



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

August 20, 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

**BELLEVILLE COMBINED LICENSE APPLICATION – RESPONSE TO REQUEST FOR
ADDITIONAL INFORMATION – FIRE PROTECTION PROGRAM**

Reference: Letter from Tanya Simms (NRC) to Andrea L. Sterdis (TVA), Request for
Additional Information Letter No. 091 Related to SRP Section 09.05.01 for the
Belleville Units 3 and 4 Combined License Application, dated July 30, 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 20th day of Aug, 2008.

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

Enclosure
cc: See Page 2

D085
NR0

Document Control Desk

Page 2

August 20, 2008

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
- J. Reister, DOE/PM
- L. Reyes, NRC/RII
- J. M. Sebrosky, NRC/HQ

Enclosure
TVA letter dated August 20, 2008
RAI Response

Response to NRC Request for Additional Information letter No. 091 dated July 30, 2008
(4 pages, including this list)

Subject: Fire Protection Program in the Final Safety Analysis Report

<u>RAI Number</u>	<u>Date of TVA Response</u>
09.05.01-15	This letter – see following pages

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

Enclosure
TVA letter dated August 20, 2008
RAI Response

NRC Letter Dated: July 30, 2008

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 09.05.01-15

Please clarify applicable subsections of the COLA to address the following issues, or explain what alternative approach the applicant is proposing:

Regulatory Guide 1.189, Section 3.5.1.2, states that the fire brigade should have at least 10 NIOSH masks [SCBA unit] and should have at least 2 extra bottles per mask. Each air bottle should be rated with a 30 minute minimum operating life/capacity. Although the COLA does describe providing the 10 NIOSH masks and the 2 extra air bottles per mask, there is no specific provision for these SCBA units and extra bottles to have a minimum of 30 minutes operating capacity. Clarify in subsection 9.5.1.8.2.2 whether the minimum operating capacity for each SCBA unit and reserve bottles will be 30 minutes. In addition, clarify whether the [fire brigade] 6-hour reserve breathable air supply provision is for each of the 10 SCBA units (i.e., the system should be able to supply air for 10 persons for 6 hours each) as intended by the Regulatory Guide.

RG 1.189, Section 1.6.4.2, lists the types of fires fire brigade members should be trained on (i.e., hydrogen fires, flammable liquid fires, energized electrical equipment fires, cable tray fires, construction-related fires, record file fires, etc.) For clarification, please include this list in subsection 9.5.1.8.2.2.1(d) of the COLA.

RG 1.189, Section 1.6.4.2(i), states that initial classroom instruction should include a detailed review of the fire fighting strategies and procedures. Please include the provision for a detailed review of fire fighting strategies in subsection 9.5.1.8.2.2.1(j) of the COLA, or justify its omission.

RG 1.189, Section 1.6.4.3, states that practice sessions should be held for "each" shift fire brigade and should be provided for "each" fire brigade member. For clarification, please specifically state in subsection 9.5.1.8.2.2.3 of the COLA whether "each" fire brigade member will have practice sessions.

BLN RAI ID: 0924

BLN RESPONSE:

As prescribed by Regulatory Guide (RG) 1.189, the service or rated operating life for the self-contained breathing apparatus (SCBA) units is at least 30 minutes. Each of the extra air bottles described in FSAR Subsection 9.5.1.8.2.2 contains a minimum of 30 minutes of operating capacity. FSAR Subsection 9.5.1.8.2.2 will be changed in a future COLA revision to clarify this intent.

Regarding the fire brigade 6-hour reserve breathable air supply, RG 1.189 prescribes that "an onsite 6-hour supply of reserve air should be provided for the fire brigade personnel and arranged to permit quick and complete replenishment of exhausted air supply bottles as they are returned." Concerning these fire brigade SCBAs, FSAR Subsection 9.5.1.8.2.2 states "An additional on-site 6-hour supply of reserve air is provided to permit quick and complete replenishment of exhausted supply air bottles." This supply of reserve air is sufficient to provide at least 6 hours of additional air for "each" of the 10 SCBA units. This clarification does not require a COLA change because the FSAR is consistent with the regulatory guidance.

Regarding the types of fires that fire brigade members should be trained on in initial classroom instruction, FSAR Subsection 9.5.1.8.2.2, Fire Brigade Training, states that the course subject matter for formal training conducted prior to members assuming brigade duties, "is selected to satisfy the

requirements of Regulatory Guide 1.189.” However, to clarify the types of fires that brigade members are trained to fight, the list from RG 1.189, Section 1.6.4.2 will be included in FSAR Subsection 9.5.1.8.2.2.1(d) in the future revision of the COLA.

Regarding review of fire fighting strategies and procedures during initial classroom training, FSAR Subsection 9.5.1.8.2.2.1(j) will be changed in a future COLA revision to include a detailed review of both fire fighting “strategies” and procedures.

Regarding practice sessions for shift fire brigade, RG 1.189 states that “The licensee should hold practice sessions for each shift fire brigade on the proper method of fighting the various types of fires that could occur in a nuclear power plant. These sessions should provide brigade members with experience...” FSAR Subsection 9.5.1.8.2.2.3, Practice, states that “Practice sessions are held for fire brigade members on the proper method of fighting various types of fires which might occur in the plant. These sessions are scheduled on an annual basis and provide brigade members with team experience...” The intent is that “each” brigade member will receive practice annually. Therefore, for clarification, FSAR Subsection 9.5.1.8.2.2.3 will be changed to specify that “each” member receives practice.

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

ASSOCIATED BLN COL APPLICATION REVISIONS:

1. COLA Part 2, FSAR Chapter 9, Subsection 9.5.1.8.2.2, 4th paragraph (second through fourth sentences) will be revised from:

Self-contained breathing apparatus (SCBA) approved by NIOSH, using full face positive pressure masks, are provided for selected fire brigade, emergency repair and control room personnel. At least ten masks are provided for fire brigade personnel. At least two extra air bottles are located onsite for each SCBA.

To read:

Self-contained breathing apparatus (SCBA) approved by NIOSH, using full face positive pressure masks, and providing an operating life of at least 30 minutes, are provided for selected fire brigade, emergency repair and control room personnel. At least ten masks are provided for fire brigade personnel. At least two extra air bottles, each with at least 30 minutes of operating life, are located onsite for each SCBA.

2. COLA Part 2, FSAR Chapter 9, Section 9.5.1.8.2.2.1(d), will be revised from:

- d. The proper use of on-site fire fighting equipment and the correct method of fighting various types of fires.

To read:

- d. The proper use of on-site fire fighting equipment and the correct method of fighting various types of fires including at least the following:
 - fires involving radioactive materials
 - fires in energized electrical equipment
 - fires in cables and cable trays
 - fires involving hydrogen
 - fires involving flammable and combustible liquids or hazardous process chemicals

Enclosure
TVA letter dated August 20, 2008
RAI Response

- fires resulting from construction or modifications (welding)
- fires involving record files

3. COLA Part 2, FSAR Chapter 9, Section 9.5.1.8.2.2.1(j), will be revised from:

- j. Review of fire fighting procedures and procedure changes.

To read:

- j. Detailed review of fire fighting strategies, procedures and procedure changes.

4. COLA Part 2, FSAR Chapter 9, Section 9.5.1.8.2.2.3, first sentence, will be revised from:

Practice sessions are held for fire brigade members on the proper method of fighting various types of fires which might occur in the plant.

To read:

Practice sessions are held for each fire brigade and for each fire brigade member on the proper method of fighting various types of fires which might occur in the plant.

ATTACHMENTS/ENCLOSURES:

None