TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

December 17, 1979

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

Dear Mr. O'Reilly:

Enclosed is our response to C. E. Murphy's November 21, 1979, letter, RII:JJL 50-553/79-16, and 50-554/79-15, regarding activities at the Phipps Bend Nuclear Plant which appeared to have been in violation of NRC regulations.

We have reviewed the subject inspection report and find no proprietary information in the report. If you have any questions regarding this matter, please call Jim Domer at FTS 854-2014.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

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

ENCLOSURE

FINAL RESPONSE TO NRC-OIE LETTER
FROM C. E. MURPHY TO H. G. PARRIS
DATED NOVEMBER 21, 1979

(REFERENCE RII: JJL 50-553/79-16, 50-554/79-15)

This report responds to the following Notice of Violation described in Appendix A of OIE Inspection Report RII: JJL 50-553/79-16, 50-554/79-15. This is the final report on this deficiency.

Noncompliance Item - Deficiency 50-553/79-16-01, 50-554/78-15-01

As required by Criterion V of Appendix B to 10CFR50, implemented by PSAR Section 17.1A.5, "Activities affecting quality shall be prescribed by documented instructions, procedures or drawings. . . and shall be accomplished in accordance with these instructions, procedures, or drawings." Procedure QCI-C-208 specifies that concrete cylinders shall be stored in accordance with requirements of ASTM C-31. ASTM C-31 requires cylinders to be moist cured until time of testing. ASTM C-31 defines moist curing as a condition in which the concrete cylinders have free water maintained on the entire surface at all times. Procedure QCI C-208 specifies that concrete test cylinders shall be tested in accordance with requirements of ASTM C-39. ASTM C-39 requires that the rate of loading during testing of the concrete cylinders be applied within the range of 20 to 50 lb/in^2 per second.

Contrary to the above, the following examples of failure to follow procedures were identified:

1. On November 7, 1979, the surfaces of concrete cylinder numbers 1308 F, 1371 E, 1371 F, 1378 E, 1378F, and 1434 F stored in the concrete laboratory curing room were dry.

2. On November 7, 1979, during testing of concrete cylinder numbers 1174 E, 1173 F, 1175 E, 1175 F, 1176 E, 1176 F, and 1170 E, the rate of loading was applied in the range of 60 to 70 lb/in^2 per second.

This is a deficiency.

Response

1. Corrective Steps Taken and Results Achieved

   Item 1 - The test cylinders sited were covered with burlap and made wet. This action brought the concrete laboratory curing room into full compliance with ASTM C-31.

   Item 2 - This situation occurred due to the compressive test machine load rate knob being set or turned to the high end of the range which would acceptably load cylinders with short curing ages but not those with longer curing ages. As calibrated, the test machine will give loading rates meeting ASTM C-39 for all ages of cylinders if the setting is at midrange. The compressive test machine has been reset to midrange and cylinders are now being tested in full compliance with ASTM C-39.

2. Corrective Steps Taken to Avoid Further Noncompliance

Item 1 - This situation was caused by water nozzles which spray the test cylinders becoming clogged causing some test cylinders to not be maintained in a wet condition. The clogged nozzles have been cleaned or replaced and are now being monitored on a daily basis for the proper spray pattern.

Item 2 - All operators of the concrete compressive test machine have been instructed to make sure the load rate setting is at the middle of the range. The test machine is now being checked on a periodic basis by the responsible supervisor to ensure continued accuracy.

3. Date When Full Compliance Was Achieved

Full compliance was achieved on both items on or by November 9, 1979.