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FEB 19 1992

WBRD-50-390/92-02
WBRD-50-391/92-02

10 CFR 50.55(e)

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of the Application of)
Tennessee Valley Authority) Docket Nos. 50-390
50-391

WATTS BAR NUCLEAR PLANT (WBN) UNITS 1 AND 2 - POTENTIAL COMMON MODE
FAILURE OF THE AUXILIARY CONTROL AIR SYSTEM - WBRD-50-390/92-02 AND
WBRD-50-391/92-02 - INTERIM REPORT

The subject deficiency was initially reported to NRC Region II on
January 30, 1992, in accordance with 10 CFR 50.55(e) as Significant
Corrective Action Report (SCAR) WBSA920004. Enclosure 1 is TVA's
interim report on this subject. TVA expects to submit a final report to
NRC by April 30, 1992.

The commitment made in this report is provided in Enclosure 2.

If there are any questions, please telephone P. L. Pace at (615) 365-1824.

Sincerely,

John H. Garrity

Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

FEB 19 1992

cc (Enclosures):

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT (WBN) UNITS 1 AND 2
POTENTIAL COMMON MODE FAILURE OF THE
AUXILIARY CONTROL AIR SYSTEM
SIGNIFICANT CORRECTIVE ACTION REPORT (SCAR) WBSA920004
WBRD-50-390/92-02 AND WBRD-50-391/92-02
INTERIM REPORT

DESCRIPTION OF THE DEFICIENCY

TVA has determined that both trains of the Auxiliary Control Air System (ACAS) could become inoperable during a seismic event. System boundaries had been expanded without upgrading the added piping. Specifically, Design Change Notice (DCN) S-16120-A was issued to show normally closed drain isolation valves 0-32-241 and 0-32-281 for ACAS air receiver tanks A-A and B-B, respectively, to be normally open. These valves are located upstream of the tank drain traps and are ASME Class 3, TVA Class C valves. Classification of the piping downstream of these valves is ANSI B31.1, TVA Class G, and seismically-qualified for position retention only.

The compressed air system is common to both units and is divided into two systems, the Service Air System (SAS)/Control Air System (CAS) and the ACAS. The SAS/CAS is designed to supply adequate compressed air capacity for general plant service, instrumentation, testing, and control. The SAS/CAS performs no safety-related function.

The ACAS is used to ensure plant safety, even if the SAS/CAS fails for any reason. Safety-related components and equipment which require instrument air to perform an active safety function are supplied from the ACAS compressors. Some of these safety-related items are identified below:

- Auxiliary Feedwater System steam generator level control and pressure control valves
- Main steam atmospheric relief valves
- Auxiliary Building Gas Treatment System flow control and isolation dampers
- Emergency Gas Treatment System isolation and flow control dampers and valves
- Control Building Heating, Ventilating, and Air Conditioning isolation and flow control valves, dampers, temperature controllers, transmitters, and other pneumatic instruments
- Sampling System containment isolation valves for hydrogen analyzers
- Reactor Coolant System pressurizer spray line pressure control valves

The ACAS air receiver tanks, in conjunction with the accumulator tanks, dampen the reciprocating compressor discharge pressure pulses and provide a sufficient stored air volume to minimize startups and load/unload cycling of the ACAS compressors. Manual drain isolation valves are provided to purge the ACAS air receiver tanks of accumulated moisture.

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INTERIM REPORT

SAFETY IMPLICATIONS

During a seismic event, the piping downstream of the ACAS air receiver tank drain isolation valves could break, providing a discharge path from both ACAS trains to atmosphere. The ACAS would depressurize to the point where minimum required air pressure to the downstream users could not be maintained. Various safety-related valves may not be able to perform their safety function because of insufficient air pressure provided to the valve air operators. Therefore, this condition could have adversely affected the safe operation of the plant had it remained uncorrected.

INTERIM PROGRESS

TVA is currently developing a corrective action plan to address the deficiency and expects to submit a final report to NRC by April 30, 1992.

ENCLOSURE 2

LIST OF COMMITMENTS

TVA is currently developing a corrective action plan to address the deficiency and expects to submit a final report to NRC by April 30, 1992.