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MAR 27 1991

WBRD-50-390/90-30
WBRD-50-391/90-30

10 CFR 50.55(e)

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

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

WATTS BAR NUCLEAR PLANT (WBN) - NRC INSPECTION REPORT NO. 390, 391/90-30 -
REPLY TO NOTICE OF VIOLATION

TVA has reviewed the subject inspection report and notice of violation,
and the response is provided in Enclosure 1.

Enclosure 2 contains the commitment made in this response.

If there are any questions, please telephone P. L. Pace at (615) 365-1827.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

Mark O. Medford
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Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

cc (Enclosures):

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNIT 1
RESPONSE TO NRC'S FEBRUARY 25, 1991 LETTER TO TVA
NRC VIOLATION 390/90-30-02

DESCRIPTION OF VIOLATION

10 CFR 50.55(e) requires the holder of the construction permit to notify the commission, by telephone within 24 hours and in writing within 30 days, of significant deficiencies in construction which require extensive repair to meet the criteria and bases stated in the safety analysis report. By reference, the safety analysis report implements 10 CFR Appendix B through the Quality Assurance plan which requires material quality and traceability of records and material.

Contrary to the above, on August 16, 1989, the licensee identified in Condition Adverse to Quality Report (CAQR) 890415 a condition that represented a significant deficiency in construction involving the lack of material quality traceability for numerous safety-related molded case circuit breakers. This condition was not reported until December 5, 1990.

ADMISSION OR DENIAL OF THE VIOLATION

TVA admits the violation occurred as stated.

REASON FOR VIOLATION

The CAQR identified in the violation was prepared to document molded case circuit breaker material traceability problems. These deficiencies were discovered by investigations performed to satisfy the requirements of NRC Bulletin 88-10, "Nonconforming Molded Case Circuit Breakers." TVA provided a response to the bulletin and its supplement in letters dated April 11, August 30, and November 8, 1989. As required by TVA procedures, licensing personnel performed an evaluation of the CAQR to determine if the deficiency was reportable under 10 CFR 50.55(e). This evaluation was completed October 6, 1989, and determined that the deficiency was not reportable.

The TVA procedure for conducting evaluations for reportability under 10 CFR 50.55(e) is Administrative Instruction (AI)-13.4.1, "Construction Deficiency Reporting - 10 CFR 50.55(e)." Revision 0 was in effect at the time of the initial and subsequent reviews of CAQR WBP 890415. Because no hardware deficiencies or actual instances of fraudulent or inadequate molded case circuit breakers had been identified at WBN, the initial evaluators made the judgment that the identified traceability documentation problems described in the CAQR were unlikely to result in a failure.

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TVA considers this judgment to be in error as indicated in the subsequent TVA re-review of the CAQR dated December 5, 1990. That reevaluation determined that untraceable molded case circuit breakers had been installed in plant systems and that NRC-supplied information indicated some refurbished and untraced breakers could not meet testing requirements. Accordingly, the safety of plant operations could not be confirmed and the deficiency was determined to be reportable. The deficiency was reported to NRC on December 5, 1990.

TVA attributes the initial failure to report to a nonconservative judgment error by Site Licensing personnel and a weakness in the then existing revision of AI-13.4.1, in that minimal guidance was provided to the evaluators for reportability decisions. More reliance should have been placed on the industry information supplied in the NRC bulletin regarding the potential for failure of the breakers.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

In order to ensure that each licensing engineer making reportable decisions fully understands the available NRC guidance on 10 CFR 50.55(e) evaluations, a copy of NRC Inspection Manual, Part 9900, 10 CFR 50.55(e) was provided to each engineer on February 4, 1991. Training of the Compliance Licensing engineers on this guidance and on the causes and deficiencies of this violation was completed on March 21, 1991. The need to consider all available information and the need to declare deficiencies potentially reportable in the absence of a definitive determination on safety impact were emphasized in this training.

The licensing individuals involved in the original determination in 1989 are no longer employees of TVA. Accordingly, no direct feedback to these individuals is possible.

To determine the extent of the problem identified by this violation, TVA conducted a statistical sample of previous reportability evaluations to evaluate whether this problem was isolated to this particular CAQR. The population for the sample was approximately 400 deficiencies that had been determined to not be reportable. These evaluations had been conducted between the time TVA had introduced the Condition Adverse to Quality Program in 1987 and the reevaluation of CAQR 890415 in December 1990. To establish a valid confidence level, 54 evaluations were screened to identify any additional examples of nonconservative judgments regarding the effect of the deficiencies on plant safety. One additional problem was identified. This deficiency has been reported to Region II under 10 CFR 50.55(e). As a result of this sample screening, TVA has determined that further review is warranted. Accordingly, each of the approximately 400 evaluations in the subject population will be screened for reconsideration of the reportability determination.

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CORRECTIVE ACTION WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATION

TVA has revised the section of AI-13.4.1 that deals with performing the reportability evaluation to indicate that the guidance in NRC Inspection Manual, Part 9900, should be used to make the determination of reportability. This procedure revision was approved March 15, 1991, and the changes were reviewed in the training session discussed above. This procedure revision and evaluation training are considered sufficient to limit future problems of the type described in the violation.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

The screening of previous evaluation^s discussed above is scheduled to be completed by June 28, 1991.

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ENCLOSURE 2

LIST OF COMMITMENTS

TVA will screen previous reportability evaluations from the period March 6, 1987 to December 5, 1990, to identify any additional examples of nonconservative judgments regarding the affect of the deficiencies on plant safety. This activity is scheduled to be completed by June 28, 1991.