



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

April 24, 1991

Docket Nos. 50-438
and 50-439

LICENSEE: Tennessee Valley Authority
FACILITY: Bellefonte Nuclear Plant, Units 1 and 2
SUBJECT: SUMMARY OF APRIL 11, 1991 MEETING WITH TVA ON SEISMIC GROUND
MOTION AND FIRE PROTECTION FOR BELLEFONTE, UNITS 1 AND 2

On April 11, 1991, the NRC staff met with the TVA staff at NRC Headquarters in Rockville, Md. The purpose of the meeting was to discuss seismic ground motion licensing basis and TVA's position paper on Fire Protection for Bellefonte Nuclear Plant (BLN), Units 1 and 2. Enclosure 1 is a list of the meeting attendees.

The NRC staff present at the meeting discussed various options to deal with the latest understanding of the seismic hazard at the site. One of the options discussed involved some revision to the 0.18g Safe Shutdown Earthquake spectrum for limited validation of existing structures, systems and components, and then use of the revised input for the structures, systems, and components yet to be designed. The TVA staff asked if the NRC staff was interest in analysis similar to what was done for the Watts Bar/Sequoyah sites where acceleration of 0.22g was used for structures and components which are not yet constructed. The NRC staff indicated that such an approach would increase the NRC staff's confidence in the BLN design. The TVA staff stated that it will review with the TVA's management if it should revise the ground motion acceleration used on the new analysis, and will inform NRC in a short time if it plans to change the licensing basis acceleration for BLN, Units 1 and 2. The NRC staff informed the TVA staff that it was under a significant time constraint to complete the review of the TVA's position paper and would appreciate expeditious response from TVA.

On the fire protection position at BLN, the TVA staff stated that it is undertaking a comprehensive review of the fire protection program, and will comply with GDC 3 of Appendix A to 10 CFR 50, and 10 CFR 50.48(a) and (e). To demonstrate compliance, TVA commits to comply with (1) Appendix A to Branch Technical Position APCS 9.5.1 (1976), (2) Sections III.G, III.J, and III.O of 10 CFR 50, Appendix R, and (3) NFPA and other fire protection codes. TVA further indicated that it will identify the codes and their editions that it

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Memorandum

plans to adopt for the BLN Fire Protection Program. It also plans to conform to the guidance provided by NRC in Generic Letters 86-10 and 88-12. This TVA approach supersedes all previous BLN fire protection submittals and commitments. The NRC staff asked if TVA plans to upgrade the fire detection capability to the latest designs. The TVA staff indicated that it will consider that option and will provide a confirmation at a future date. Enclosure 2 contains the viewgraphs on the presentation of TVA's fire protection program for BLN.

Original signed by
Mohan C. Thadani, Project Manager
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Attendance List
2. TVA Viewgraphs on Bellefonte's Position on Fire Protection

cc w/enclosures:
See next page

| | | | | | |
|------|--------------------|----------------|--------------------|---------------------|---|
| OFC | : PDII-4/LA | : <i>ML</i> PM | : PDII-4/DD | : PDII-4/D | : |
| NAME | : MKrebs <i>mk</i> | : MThadani:as | : SBlack <i>SB</i> | : FHebdon <i>FH</i> | : |
| DATE | : 4/24/91 | : 4/24/91 | : 4/24/91 | : 4/24/91 | : |

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ENCLOSURE 1

MEETING WITH TVA ON
SEISMIC DESIGN/GROUND MOTION

AND

FIRE PROTECTION POSITION

APRIL 11, 1991

Attendees

Affiliation

| | |
|--------------------|------------------|
| Bruce Schofield | TVA - Bellefonte |
| John Johnson | MPR |
| William R. Schmidt | MPR |
| Thomas M. Cheng | NRR/DET/ESGB |
| Thomas A. Ippolito | TVA - Rockville |
| Goutam Bagchi | NRR/DET/ESGB |
| Robert Rothman | NRR/DET/ESGB |
| Gus Giese-Koch | NRR/DET/ESGB |
| Mohan C. Thadani | NRR/DRPE/PDII-4 |

BACKGROUND ON FIRE PROTECTION AT BELLEFONTE (BLN)

- **BLN FIRE PROTECTION PROGRAM AND DESIGN ARE BASED ON APPENDIX A TO BTP APCSB 9.5.1. (1976)**

- **SIGNIFICANT PORTION OF DESIGN AND CONSTRUCTION HAVE BEEN COMPLETED BASED ON APPENDIX A AND RELATED COMMITMENTS AND AGREEMENTS.**

- **BLN CONSTRUCTION SLOWDOWN BEGAN IN 1985 EVENTUALLY LEADING TO PLANT DEFERRAL IN 1988.**

- **NRC ISSUED SIGNIFICANT FIRE PROTECTION GUIDANCE DOCUMENTS CONCURRENTLY WITH CONSTRUCTION SLOWDOWN AND DEFERRAL.**

- **TVA IS UNDERTAKING COMPREHENSIVE REVIEW OF FIRE PROTECTION AT BLN.**

**SUMMARY OF TVA POSITION ON BLN
FIRE PROTECTION REGULATORY BASES**

- **TVA WILL COMPLY WITH:**
 - **GDC 3 OF APPENDIX A TO 10CFR50**
 - **10CFR50.48(A) AND (E)**

- **TO DEMONSTRATE COMPLIANCE TVA COMMITS TO COMPLY WITH:**
 - **APPENDIX A OF BTP APCS 9.5.1 (1976) AS IT APPLIES TO PLANTS UNDER CONSTRUCTION. (ALTERNATIVES OR EXCEPTIONS WILL BE NOTED IN SUBMITTALS TO THE NRC.)**

 - **SECTIONS III.G, III.J AND III.O OF 10CFR50 APPENDIX R OR PROVIDE EQUIVALENT PROTECTION. (TVA WILL ALSO MAKE A COMPARISON TO THE REMAINDER OF APPENDIX R.)**

 - **COMPLY WITH NFPA CODES AND OTHER FIRE PROTECTION RELATED CODES IN THE LATEST EXISTING REVISION OF THE FSAR (AMENDMENT 29, PARAGRAPH 9.5.1.1). DEVIATIONS WILL BE IDENTIFIED AND JUSTIFIED IN FIRE PROTECTION PROGRAM.**

DOCUMENTATION OF BLN FIRE PROTECTION PROGRAM

- CONFORM TO GUIDANCE OF NRC GENERIC LETTERS 86-10 AND 88-12.

- REVISE AND SUBMIT FSAR SECTION 9.5.1 AND FIRE PROTECTION PROGRAM DOCUMENT WILL BE REFERENCED IN THE FSAR.
 - FIRE PROTECTION COMMITMENTS

 - SUPPORTING DOCUMENTATION SUCH AS CODE OF RECORD, SAFE SHUTDOWN ANALYSIS, COMBUSTIBLE LOAD ANALYSIS, ADMINISTRATIVE AND TECHNICAL CONTROLS, ORGANIZATION AND IDENTIFICATION OF PLANT FEATURES AND SYSTEMS ASSOCIATED WITH FIRE PROTECTION.

- SUPERSEDE ALL PREVIOUS BLN FIRE PROTECTION SUBMITTALS AND COMMITMENTS.

CONCLUSIONS REGARDING BLN FIRE PROTECTION PROGRAM

- PROVIDES ADEQUATE FIRE PROTECTION MEASURES TO PROTECT PUBLIC HEALTH AND SAFETY.
- CONSISTENT WITH NRC REGULATIONS.
- ASSURES CONTINUITY IN DESIGN AND CONSTRUCTION.