

**TENNESSEE VALLEY AUTHORITY**

CHATTANOOGA, TENNESSEE 37401  
5N 157B Lookout Place

February 12, 1986

WBRD-50-390/86-20  
WBRD-50-391/86-16

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 - VENDOR DRAWINGS SHOW CONFLICTING VALVE WEIGHT DATA - WBRD-50-390/86-20, WBRD-50-391/86-16 - INTERIM REPORT


The subject deficiency was initially reported to NRC-OIE Inspector Al Ignatonis on January 6, 1986 in accordance with 10 CFR 50.55(e) as SCRs WBN MEB 8555 and MEB 8556. Enclosed is our interim report. We expect to submit our next report on or about April 18, 1986.

Delay in submittal of this report was discussed with Bob Carroll February 5, 1986.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

  
R. L. Gridley  
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

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## ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
VENDOR DRAWINGS SHOW CONFLICTING VALVE WEIGHT DATA  
WBRD-50-390/86-20, WBRD-50-391/86-16  
SCR WBN MEB 8555 AND SCR WBN MEB 8556  
10 CFR 50.55(e)  
INTERIM REPORT

### Description of Deficiency

Drawings C-3522 and C-3538 of TVA contract 74C38-83015 for Watts Bar Nuclear Plant (WBN) show motor-operated valves with identical TVA mark numbers as manufactured by Henry Pratt Company, Aurora, Illinois. These drawings were identical in all dimensions, materials, etc., except for the valve weight and center of gravity (CG) location. There was no indication as to which weight or CG was correct for the various affected valves. The piping analysis for these valves could be invalidated if an unconservative weight or CG was used. This condition was discovered during a reanalysis of WBN piping analysis problem N3-70-4R for documentation verification.

All of the affected valves, 83 total, are Henry Pratt Company Nuclear Mark II butterfly valves. The valves are installed in the essential raw cooling water (ERCW) and component cooling water (CCW) systems at WBN. A vendor review of this deficiency, per TVA problem identification report (PIR) WBN MEB 8526 resulted in raising the valve weights and lengthening the CG moment arm for some of the valves. Additionally, the vendor review showed that this problem also existed on drawings C-3525 and C-3541.

### Safety Implications

As stated above, affected piping analysis problems could be invalidated if unconservative valve weights or CG locations were used. This could possibly result in a failure of the affected safety-related systems to function as designed during a design basis seismic event. As such, the subject deficiency potentially could adversely affect the safety of operations of the plant.

### Interim Progress

Henry Pratt Company has revised drawings C-3522 and C-3525 to reflect the correct valve weights and CG locations and to agree with drawings C-3538 and C-3541, respectively. The revised drawings have been received by TVA. Additionally, the vendor has reviewed other TVA contracts to determine if the subject deficiency had occurred elsewhere. No other deficiencies were identified. Therefore, TVA has determined that this deficiency is not applicable to Browns Ferry, Sequoyah, or Bellefonte Nuclear Plants.

TVA is in the process of revising TVA drawings affected by the valve weight and CG changes. All affected WBN piping analysis problems are being reviewed to ensure that conservative valve data was used.

TVA will provide our next report on this item to NRC on or about April 18, 1986.