

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
WELDS QC BYPASSED  
NCR 1803R  
10 CFR 50.55(e)  
FINAL REPORT

Description of Deficiency

This NCR, in itself, was not considered significant under Appendix B of 10 CFR 50. It was upgraded to significant in accordance with TVA's response to violations cited as a result of an inspection by NRC-OIE Region II Inspector R. W. Wright on November 29-30, 1979. (Reference RII:RWW 50-390/79-45 and 50-391/79-39.) In the notice of violation the inspector cited 10 NCR's and 9 CAQR's (conditions adverse to quality reports) that document repetitive deficiencies in the installation of safety-related piping. This is a breakdown in the quality assurance program established to meet the requirements of Appendix B. It is this QA breakdown and the generic implications of repeated deficiencies that is considered significant. Therefore, this NCR, which is the most recent of the 10 mentioned previously, was upgraded to significant in order to initiate a reportability study by TVA's Division of Engineering Design. As a result, this report will deal with the QA breakdown and generic concerns of repeated deficiencies rather than the specific nonconformance identified.

Although craft training was administered to prevent recurrence, they failed to grasp the importance of strict adherence to quality control procedures. This gave rise to repeated occurrences of deficiencies.

Safety Implications

This generic problem has raised questions concerning safety because of the fact that corrective action that was taken did not preclude further occurrences as it was designed to do. Had these deficiencies remained undetected, the quality of safety-related piping could have been questioned because ASME documentation requirements were not met. Therefore, because of the generic aspects of this problem, the safety-related piping could have had multiple occurrences of welds which were not fully documented. Therefore, the construction of the safety-related systems would be in question.

Corrective Action

Those subject welds that could not be properly documented were removed and the affected piping was rewelded with proper documentation. TVA will use general craft training and specific disciplinary action to ensure that crafts comply with QA program requirements. Such training will include increased emphasis on the importance of engineering hold points and compliance with procedural requirements.

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WBNP-ACP-1.2 and 1.4 are being combined to bring Watts Bar Nuclear Plant into full agreement with TVA policy on nonconformances. Also, training will be given to the site's Mechanical Engineering Unit employees on how to prepare an NCR with emphasis on what description is needed and when the actual nonconformance occurred. Finally, NCR status reporting will be transferred to an information processor so that a printout of NCR's for code or other activity work can be sorted as needed. These actions will enable the engineering unit supervisor and the construction engineer to identify repetitive or generic conditions. All of the corrective actions are to be implemented by February 22, 1980.