

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

August 9, 1982

WBRD-50-390/82-76

WBRD-50-391/82-72

U.S. Nuclear Regulatory Commission
Region II

Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - UNISTRUT CLAMPS LOADED IN MORE THAN ONE DIRECTION - WBRD-50-390/82-76, WBRD-50-391/82-72 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on July 8, 1982 in accordance with 10 CFR 50.55(e) as NCR WBN SWP 8237. Enclosed is our first interim report. We expect to submit our next report on or about December 22, 1982.

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

Very truly yours

TENNESSEE VALLEY AUTHORITY

D S Kammer

for 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, DC 20555

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
UNISTRUT CLAMPS LOADED IN MORE THAN ONE DIRECTION
NCR WBN SWP 8237
WBRD-50-390/82-76, WBRD-50-391/82-72
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

Unistrut clamps used for some seismic supports (primarily for 4-inch and smaller piping, instrument tubing, and electrical conduit) were tested to determine the ultimate load for the clamp arrangement. The ultimate load data was based on one directional loading. The support designer used the ultimate load test data and a factor of safety to determine the allowable design load. The clamps have been used in conditions subject to simultaneous loading in more than one direction. The support designer may have used the allowable design load obtained above as his allowable load in the appropriate direction regardless of the number of loaded directions. To maintain the same factor of safety, an interaction equation should be used when designing support members subject to loading in more than one direction.

Interim Progress

By using the load rating method shown in ASME Section III, Subsection NF, article NF 3262.4 (which is acceptable for WBN designs), TVA has determined, for alternately analyzed piping, that all clamps are qualified except those for 3" piping. TVA is currently investigating this matter and will provide more information in our next report.