

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
LIQUID PENETRANT OR MAGNETIC PARTICLE INSPECTION
NOT PERFORMED IN QUALIFICATION OF COLD FORMING PROCEDURES
NCR 2053R
10 CFR 50.55(e)
REVISED FINAL REPORT

Description of Deficiency

During a documentation review of cold forming records it was discovered that there was a failure to properly qualify cold forming procedures (WBNP-CF-101 through -105) with magnetic particle or liquid penetrant tests. This deficiency is reportable because of the possibility that defects may have resulted from one of the improperly qualified cold forming procedures. We have presently identified 23 bends which were made using the unqualified procedures. These bends involve small diameter piping in the Reactor Coolant and Waste Disposal Systems.

The unqualified cold forming procedures are not presently being used pending proper qualification of those procedures (WBNP-CF-101 through -105).

Safety Implications

If this deficiency had remained uncorrected, safety related systems might have contained an undetected defect as a result of cold forming. This fact together with an accident from other causes (e.g., severe earthquake) might have adversely affected a safety related system and impaired the ability of the plant to reach and maintain a safe shutdown.

Corrective Actions

The site's cold forming procedures will be requalified to the latest specifications. This requalification will include bending (cold forming) of representative piping followed by inspection per the applicable procedures. If the results of these cold forming tests and inspections are acceptable, the site's cold forming procedures will be reissued and all production bends based on those procedures will be considered acceptable. On the other hand, if the tests of cold forming and subsequent inspections prove unacceptable, all bending based on the cold forming procedures presently in effect at the site will be identified and individually evaluated as to acceptability or non-acceptability. This corrective action should be complete by June 3, 1980. Additional time is required because, through an oversight, samples of only one heat of metal piping were used in procedures qualification rather than three as should have been.