



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

January 2, 2009

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 – AC POWER SYSTEMS (ONSITE)**

Reference: Letter from Tanya Simms (NRC) to Andrea L Sterdis (TVA), Request for
Additional Information Letter No. 138 Related to SRP Section 08.03.01 for the
Bellefonte Units 3 and 4 Combined License Application, dated November
18, 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 Thomas 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 2nd day of Jan, 2009.

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

Enclosure
cc: See Page 2

DOES
NRO

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cc: (Enclosures)

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
T. Simms, NRC/HQ
G. A. Zinke, NuStart

cc: (w/o Enclosure)

B. Anderson, NRC/HQ
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
J. M. Sebrosky, NRC/HQ

Enclosure
TVA letter dated January 2, 2009
RAI Response

Response to NRC Request for Additional Information letter No. 138 dated November 18, 2008
(3 pages, including this list)

Subject: AC Power Systems in the Final Safety Analysis Report

<u>RAI Number</u>	<u>Date of TVA Response</u>
08.03.01-001	This letter – see following pages

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

Enclosure
TVA letter dated January 2, 2009
RAI Response

NRC Letter Dated: November 18, 2008

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 08.03.01-001

In Section 8.3.1.2.4 of the FSAR, the applicant describes the periodic testing of electrical penetration protective devices (COL action item 8.4.1-1) that provide penetration overcurrent protection. However, the NRC staff notes that the applicant has not addressed the periodic testing of the electrical penetration primary and backup protective devices protecting Class 1E and non-Class 1E dc circuits. Provide a description of the testing of primary and backup protective devices protecting Class 1E and non-Class 1E dc circuits, if any.

BLN RAI ID: 2528

BLN RESPONSE:

The FSAR will be revised in the next COLA submittal to include periodic testing of the electrical penetration primary and backup protective devices protecting Class 1E and non-Class 1E dc circuits, as well as control of protective devices. The COLA change will also include an unrelated correction to testing related to medium voltage vacuum circuit breakers.

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

ASSOCIATED BLN COL APPLICATION REVISIONS:

1- COLA Part 2, FSAR Chapter 8, Subsection 8.3.1.1.6 will be revised from:

Procedures implement periodic testing of protective devices that provide penetration overcurrent protection. A sample of each different type of overcurrent device is selected for periodic testing during refueling outages. Testing includes:

- Verification of thermal and instantaneous trip characteristics of molded case circuit breakers.
- Verification of long time, short time, and instantaneous trips of medium voltage air circuit breakers.
- Verification of long time, short time, and instantaneous trips of low voltage air circuit breakers.

To read:

Procedures implement periodic testing of protective devices that provide penetration overcurrent protection. A sample of each different type of overcurrent device is selected for periodic testing during refueling outages. Testing includes:

- Verification of thermal and instantaneous trip characteristics of molded case circuit breakers.
- Verification of long time, short time, and instantaneous trips of medium voltage vacuum circuit breakers.
- Verification of long time, short time, and instantaneous trips of low voltage air circuit breakers.

Enclosure
TVA letter dated January 2, 2009
RAI Response

- Verification of Class 1E and non-Class 1E dc protective device characteristics (except fuses) per manufacturer recommendations, including testing for overcurrent interruption and/or fault current limiting.

Penetration protective devices are maintained and controlled under the plant configuration control program. A fuse control program, including a master fuse list, is established based on industry operating experience.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None