

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

September 21, 1983 P 2: 42

WBRD-50-390/83-54

WBRD-50-391/83-51

U.S. Nuclear Regulatory Commission

Region II

Attn: Mr. James P. O'Reilly, Regional Administrator

101 Marietta Street, NW, Suite 2900

Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - BROKEN PIN CARRIER PLATES ON ERCW MOTORS  
BY SIEMENS-ALLIS - WBRD-50-390/83-54, WBRD-50-391/83-51 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Linda Watson on August 24, 1983 in accordance with 10 CFR 50.55(e) as NCR WBN W-136-P. Enclosed is our first interim report. We expect to submit our next report on or about December 19, 1983. We consider 10 CFR Part 21 applicable to this deficiency.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*DS 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, 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  
BROKEN PIN CARRIER PLATES ON ERCW MOTORS BY SIEMENS-ALLIS  
NCR W-136-P  
10 CFR 50.55(e)  
FIRST INTERIM REPORT

Description of Deficiency

Each of the eight essential raw cooling water (ERCW) pumps at Watts Bar Nuclear Plant (WBN) supplied by Siemens-Allis, Norwood, Ohio, incorporate an anti-reversing mechanism. The mechanism consists of a ramp plate and an opposing pin carrier plate. When the pump impeller is subjected to a driving force such as backpressure which could tend to cause reverse rotation, the pins in the carrier plate engage the ramp plate ratchet and prevent further reverse rotation. The damage noted in the NCR is cracked and broken pin bushings. The vendor has determined that there have been no other pumps of this design supplied for use at any other nuclear plants.

Interim Progress

The vendor sent a representative to WBN to investigate the deficiency and has submitted his findings to the vendor's internal material review board. The vendor is in the process of determining the maximum loading applied to the bushings and their recommended corrective action.