

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

July 10, 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 – TURBINE ROTOR INTEGRITY

Reference: Letter from Brian Anderson (NRC) to Andrea L. Sterdis (TVA), Request for Additional Information Letter No. 039 Related to SRP Section 10.02.03 for the Bellefonte Units 3 and 4 Combined License Application, dated June 11, 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 each NRC request in the subject letter is addressed in the enclosure and 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  $/O^{++}$  day of July, 2008.

Manager, New Nuclear Licensing and Industry Affairs Nuclear Generation Development & Construction

Enclosure cc: See Page 2



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cc: (Enclosure)

- B. C. Anderson, NRC/HQ
- J. P. Berger, EDF
- E. Cummins, Westinghouse
- S. P. Frantz, Morgan Lewis
- M. W. Gettler, FP&L
- R. C. Grumbir, NuStart
- P. S. Hastings, NuStart
- P. Hinnenkamp, Entergy
- M. C. Kray, NuStart
- D. Lindgren, Westinghouse
- G. D. Miller, PG&N
- M. C. Nolan, Duke Energy
- N. T. Simms, Duke Energy
- G. A. Zinke, NuStart

### cc: (w/o Enclosure)

- M. M. Comar, NRC/HQ
- B. Hughes, NRC/HQ
- R. G. Joshi, NRC/HQ
- R. H. Kitchen, PGN
- M. C. Kray, NuStart
- A. M. Monroe, SCE&G
- C. R. Pierce, SNC
- R. Register, DOE/PM
- L. Reyes, NRC/RII
- T. Simms, NRC/HQ
- J. M. Sebrosky, NRC/HQ

Enclosure TVA letter dated July 10, 2008 RAI Responses

Responses to NRC Request for Additional Information letter No. 039 dated June 11, 2008 (3 pages, including this list)

Subject: Turbine rotor integrity in the Final Safety Analysis Report

# RAI Number

Date of Response

10.02.03-01

This letter – see following pages

Attachments / Enclosures

Pages Included

# None

Enclosure TVA letter dated July 10, 2008 RAI Responses

## NRC Letter Dated: June 11, 2008 NRC Review of Final Safety Analysis Report NRC RAI NUMBER: 10.02.03-1 (a)

The final sentence in FSAR Section 10.2.6 (COL 10.2-1) contains the phrase, "fabrication of the turbine information." Because the word "information" seems inappropriate in this context, please clarify the meaning of this sentence.

### BLN RAI ID: 0564 BLN RESPONSE:

(a) Use of the word "information" is a typographical error and should not have been included in the FSAR text of Subsection 10.2.6. The COLA revision to remove the word "information" was submitted to the NRC by Errata Report Letter Revision 1 on March 28, 2008 (Change Number AP-STD-0050). The COLA will be revised per the Errata Report with minor editorial changes as shown below.

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

### ASSOCIATED BLN COL APPLICATION REVISIONS:

COLA Part 2, FSAR, Chapter 10, Subsection 10.2.6 will be revised from:

Plant-specific turbine rotor test data and calculated toughness curves that support the material property assumptions in the turbine rotor analysis after the fabrication of the turbine information will be available for review prior to fuel load.

To read:

Plant-specific turbine rotor test data and calculated toughness curves that support the material property assumptions in the turbine rotor analysis will be available for review after fabrication of the turbine and prior to fuel load.

### **ATTACHMENTS/ENCLOSURES:**

None

Enclosure TVA letter dated July 10, 2008 RAI Responses

### NRC Letter Dated: June 11, 2008

## NRC Review of Final Safety Analysis Report

## NRC RAI NUMBER: 10.02.03-1 (b)

In addition, the NRC staff reviewed the standard supplementary information (STD SUP 10.2-2) on the frequency of exercising main steam stop and control valves discussed in Section 10.2.3.6 of the FSAR. The application proposes to add to DCD Subsection 10.2.3.6 a statement that the valves will be exercised on a frequency recommended by the turbine vendor or valve manufacturer. In order for the staff to confirm the adequacy of the turbine maintenance and inspection program with respect to turbine rotor integrity, please discuss in detail TVA's plans to provide the specific valve exercise frequency and technical justification as part of either the application or the maintenance and inspection program addressed in STD COL 10.2-1.

#### **BLN RAI ID: 0565**

#### **BLN RESPONSE:**

(b) DCD Revision 16, Subsection 10.2.3.6, provided an exercise frequency of "six month intervals," consequently, the statement that main steam stop and control valves are exercised at a frequency recommended by the turbine vendor or valve manufacturer is unnecessary and is being deleted from the FSAR.

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

## **ASSOCIATED BLN COL APPLICATION REVISIONS:**

COLA Part 2, FSAR, Chapter 10, Section 10.2.3.6, will be revised to delete STD SUP 10.2-02 as follows:

Delete:

STD SUP 10.2-02 Add the following at the end of the third bullet of DCD Subsection 10.2.3.6.

The main steam stop and control valves are exercised at a frequency recommended by the turbine vendor or valve manufacturer."

## ATTACHMENTS/ENCLOSURES:

None