

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

March 7, 1984

Director of Nuclear Reactor Regulation
Attention: Ms. E. Adensam, Chief
Licensing Branch No. 4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Ms. Adensam:

In the Matter of the Application of) Docket Nos. 50-390
Tennessee Valley Authority) 50-391

Please refer to D. S. Kammer's letter to you dated January 25, 1983 which provided TVA comments/responses on various NRC positions described in the Watts Bar Nuclear Plant (WBN) Safety Evaluation Report (SER) (NUREG-0847, dated June 1982).

By the referenced letter, TVA responded to NRC's determination of the unacceptability of the WBN inservice inspection program for the Turbine Overspeed Protection System (TOPS) (WBN SER Section 10.2.1). SER Section 10.2.1 indicates that additional inspection criteria would need to be incorporated into the inspection program for the TOPS and that the WBN Technical Specifications would be developed with this as a requirement.

TVA's position was, and remains, that implementation of the additional inspection criteria provides no additional increase in safety. In subsequent discussions held with NRC Standard Technical Specification reviewers to resolve this matter, TVA further contended that the TOPS was not a nuclear safety issue and therefore should not be included in the Technical Specifications. At the conclusion of these discussions, TVA was under the impression that NRC concurred with TVA's position and therefore, no technical specification on this issue would be imposed for WBN. This understanding seemed to be reflected by the numerous draft versions of the WBN unit 1 Technical Specifications, provided to TVA by NRC, in which a technical specification for the TOPS was never included. However, the "proof and review" version of the WBN unit 1 Technical Specifications included specification 3/4.3.4 on TOPS.

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The enclosure to this letter reiterates the technical and licensing bases for our position. We request that this matter be expeditiously reviewed and a conference call be scheduled at the earliest time possible to obtain final resolution.

If you have any questions concerning this matter, please get in touch with D. B. Ellis at FTS 858-2681.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills
L. M. Mills, Manager
Nuclear Licensing

Sworn to and subscribed before me
this 7th day of March 1984

Paulette H. White
Notary Public
My Commission Expires 9-5-84

Enclosure

cc: U.S. Nuclear Regulatory Commission (Enclosure)
Region II
Attn: Mr. James P. O'Reilly Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

ENCLOSURE

The WBN Safety Evaluation Report (SER) (NUREG-0847, dated June 1982), Section 10.2.1, "Turbine Generator Design," contained a requirement for a technical specification covering the Turbine Overspeed Protection System (TOPS). The SER implies that this technical specification is necessary to ensure that TOPS would perform its designed safety function to prevent the generation of turbine missiles as required by 10 CFR 50, Appendix A, General Design Criterion (GDC) 4.

GDC 4 does not require that generation of missiles be prevented; it only requires that structures, systems, and components important to safety be appropriately protected against the effects of such missiles. In SER Section 3.5.1.3, NRC evaluates our compliance with GDC 4 concerning turbine missiles and states that "the staff concludes that the risk as a result of potential turbine missiles for Watts Bar is acceptably low"

Also, the NRC Standard Technical Specifications for Westinghouse Pressurized Water Reactors (NUREG-0452, Revision 4) bases 3/4.3.4 "Turbine Overspeed Protection" states that protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety related components, equipment, or structures. However, as previously noted, the NRC staff has concluded that due to the WBN layout the potential for turbine missiles to damage safety-related components, equipment, or structures is low.

It should be noted that TVA will perform periodic surveillance of the TOPS at Watts Bar, which includes valve cycling and disassembling on a schedule consistent with economic concerns.

In conclusion, TVA requests that NRC revise SER Section 10.2.1 to delete the requirements on TOPS and that technical specification 3/4.3.4 of the Watts Bar unit 1 Technical Specifications be deleted entirely.