

ENCLOSURE

SEQUOYAH NUCLEAR PLANT
PLANT CONFIGURATION DIFFERENT
FROM DRAWINGS OF RECORD
NCR 2P, 3P
FINAL REPORT

Description of Deficiency

Preoperational drawings of record are design drawings which have been certified as showing the actual system configuration at the time Construction transfers responsibility for the system to Power Production. These drawings consequently show what equipment has been installed and tested by Construction. Nonconformance 2P describes an error in the TVA drawing certification process where a modification to a portion of the Residual Heat Removal System had been completed before certification of the preoperational drawings of record for those systems. This modification was inadvertently omitted from the drawings that were certified "as constructed." In nonconformance 3P, several systems were found where wiring was not as it was shown on the drawings of record.

These nonconformances are examples of a problem which may affect other plant systems. It may have permitted Construction to install or modify equipment on other systems without Power Production being aware of the situation during preoperational testing of that system.

Safety Implication

Since these deficiencies indicate a Sequoyah generic problem, the exact implications cannot be completely determined. The deficiencies could permit drawings to be certified which do not reflect the exact plant configuration. Therefore, if test or operational procedures, maintenance schedules, etc., were written depending on information shown on the drawings of record, inadequate or incorrect procedures may result. If this occurred on a safety-related system, it could be postulated that the safe operation of the system could be affected. Consequently, this could adversely affect plant safety.

Corrective Action

To correct the specific deficiencies on the identified nonconforming systems, the drawings of record have been changed to reflect the actual configuration. To correct the generic aspects of this deficiency, the importance of drawings of record accurately reflecting actual construction at the time of system transfer has been reemphasized to Construction and Power Production personnel. This was accomplished in Construction in the regular weekly training sessions involving all engineering personnel on October 2, 1978, and was covered more specifically in the electrical and coordination units on October 23, 1978. Also, at some time before transfer of a system, the configuration is "fixed" and no further work is done on

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that system without strict controls. At that time, steps are taken to ensure the system drawings of record represent the "as constructed" plant configuration. Procedures are also available to control any plant changes after this point and to ensure the design drawings and any required testing reflect these changes on a timely basis. As a further check, TVA procedures require all system drawings of record to reflect the "as constructed" configuration of their respective system before the issuance of the operating license of the plant. These procedures are being revised to emphasize the requirements for accurate "as constructed" drawings.