# TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

## 400 Chestnut Street Tower II

May 6, 1981

Mr. James P. O'Reilly, Director Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Region II - Suite 3100 101 Marietta Street Atlanta, Georgia 30303

U.S. NUCLEAR REQUIRATORY COMMISSION

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - UNAUTHORIZED CUTTING OF REINFORCED STEEL IN THE DIESEL GENERATOR BUILDING - NCR 2755R - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector M. Thomas on November 18, 1980, in accordance with 10 CFR 50.55(e). Interim reports were submitted on December 18, 1980, and February 6, 1981. Enclosed is our final report.

If you have any questions, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager Nuclear Regulation and Safety

Enclosure

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cc: Mr. Victor Stello, Director (Enclosure) V Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Washington, DC 20555

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### ENCLOSURE WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 UNAUTHORIZED CUTTING OF REINFORCING STEEL IN THE DIESEL GENERATOR BUILDING NCR 2755R 10 CFR 50.55(e) FINAL REPORT

### Description of Deficiency

During the inspection of bolt anchors for cable tray supports and conduit supports in the diesel generator building, it was discovered that rebar had been cut while drilling holes for some bolt anchors. Some holes were drilled into concrete walls and slabs apparently by using carbide-tipped bits which are capable of drilling through reinforcing steel. Other bars were cut using expansion anchor shells. The cutting of this rebar is unauthorized.

### Safety Implications

There was a potential problem that the cutting of this rebar in areas of high stress could result in degradation of the integrity of the building structure, which could have adversely affected the safety of the plant. Failure of the structure could incapacitate the diesel generators, disrupting the emergency power supply to plant safety equipment.

#### Corrective Action

TVA has reviewed areas of high stress and has identified locations of critical rebar in walls and floors. These areas have been interfaced with locations of cable tray supports and conduit supports to identify areas requiring further field investigation. TVA has received and evaluated the results of the field investigation for determining the reinforcing bars cut during installation of cable tray and conduit supports. It has been determined from our analysis that the structural integrity of the building has not been impaired by the cutting of the reinforcing bars in question; therefore, modifications will not be required. Employees involved in installation and acceptance of concrete bolt anchors have been retrained in proper installation techniques of bolt anchors with special emphasis placed on unauthorized cutting of reinforcing steel.