



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

September 17, 2008

10 CFR 52.79

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

In the Matter of)
Tennessee Valley Authority)

Docket No. 52-014 and 52-015

**BELLEFONTE COMBINED LICENSE APPLICATION – RESPONSE TO REQUEST FOR
ADDITIONAL INFORMATION – RELIABILITY ASSURANCE PROGRAM (RAP)**

Reference: Letter from Ravi Joshi (NRC) to Andrea Sterdis (TVA), Request for Additional
Information Letter No. 121 Related to SRP Section 17.04 for the Bellefonte Units
3 and 4 Combined License Application, dated August 08, 2008

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 Phillip Ray at 1101 Market Street, LP5A,
Chattanooga, Tennessee 37402-2801, by telephone at (423) 751-7030, or via email at
pmray@tva.gov.

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

Executed on this 17th day of Sept, 2008.

Jack A. Bailey
Vice President Nuclear Generation Development

Enclosure

cc: See Page 2

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NKO

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cc: cc: (w/Enclosure)

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M. C. Nolan, Duke Energy
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Enclosure
TVA letter dated September 17, 2008
RAI Response

Response to NRC Request for Additional Information letter No. 121 dated August 08, 2008
(3 pages, including this list)

Subject: Reliability Assurance Program (RAP) in the Final Safety Analysis Report

| <u>RAI Number</u> | <u>Date of TVA Response</u> |
|-------------------|-----------------------------------|
| 17.04-01 | This letter – see following pages |

| <u>Associated Additional Attachments / Enclosures</u> | <u>Pages Included</u> |
|---|-----------------------|
| None | |

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NRC Letter Dated: August 8, 2008

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 17.04-01

Upgrades and updates to the PRA as well as future modifications may be expected to alter the risk sensitivity of basic events. SSCs and actions that were not considered risk significant when the COL application was submitted may meet the criteria for inclusion in one or more operational phase reliability assurance activities (OPRAAs). Please describe how risk-significant SSCs and actions that are identified after the license is issued will be included in operational phase reliability assurance activities (OPRAAs).

BLN RAI ID: 1176

BLN RESPONSE:

Upgrades and updates to the Probabilistic Risk Assessment (PRA), as well as future modifications, are controlled under the Quality Assurance Program. Configuration changes, including changes to classification of SSCs, the PRA, reliability assurance program and Maintenance Rule Program, are performed in accordance with the procedures developed per the Quality Assurance Program. These procedures provide the mechanism and process for identification of any changes to risk-significant SSCs and the update of applicable documents.

Activities characterized by the NRC as “operational phase reliability assurance activities (OPRAAs)” are contained within the following programs:

- Maintenance Rule Program (FSAR Section 17.6)
- Quality Assurance Program (FSAR Section 17.5)
- Inservice Inspection Program (FSAR Sections 5.2 and 6.6)
- Inservice Testing Program (FSAR Section 3.9)
- Technical Specifications Surveillance Test Program (FSAR Chapter 16).

As stated in FSAR Subsection 19.59.10.6, the PRA is used as an input to the Maintenance Rule and Reliability Assurance Program. Changes that meet the criteria for inclusion in one or more of those programs will be incorporated accordingly. Similarly, SSCs and actions that meet the criteria for inclusion in other reliability-related operational programs, such as quality assurance and inspection/test programs, will be identified and treated accordingly.

The Maintenance Rule Program Description contained in FSAR Section 17.6 incorporates by reference the Nuclear Energy Institute (NEI) maintenance rule template, NEI 07-02, which was under review by the NRC at the time of the COLA preparation. The NRC subsequently approved NEI 07-02, Revision 3, in a revised Safety Evaluation (SE). Section 4.0, Analysis, of the SE states, in part:

“As identified in NUREG-0800, Section 17.6, III.1, Scoping for 50.65(b), the MRPD scope ‘should identify that additional SSC functions may be added to or subtracted from the MR scope prior to fuel load, as appropriate, as additional information is developed.’ This criterion has been covered in NEI 07-02 under two sections (17.X.1.1.b and 17.X.1.1.c). Section 17.X.1.1.b states, ‘All SSCs identified as risk significant via the Reliability Assurance Program for the design phase (DRAP – see FSAR Section 17.Y) are included within the initial MR scope as HSS [high safety significant] SSCs.’ This section encompasses the HSS SSCs. The remaining SSCs will be scoped into the program by the formation of the expert panel, prior to fuel load, NEI Section 17.X.1.1.c. This section states, ‘The expert panel is established in accordance with NUMARC 93-01 prior to fuel load authorization and utilizes operating, maintenance and systems expertise, PRA insights, and other applicable information

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to update and maintain the MR scope and SSC classification.' This panel will also scope SSCs into and out of the program as additional information is developed (e.g., emergency operating procedures (EOPs)) after the license is issued."

NEI issued an approved version of the template in NEI 07-02A at the NRC's request, which included the NRC's Safety Evaluation. The approved version also included the NRC Requests for Additional Information and responses. The FSAR will be revised to include the ADAMS Accession Number for this approved version.

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

ASSOCIATED BLN COL APPLICATION REVISIONS:

1. COLA Part 2, FSAR. Chapter 1, Table 1.6-201 will be revised from (note-the following includes changes made by Errata Report Rev 2):

| Author / Report Number | Title | Revision | FSAR Section | Document Transmittal | ADAMS Accession Number |
|---------------------------|--|----------|-----------------|-------------------------|------------------------------|
| NEI 07-02A | Generic FSAR Template Guidance for Maintenance Rule Program Description for Plants Licensed Under 10 CFR Part 52 | 0 | 17.6 | March 2008 | TBD |

To read:

| Author / Report Number | Title | Revision | FSAR Section | Document Transmittal | ADAMS Accession Number |
|---------------------------|--|----------|-----------------|-------------------------|------------------------------|
| NEI 07-02A* | Generic FSAR Template Guidance for Maintenance Rule Program Description for Plants Licensed Under 10 CFR Part 52 | 0 | 17.6 | March 2008 | ML080910149 |

* NEI 07-02 Revision 3 is approved by the NRC. NEI 07-02A includes the approved Revision 3, the NRC safety evaluation, and corresponding responses to the NRC Request for Additional Information.

2. COLA Part 2, FSAR Chapter 17, Subsection 17.8, References, will be revised to add the following reference (Note: 'X' will be replaced with the next sequential reference number):

20X. Nuclear Energy Institute, "Generic FSAR Template Guidance for Maintenance Rule Program Description for Plants Licensed Under 10 CFR Part 52," NEI 07-02A, Revision 0

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None