Tennessee Valley Authority, 1101 Market Street, LP 5A, Chattanooga, Tennessee 37402-2801

March 4, 2010

10 CFR 52.79

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

In the Matter of) Docket No. 52-014 and 52-015
Tennessee Valley Authority)

BELLEFONTE COMBINED LICENSE APPLICATION – RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION – ORGANIC MATERIAL COATINGS

Reference: Letter from Donald Habib (NRC) to Andrea Sterdis (TVA), Request for Additional Information Letter No. 170 Related to SRP Section 06.01.02 for the Bellefonte Units 3 and 4 Combined License Application, dated February 17, 2010

This letter provides the Tennessee Valley Authority's (TVA) response to the Nuclear Regulatory Commission's (NRC) request for additional information (RAI) items included in the reference letter.

A response to the NRC request in the subject letter is addressed in the enclosure which also identifies any associated changes that will be made in a future revision of the BLN application.

If you should have any questions, please contact Tom Spink at 1101 Market Street, LP5A, Chattanooga, Tennessee 37402-2801, by telephone at (423) 751-7062, or via email at tespink@tva.gov.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 4th day of Mar, 2010.

Andrea L. Sterdis
Manager, New Nuclear Licensing and Industry Affairs
Nuclear Generation Development & Construction

Enclosure
cc: See Page 2

D085
NRD

Enclosure
TVA letter dated March 4, 2010
RAI Response

Response to NRC Request for Additional Information letter No. 170 dated February 17, 2010
(4 pages, including this list)

Subject: Organic Material Coatings in the Final Safety Analysis Report

RAI Number	Date of TVA Response
06.01.02-02	This letter – see following pages

Associated Additional Attachments / Enclosures	Pages Included
None	

Enclosure
TVA letter dated March 4, 2010
RAI Response

NRC Letter Dated: February 17, 2010

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 06.01.02-02

This RAI relates to the standard content of the Bellefonte Section 6.1.2, "Organic Materials" review and contains a preliminary characterization of an open item in a draft version of the Bellefonte Safety evaluation report. The staff is providing the appropriate technical content from this open item in an attempt to resolve the issue in a timely manner.

From Summary of Application of Bellefonte SER AP1000 COL Information Item

- STD COL 6.1-2

The applicant provided additional information in STD COL 6.1-2 to resolve COL Information Item 6.1-2. STD COL 6.1-2 discusses a program to control procurement, application, and monitoring of Service Level I and Service Level III coatings.

From Technical evaluation of AP1000 COL STD COL6.1-2

The information provided in response to the COL information item clarified that the applicant's coatings program, with respect to procurement, application, inspection, and monitoring, will be consistent with the recommendations of RG 1.54, Revision 1, which is endorsed in Section 6.1.2 of NUREG-0800 as an acceptable method of meeting the quality assurance requirements of 10 CFR Part 50 Appendix B for safety-related and non-safety-related coating. However, the information provided by the applicant to resolve the COL information item merely states that the protective coatings program complies with RG 1.54, when, in fact, the program might not have been developed yet. Therefore, the COL applicant had not provided a coatings program as committed in COL Information Item 6.1.3.2.

To resolve this issue, in request for additional information (RAI) 6.1.2-1, the staff requested the following information:

1. The applicant should describe the standards to be applied to maintenance of the protective coatings in the program description. The description of the proposed coatings program should also describe the standards to be applied to selection and qualification of coatings, if the applicant intends to use coatings systems different than those described in the AP1000 DCD, either during construction or after plant operation commences.
2. The program description should describe the administrative controls that will be applied to the coatings program.
3. Provide the schedule for full implementation of the coatings program with respect to major milestones in the construction of the plant; for example, prior to application of coatings, prior to preparation of surfaces to be coated, or prior to procurement of coatings materials.

In a letter dated May 23, 2008, the applicant provided the following response:

Item 1) The coating program will be based on Revision 1 of RG 1.54 and the referenced ASTM standards in ASTM D5144. Also, the guidance provided in ASTM D5163, "Establishing Procedures to Monitor the Performance of Coating Service Level I Coating Systems in an Operating Nuclear Power Plant," and in ASTM D7167, "Establishing Procedures to Monitor the Performance of Coating Service Level III Coating Systems in an Operating Nuclear Power Plant," will be used to specify monitoring (maintenance) requirements for the safety-related coating systems pertaining to containment. While a change in coating systems (from those described in the AP1000 DCD) is not anticipated, if a different safety-related coating system is needed, it will be evaluated in accordance with the appropriate change process, i.e., 10 CFR 50.59 or 10 CFR Part 52, Appendix D, Section VIII.

Item 2) FSAR Section 6.1.3.2, Coating Program, will be revised to indicate compliance with 10 CFR Part 50, Appendix B, and 10 CFR Part 52 requirements implemented by the quality assurance program for the plant (see FSAR Chapter 17 and Part 11 of the COL application) for design, construction, and operation of the units.

Item 3) During the design and construction phase, the requirements for the coating program will be contained in certified drawings and/or standards and specifications controlling the coating processes of the designer (Westinghouse); these design documents will be available prior to the procurement and application of the coating material by the constructor of the plant. Prior to initial fuel loading, a consolidated plant coating program will be in place to address procurement, application, and monitoring (maintenance) of those coating system(s) for the life of the plant.

The applicant also indicated that this response is expected to be STANDARD for the subsequent-COL (S-COL) applications

However, since the information proposed to be added to the AP1000 DCD does not include the detailed information on control of coatings during the design and construction phase, the staff identified **Open Item 6.1.2-1** to ensure that BLN COL FSAR Section 6.1.2.1.6 is revised to include all the information from the response to RAI 6.1.2-1, Item 3, related to control of the coating program during the design and construction phase and the schedule for full implementation of the consolidated coatings program.

BLN RAI ID: 4056

BLN RESPONSE:

The detailed information on control of coatings during the design and construction phase identified in item 3) of the May 23, 2008, response to RAI 06.01.02-01 will be incorporated into the COL FSAR Subsection 6.1.2.1.6, as shown in the Application Revisions section below, in a future revision.

This response is expected to be STANDARD for the S-COLAs.

ASSOCIATED BLN COL APPLICATION REVISIONS:

COLA Part 2, FSAR Chapter 6, Subsection 6.1.2.1.6, will be revised from:

During the design and construction phase the coatings program associated with selection, procurement and application of safety related coatings is performed to applicable quality standards. Regulatory Guide 1.54 and ASTM D5144 (Reference 201) form the basis for the coating program. During the operations phase, the coatings program is administratively controlled in accordance with the quality assurance program implemented to satisfy 10 CFR Part 50, Appendix B, and 10 CFR Part 52 requirements. The coatings program provides direction for the procurement, application, and monitoring of safety related coating systems.

To read:

During the design and construction phase the coatings program associated with selection, procurement and application of safety related coatings is performed to applicable quality standards. The requirements for the coating program are contained in certified drawings and/or standards and specifications controlling the coating processes of the designer (Westinghouse) (these design documents will be available prior to the procurement and application of the coating material by the constructor of the plant). Regulatory Guide 1.54 and ASTM D5144 (Reference 201) form the basis for the coating program.

During the operations phase, the coatings program is administratively controlled in accordance with the quality assurance program implemented to satisfy 10 CFR Part 50, Appendix B, and 10 CFR Part 52 requirements. The coatings program provides direction for the procurement, application, and monitoring of safety related coating systems. Prior to initial fuel loading, a consolidated plant coating program will be in place to address procurement, application, and monitoring (maintenance) of those coating system(s) for the life of the plant.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None