

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

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WBRD-50-390/86-58

WBRD-50-391/86-55

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 PRESSURE SWITCH SETPOINTS  
FOR ERCW SCREEN WASH PUMPS - WBRD-50-390/86-58, WBRD 50-391/86-55 - INTERIM  
REPORT

The subject deficiency was initially reported to NRC-Region II Inspector  
Gordon Hunegs on June 17, 1986 in accordance with 10 CFR 50.55(e) as  
SCR WBN MEB 8663. Enclosed is our interim report. We expect to submit our  
final report on or about October 3, 1986.

If there are any questions, please get in touch with J. A. McDonald at  
(615) 365-8527.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



R. L. Gridley, Director  
Nuclear Safety and 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  
INCORRECT PRESSURE SWITCH SETPOINTS FOR ERCW SCREEN WASH PUMPS  
WBRD-50-390/86-58, WBRD-50-391/86-55  
SCR WBN MEB 8663  
10 CFR 50.55(e)  
INTERIM REPORT

### Description of Deficiency

The instrument tabulations (TVA Drawings) 47B601-67-54R34, -55R34 and -57R34 for Watts Bar Nuclear Plant (WBN) indicate that the setpoints for pressure switches PS-67-434A, -439A, -455B and -451B are at 90 psig. However, a recent TVA calculation performed as a required accuracy verification for the evaluation of the instrumentation tubing slope deficiency indicates that the correct pressure switch setpoints should be between 70 and 75 psig.

### Safety Implications

The affected pressure switches sense/measure the essential raw cooling water (ERCW) screen wash pumps' discharge pressures and signal the travelling screen motors to start when screen wash pressure has been established. With a 90 psig setpoint, it is possible that the pressure switches would never signal their associated travelling screens to start after initiation of the backwash sequence. This could allow the screens to clog and restrict flow to the ERCW pumps and, subsequently, to the ERCW system. Since the subject deficiency is common to all of the ERCW screen wash pumps, and since ERCW flow is essential to safe plant operation in all operating modes, the subject deficiency could adversely affect the safety of operations of the plant.

### Interim Progress

As noted in the description of deficiency above, TVA has performed and documented calculations to determine the correct setpoints for the affected pressure switches. This is to be used to revise appropriate design output documents and for adjusting setpoints in the field. TVA is in the process of evaluating this item to determine the root cause and actions required to prevent recurrence.

The final report on this item will be provided to NRC on or about October 3, 1986.