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TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
5N 157B Lookout Place

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May 2, 1986

WBRD-50-390/86-46

U.S. Nuclear Regulatory Commission
Region II
Attention: Dr. J. Nelson Grace, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Dr. Grace:

WATTS BAR NUCLEAR PLANT UNIT 1 - DEFICIENCIES INVOLVING CIRCUITS INSIDE PENETRATIONS - WBRD-50-390/86-46 - INTERIM REPORT

The subject deficiency was initially reported to NRC-Region II Inspector Bob Carroll on April 2, 1986 in accordance with 10 CFR 50.55(e) as NCR W-353-P. Enclosed is our interim report. We expect to submit our next report on or about August 1, 1986.

If there are any questions, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. L. Gridley, Director
Nuclear Safety and Licensing

Enclosure
cc: Mr. James Taylor, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1
DEFICIENCIES INVOLVING CIRCUITS INSIDE PENETRATIONS
WBRD-50-390/86-46
NCR W-353-P
10 CFR 50.55(e)
INTERIM REPORT

Description of Deficiency

During the performance of technical inspections, TVA personnel identified a number of problems associated with Conax electrical penetration enclosures. The nonconforming condition report (NCR) lists 22 deficiencies found, of which seven were determined as having the potential to impact system or component functionability. As identified by the NCR, these seven deficencies are:

1. Raychem not heat shrunk properly.
2. Raychem sleeves taped improperly.
3. Incorrect heat shrink material used on cable splices.
4. Bare copper of cable on conductor exposed.
5. Connectors are loose and can be turned on feedthroughs.
6. Flex conduit to penetration enclosures is loose.
7. Bushing on penetration enclosure flex conductor is missing.

Safety Implications

Although specific impact to safety-related equipment and systems has not been identified, all the deficencies identified involve electrical circuits routed through containment penetrations. Consequently, there is the potential that circuit malfunctions (short, ground, or open) could occur and cause associated equipment or instrumentation failure and adversely affect safe operations of the plant.

Interim Progress

TVA is still evaluating the extent of the deficiencies to determine actual safety implications and corrective actions. We will provide our next report on this item on or about August 1, 1986.