

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

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December 5, 1983

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

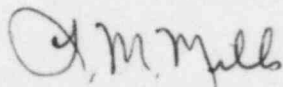
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - ITT GRINNEL WELDED SUPPORTS -
NCR BLN BLP 8002 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. W. Wright on September 5, 1980, in accordance with 10 CFR 50.55(e). This was followed by our interim reports dated October 3, 1980, January 22, April 29, and October 21, 1981, March 26, July 12, and September 29, 1982 and March 11, 1983. Enclosed is our final report. We consider 10 CFR Part 21 applicable to this deficiency.

If you have any questions concerning this matter, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, 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

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
ITT GRINNELL WELDED SUPPORTS
NCR BLN BLP 8002
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

Detail sheets supplied by ITT Grinnell for assembly of pipe hangers and supports had discrepancies in weld designations. Certain supports with welds made on structural members that make angles less than 60 degrees and greater than 135 degrees were designated as fillet welds but should have been groove welds. On some groove welds which were specified, the parentheses around the dimension were omitted. This omission indicated depth or size of bevel when in fact ITT Grinnell meant effective throat. Both of the above weld joint designations conflict with applicable AWS symbols for welding (AWS A2.4-76) and do not provide sufficient information for fabrication and inspection.

Safety Implications

Failure to use proper weld designations on design drawings has resulted in the fabrication of deficient pipe supports. Subsequent failure of these supports could result in failure of the associated safety-related piping thereby adversely affecting the safe operation of the plant.

Corrective Action

TVA requested a review of all support drawings for these weld deficiencies by ITTG in September 1980. From this review TVA determined that approximately 1,100 supports required corrective action. The revision of these 1,100 support drawings has been completed to indicate the proper AWS designation.

To prevent recurrence, ITTG engineering standard 16 revision E (weld design procedure for component supports) now reflects the use of AWS prequalified weld symbols. Process control documents have been prepared for all drawings revised under the scope of the NCR. The rework of these supports will be accomplished by construction packages in accordance with the newly established construction schedule. Unit 1 support rework will be completed by June 30, 1987. Unit 2 support rework will be completed by June 30, 1989.