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

January 29, 1982

U.S. Nuclear Regulatory Commission
Region II
ATTN: James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Please reference our response dated November 10, 1980 to C. E. Murphy's October 16, 1980 letter, RII:WBS 50-518/80-18, -519/80-17, -520/80-18, -521/80-16. As requested by NRC Inspector W. B. Swan, we are enclosing our revised response to the Notice of Violation which clarifies additional corrective actions taken at the Hartsville Nuclear Plant to resolve the infraction identified in the notice. If you have any questions, please get in touch with Jim Domer at FTS 858-2725.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

ENCLOSURE
REVISED RESPONSE TO NRC-OIE LETTER
FROM C. E. MURPHY TO H. G. PARRIS
DATED OCTOBER 16, 1980

(REFERENCE: Report Nos. 50-518/80-18, 50-519/80-17, 50-520/80-18, and 50-521/80-16)

This report responds to the Notice of Violation described in Appendix A of the OIE inspection report referenced above. This is the revised final report on the subject noncompliance.

Noncompliance Item - Infraction 518, 519, 520, 521/80-18-01

As required by 10CFR50, Appendix B, Criterion V, and implemented by PSAR Section 17.1A.5, activities affecting quality are prescribed by procedures and are accomplished in accordance with these procedures. PSAR Section 17.1A.6 further requires control of document procedures and drawings. Drawing control procedure CEP 6.01, R7, requires in part that obsolete prints or their title blocks be returned to the document control room upon receipt of revised prints. Criterion XVI, as implemented by PSAR Section 17.1A.16, requires correction of conditions adverse to quality.

Contrary to the above, obsolete drawings identified by the licensee's audit HT-G-80-12 Drawing Control on July 30, 1980, had not been returned to the document control rooms. Corrective measures to preclude use of obsolete drawings were not effective in that some of the obsolete drawings identified in the audit had not been returned as of August 21, 1980, to the document control room.

Response

1. Corrective Steps Taken and Results Achieved

The files containing the 30 drawings were updated by the Document Control Unit (DCU) to include current revisions as of August 22, 1980. The DCU generated a computer list of all TVA and C. F. Braun generated drawings currently in use and the current revision. (These drawings constitute over 95% of all drawings needed for fabrication, installation, or inspection.) This list is updated on a daily basis by using the TVA drawing receipt forms processed each day. The rest of the drawing files onsite were corrected from copies of the computer list. Superseded drawings were removed from files and the correct revisions of the drawings issued to the field by September 26, 1980. A similar list of drawing change requests (FCR's and ECN's) was made, distributed, and the necessary updates made by October 3, 1980. TVA CONST QA performed a survey of 133 drawings in various project locations on October 8, 1980, and found no superseded drawings in use at Hartsville.

Additional actions taken included instructions to the Construction Superintendent and site engineering and QC units stressing the necessity of using up-to-date drawings and requesting that all drawing holders be informed accordingly. At that time a monthly survey of drawing files was established. The survey included all QC files and 1/3 of all other site drawing files on a rotating basis.

On January 27, 1981, TVA informed NRC-OIE Region II Inspector R. W. Wright of a repeat of this deficiency identified in audit HT-G-81-06. The TVA CONST QA Unit at Hartsville performed an audit surveying 469 drawings being maintained by engineering and crafts personnel and found 26 drawings which were out of date and/or superseded by later revisions. This indicated that measures taken to prevent recurrence were inadequate and required revision.

The Hartsville Site QA Unit conducted a 100 percent audit of safety-related site-issued drawings. This audit revealed that out of approximately 40,000 drawings, 1,155 superseded drawings were being held by engineering and quality control inspection personnel. All superseded drawings and documents have been replaced with current revisions.

Of the 1,155 superseded drawings identified under action item 1, 16 were identified as being in use. Twelve of these affected work in progress, but all of these drawings were being utilized for the fabrication of one support. Modifications were necessitated and scheduled by Sequence Control Charts.

A team consisting of QA engineers from TVA's Office of Engineering Design and Construction QA Staff and CONST QA Branch conducted an investigation to determine why the breakdown in drawing control occurred after full compliance was reported to have been achieved as of October 8, 1980. The investigation was conducted on February 12-14, 1981. The following is a summary of the results of this investigation:

a. No individual or organization was responsible for the entire drawing control process from receipt of a drawing until it was retrieved.

b. There were too many individuals and stations where groups of controlled drawings were located which contributed to the increase in the number of drawings.

c. No restraints were placed on personnel requesting drawings or complete sets of drawings from the DCU which also contributed to the increase in the number of drawings.

d. Vendor drawings were not adequately identified and controlled.

e. Construction working drawings were not identified as controlled drawings.

f. Field Change Requests (FCR's) were not being incorporated on C. F. Braun drawings.

g. The Drawing Index was not maintained in an accurate status.

These findings have been addressed either procedurally or administratively.

All TVA construction site QA units were directed to conduct audits to determine if the Hartsville drawing control problem existed at other TVA nuclear facilities. With the exception of Hartsville, there were no audit findings evaluated and deemed "significant". Line and QA management reviewed the audit and investigation findings on February 18, 1981. No document control procedures were necessary for Sequoyah, Watts Bar, or Bellefonte. The drawing control procedure did require adjustments for Hartsville, Phipps Bend, and Yellow Creek Nuclear Plants. Construction Engineering Procedure (CEP) 6.01, "Drawing Control," was revised and approved on April 23, 1981, with an implementation schedule which would result in full compliance by May 29, 1981.

2. Corrective Steps Taken to Avoid Further Noncompliance

Due to operating differences between Hartsville and other TVA nuclear facilities, a site-unique procedure was issued in interim form on September 25, 1981. Minor changes were made to the interim procedure, and it was subsequently issued as a permanent document, CEP 6.05, Revision 1, on December 3, 1981. These changes did not affect the handling of superseded material, but were "fine-tuning" efforts. In addition, CEP 6.01 was revised and issued on December 4, 1981, and now only applies to Phipps Bend and Yellow Creek.

Additional audits of the drawing control system at Hartsville were conducted between June 1 and July 1, 1981, and in November 1981. Additional deficiencies were noted, but none involving the use or possession of superseded drawings were deemed "significant". As a result we believe that full compliance has been achieved.

3. Date When Full Compliance Was Achieved

We are now in full compliance.