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

April 23, 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 – FIRE PROTECTION SYSTEM

Reference: Letter from Tanya Simms (NRC) to Andrea L Sterdis (TVA), Request for Additional Information Letter No. 153 Related to SRP Section 09.05.01 for the Bellefonte Units 3 and 4 Combined License Application, dated March 26, 2009

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

A response to the NRC request in the subject letter is addressed in the enclosure which does not identify any associated changes to 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 23rd day of April, 2009.

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

Enclosure
cc: See Page 2

A0076
D085
NRO

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 April 23, 2009
RAI Response

Response to NRC Request for Additional Information letter No. 153 dated March 26, 2009
(2 pages, including this list)

Subject: Fire Protection System in the Final Safety Analysis Report

RAI Number	Date of TVA Response
09.05.01-17	This letter – see following page

Associated Additional Attachments / Enclosures	Pages Included
None	

Enclosure
TVA letter dated April 23, 2009
RAI Response

NRC Letter Dated: March 26, 2009

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 09.05.01-17

Revision 17 of the AP1000 DCD changed the design pressure from 5000 psi to 4000 psi for the High Pressure Air Subsystem that is used to recharge fire brigade's self-contained breathing apparatus (SCBA) cylinders. This design change has a potential impact on the adequacy of the breathing air recharging capability if high-pressure cylinders (4500 psi) are supplied for fire brigade's use. The applicant should review the above DCD change and address the impact on the breathing air system design at Bellefonte and make changes to the COLA as appropriate.

BLN RAI ID: 3270

BLN RESPONSE:

DCD Revision 17 revised Table 9.3.1-4 to correct a discrepancy between the compressed air system (CAS), high-pressure air subsystem compressor design pressure and other components such as the associated downstream air receiver design pressure. The compressor design pressure was changed to 4000 psig to make it identical to the 4000 psig design pressure of the compressed air system and the air receiver which is also shown in Table 9.3.1-4. The design pressure of the high-pressure air subsystem of the CAS for the AP1000 was previously, and still remains, 4000 psig. Per DCD subsection 9.3.1, one of the primary purposes of the high-pressure air subsystem of the CAS is to recharge the control room emergency habitability system (VES) air storage tanks. These tanks also have a design pressure of 4000 psig and maintain a minimum pressure of 3400 psig, as discussed in DCD subsection 6.4.2.3. Therefore, the correction of air compressor design pressure from 5000 psig to 4000 psig does not change the capability of this system to charge the SCBA cylinders for the fire brigade.

As described in FSAR Subsection 9.5.1.8.2.2, SCBAs are provided with an operating life of at least 30 minutes for selected fire brigade, emergency repair and control room personnel. The SCBA cylinders can be adequately charged using the high pressure air subsystem with a design pressure of 4000 psig. This can be accomplished by using 2216 psig SCBA.

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

ASSOCIATED BLN COL APPLICATION REVISIONS:

No COLA revisions have been identified associated with this response.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None