holder Items, COL Item # 5.3-1, as follows: "The COL Holder shall update the P/T limits using the PTLR methodologies approved in the AP1000 DCD, and using the plant-specific material properties. The COL Holder will inform the NRC of the updated P/T limits." This approach would be consistent with that used for all operating reactors (see NRC Generic Letter 96-03), under which licensees using PTLRs inform the NRC staff of any subsequent change in P/T limits, without the need for prior NRC approval, as long as there are no changes to the approved PTLR methodology.

Enclosure