

APPENDIX A

NOTICE OF VIOLATION

Tennessee Valley Authority  
Watts Bar 1

Docket No. 50-390  
License No. CPPR-91

As a result of the inspection conducted on June 21 - July 20, 1981, and in accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), the following violations were identified.

- A. 10 CFR 50, Appendix B, Criterion II requires establishment and execution of a quality assurance program, documented by written policies, procedures, or instructions, which complies with the requirements of Appendix B. Section 17.1A of Watts Bar FSAR, the accepted QA program, commits to safety guide 28 which endorses ANSI N45.2-1971. Section 2 of the Standard requires that activities affecting quality shall be accomplished under suitably controlled conditions.

Contrary to the above, as evidenced by the violations presented below, activities affecting quality were not accomplished under suitably controlled conditions.

This is a Severity Level IV Violation (Supplement II.D.).

- B. 10 CFR 50, Appendix B, Criterion V requires activities affecting quality to be accomplished in accordance with instructions. Also, activities affecting quality must be prescribed by instructions which include appropriate quantitative acceptance criteria. The accepted QA program, FSAR section 17.1A commits to safety guide 28 which endorses ANSI N45.2-1971. Section 6 of the Standard contains the same requirements as does Criterion V of Appendix B.

1. Contrary to the above, on or before June 15, 1981, activities affecting quality were not accomplished in accordance with the licensee's prescribed instructions, in that:

- a. Section 10.1 of WBNP-QCT-4.36-9, a licensee prescribed instruction, requires monitoring of centrifugal charging pump suction and discharge pressure during pump operation; however, on June 15, 1981, during three steady-state operations of centrifugal charging pump 1A-A CCP, discharge pressure was not monitored. Suction pressure was not monitored on two of the three operations. In consequence, blockage of the startup strainer was undetected and the centrifugal charging pump was extensively damaged.
- b. On June 15, 1981, system flushing operations were not coordinated, directed, and accomplished by a Construction Test Director as required by section 5.1.1 of WBNP-QCT-4.36, a licensee prescribed instruction.

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- c. On June 15, 1981, personnel who participated in the system flush operation had not all been briefed regarding the operation in a meeting conducted by a Construction Test Director as required by section 5.1.10 of WBNP-QCT-4.36.
2. Contrary to the above, on June 15, 1981 WBNP-QCT-4.36-9, a prescribed instruction, did not include appropriate quantitative acceptance criteria. The instruction required that suction pressure, discharge pressure, and startup strainer differential pressure, be maintained within operating limits; but no limits were provided.

This is a Severity Level V Violation (Supplement II.E.).

- C. 10 CFR 50, Appendix B, Criterion XI requires that test procedures include provisions for assuring that adequate test instrumentation is available and used. The accepted QA program, FSAR section 17.1A, commits to safety guide 28, which endorses ANSI N45.2-1971. Section 12 of the Standard contains the same requirements as does Criterion XI of Appendix B.

Contrary to the above, a licensee prescribed test procedure, WBNP-QCT-4.36-9, applicable to the June 15 flushing operation, did not include provisions for assuring the availability of test instrumentation described in the procedure.

This is a Severity Level V Violation (Supplement II.E.).

- D. 10 CFR 50, Appendix B, Criterion II requires that the indoctrination and training of personnel assure that suitable proficiency is achieved and maintained. The accepted QA program, FSAR section 17.1A, commits to safety guide 28, which endorses ANSI N45.2-1971. Section 2 of the Standard contains the same requirements as does Criterion II of Appendix B.

Contrary to the above, on or before June 15, 1981, personnel engaged in the June 15 flushing operation were not indoctrinated and trained to assure suitable proficiency, in that:

1. One Shift Engineer incorrectly evaluated the cause of 1A-A CCP vibration, roaring, and overheating to be a lack of design capacity of the miniflow recirculation line. He did not have information from pump suction and discharge pressure gauges to support this conclusion. He also recommended further pump starting without investigating the possibility of pump damage having occurred during the second run.
2. One Shift Engineer directed a third pump start, while suspecting an inadequate flow condition had previously existed, without assuring the availability of net positive suction head (NPSH) indication or investigating the possibility of prior pump damage. He then directed a fourth pump start after having observed abnormal motor current fluctuations during the third run, and without investigating the possibility of pump damage.

3. An uncontrolled folder of pump performance curves was provided in the control room with no management requirements for operator use in achieving or maintaining proficiency in pump operating limitations. The Nuclear Power operators did not consult this folder, nor the available procedure, nor did they have knowledge of 1A-A CCP NPSH requirements.
4. One Unit Operator did not know the connection point of the 1A-A CCP discharge pressure gauge. He incorrectly assumed it was not within the flow path boundary, and hence did not consider it to be of utility for the operation of 1A-A CCP.

This is a Severity Level IV Violation (Supplement II. D. 1.).

- E. 10 CFR 50, Appendix B, Criterion VI requires that measures be established to assure that documents are distributed to and used at the location where activities affecting quality are performed. The accepted QA program, FSAR section 17.1A commits to safety guide 28 which endorses ANSI N45.2-1971. Section 7 of the Standard contains the same requirements as does Criterion VI of Appendix B and further requires that document control measures provide for ascertaining that proper documents are being used.

Contrary to the above, as of July 15, 1981 measures were not established to assure that proper documents were being used and 45 of approximately 200 safety-related drawings reviewed in the control room were out of date and drawings were supplied by at least one unauthorized source.

This is a Severity Level V Violation (Supplement II.E.).

Pursuant to the provisions of 10 CFR 2.201, you are hereby required to submit to this office within thirty days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown. Under the authority of Section 182 of the Atomic Energy Act of 1954, as amended, this response shall be submitted under oath or affirmation.

Date: NOV 05 1981