Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

Richard T. Purcell
Site Vice President, Watts Bar Nuclear Plant

DEC 2 2 1998

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

Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) - TECHNICAL SPECIFICATION (TS) 5.9.8 - POST ACCIDENT MONITORING REPORT - REACTOR VESSEL LEVEL INSTRUMENTATION SYSTEM (RVLIS).

On December 17, 1998, Technical Specification Limiting Condition for Operation (LCO) 3.3.3, Condition B was entered for a train of Reactor Vessel Level Instrumentation System. Condition B requires immediate action to provide a report within 14 days in accordance with Technical Specification 5.9.8. Enclosure 1 provides the required report. Enclosure 2 provides a commitment list.

Sincerely,

R. Purcell

R. T. Purcell

Enclosure
cc: See page 2

DEC 2 2 1998

cc (Enclosure):
NRC Resident Inspector
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

Mr. Robert E. Martin, Senior Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852

U.S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth St., Suite 23T85
Atlanta, Georgia 30323

ENCLOSURE 1

TECHNICAL SPECIFICATION 5.9.8
POST ACCIDENT MONITORING SYSTEM REPORT
REACTOR VESSEL LEVEL INSTRUMENTATION SYSTEM (RVLIS) FUNCTION

BACKGROUND

On November 17, 1998, at 1753 hours (ET), LCO 3.3.3, condition A was entered due to a plasma display data link failure on the Train B Reactor Vessel Level Instrumentation System (RVLIS). On December 17, 1998, condition B of LCO 3.3.3 was entered since this train, although currently functioning acceptably, had not been declared operable. This train appears to be working properly at this time, however, due to its previous sporadic operation, it has not been declared operable. This train will not be declared operable until sufficient time has elapsed to confirm that the sporadic operation experienced previously has been resolved. The action of LCO 3.3.3, condition B is to provide a report within 14 days in accordance with Technical Specification 5.9.8. Trains A and B of RVLIS are currently operating correctly and providing valid data. The only differences are that Train B has operated sporadically in the past, still has diagnostic equipment connected to the processor card to monitor operation, and thus has not been declared operable. Train A has remained operable during the entire time that Train B has been in the LCO.

The RVLIS provides several key Post Accident Monitoring (PAM) functions but primarily provides a direct measurement of reactor water level. Control room indications are provided through the Inadequate Core Cooling Monitoring (ICCM) plasma display. The two trained ICCM plasma displays are the primary indication used by the operator during an accident.

PREPLANNED ALTERNATE METHOD OF MONITORING

Train B RVLIS/ICCM appears to be working correctly at this time. Although operating, this train will not be declared operable until sufficient time has elapsed to confirm that the sporadic operation experienced has been resolved. In addition to Train B functioning, the Train A RVLIS has remained operable during this time.

THE CAUSE OF THE INOPERABILITY

The cause of this inoperability was due to a data link failure to the plasma display. This failure was caused by the train entering the monitor mode without a manual manipulation.

When the train is intentionally placed in the monitor mode, a personal computer can be connected to the train and maintenance personnel can communicate with the RVLIS software. During this mode of operation, the main control receives a data link failure and a trouble alarm. The equipment can be returned to normal operating mode by either exiting the communication software or manually resetting the equipment. The failure that Train B has experienced is that the equipment enters the monitor mode without manual manipulation. When this happens, personnel have to perform one of the two tasks described above to return the equipment to normal operating mode.

PLANS AND SCHEDULE FOR RESTORING FUNCTION TO OPERABLE CONDITION

The previous failures have been diagnosed by the equipment vendor and the suspect circuit cards were replaced. Monitoring equipment has been temporarily attached to allow detailed diagnosis of any future failures.

The operation of Train B RVLIS will be monitored until sufficient time (e.g. another thirty days) has elapsed such that plant management deems that the sporadic operation experienced has been resolved.

ENCLOSURE 2

TECHNICAL SPECIFICATION 5.9.8
POST ACCIDENT MONITORING SYSTEM REPORT
REACTOR VESSEL LEVEL INSTRUMENTATION SYSTEM (RVLIS) FUNCTION

LIST OF COMMITMENTS

The operation of Train B RVLIS will be monitored until sufficient time (e.g. another thirty days) has elapsed such that plant management deems that the sporadic operation experienced has been resolved.