

OFFICIAL COPY

TENNESSEE VALLEY AUTHORITY

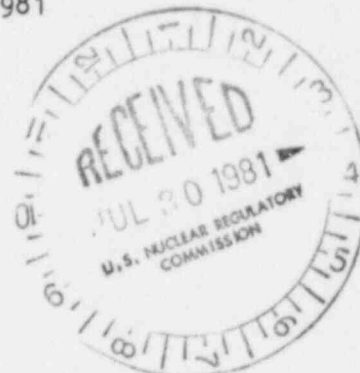
CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

April 21, 1981

80-014-034-
80-011-034-

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:

YELLOW CREEK NUCLEAR PLANT UNITS 1 AND 2 - FLORIDA STEEL DEFICIENT WELDS -
NCR YC-124 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector M. Thomas on November 21, 1980, in accordance with 10 CFR 50.55(e). This was followed by our first interim report dated December 20, 1980. Enclosed is our final report. We consider 10 CFR 21 applicable to this deficiency.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

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

IR27
S.11

ENCLOSURE

YELLOW CREEK NUCLEAR PLANT UNITS 1 AND 2
FLORIDA STEEL DEFICIENT WELDS
NCR YC-124
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

Structural members were shipped from Florida Steel Corporation to the Yellow Creek site. The members appeared to have undersized fillet welds, craters, excessive undercut, lack of fusion and porosity. In addition, some land dimension exceeded design dimension at welds connecting beams to flanges.

Safety Implications

Had the structural steel members failed because of inadequate welds, the structures that contained these members (floors, elevator shafts, and walls of the containment as well as the Auxiliary Building) could have failed. The possibility of failures of this nature represent an unacceptable degradation of the overall safety of the plant.

Corrective Action

During the period from March 9 through April 6, 1981, representatives of Florida Steel Corporation were at Yellow Creek Nuclear Plant repairing the material of the subject deficiency. All welded members of the structural steel floor framing, elevator framing, and columns inside containment for the Reactor Buildings were 100 percent inspected by the Yellow Creek Quality Control Welding NDE Inspectors. Following the inspection, repairs were made by Florida Steel employees, and the repairs were reinspected and judged acceptable by TVA NDE inspectors.

Poorly welded structural steel was released for shipment from the vendor's plant after receiving a surveillance inspection by a TVA source inspector. TVA is investigating its program of source inspection in a separate nonconformance report, YCN QAB 8101.