

# TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 105B Lookout Place

86 JAN 27 P 3:00  
January 22, 1986

WBRD-50-390/86-12

WBRD-50-391/86-10

U.S. Nuclear Regulatory Commission

Region II

Attention: Dr. J. Nelson Grace, Regional Administrator

101 Marietta Street, NW, Suite 2900

Atlanta, Georgia 30323

Dear Dr. Grace:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - INCORRECT SUBSTITUTION OF  
BERGEN-PATERSON CLAMPS - WBRD-50-390/86-12, WBRD-50-391/86-10 - INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector  
Art Johnson on December 27, 1985 in accordance with 10 CFR 50.55(e) as SCR WBN  
CEB 8569. Enclosed is our interim report. We expect to submit our next  
report on or about April 14, 1986.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*J. A. Domer*

J. A. Domer  
Manager of Licensing

## Enclosure

cc: Mr. James Taylor, 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

ENCLOSURE  
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
INCORRECT SUBSTITUTION OF BERGEN-PATERSON CLAMPS  
WBRD-50-390/86-12, WBRD-50-391/86-10  
SCR WBN CEB 8569  
10 CFR 50.55(e)  
INTERIM REPORT

Description of Deficiency

Note 54 of Watts Bar Nuclear Plant (WBN) drawing series 47A050 has been applied by TVA's Office of Construction (OC) to the substitution of Bergen-Paterson (B-P) clamp No. 175 for No. 298. The subject note 54 states that substitutions of J-P standard components may be made, provided load capacity is maintained. For applications where the subject clamps are used as rotational restraints, B-P does not provide a load rating. Therefore, a substitution of clamp No. 175 for No. 298 should not have been made without TVA's Office of Engineering (OE) approval.

Safety Implications

Since the Nos. 175 and 298 clamps are dissimilar in size, for small diameter pipes the rotational resistance of the clamps could be different. Thus, their substitution could result in reduced support load capacities and, consequently, reduced factors of safety for affected supports. This could result in overstressing of an affected branch line at the intersection of the branch line and the run line. The affected supports are on various safety-related systems at WBN (e.g., reactor coolant, safety injection, chemical and volume control). As such, the subject deficiency could adversely affect the safety of operations of the plant.

Interim Progress

TVA has determined that approximately 64 engineered supports on WBN unit 1 and 58 on WBN unit 2 call for B-P No. 298 clamps to be used as rotational restraints. These supports will be inspected to determine which supports had B-P No. 175 clamps substituted for B-P No. 298 clamps. The supports identified will then be evaluated by TVA and reworked as required.

A final report on this item will be provided to the NRC by April 14, 1986.