

October 31, 1984

W3P84-2965 Q-3-A35.07.93 3-A1.01.04

Mr. John T. Collins Regional Administrator, Region IV U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76011

Dear Mr. Collins:

Subject: Waterford 3 SES

Docket No. 50-382

SIGNIFICANT CONSTRUCTION DEFICIENCY NO. 93

"Charging and Letdown Containment Isolation Valve Deficiency"

Interim Report

Reference: LP&L letter W3K84-2105 dated September 5, 1984

The referenced letter indicated that closure of the subject deficiency was contingent on completion of Post Core Hot Functional Testing. In accordance with the requirements of 10CFR50.55(e)(3), enclosed is an interim report on SCD-93 with the Justification for Interim Operation. A final report will be submitted upon the completion of response time testing during Post Core Hot Functionals which is currently planned for early December and prior to initial criticality.

Very truly yours,

XW Cook

K.W. Cook

Nuclear Support & Licensing Manager

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cc: NRC, Director, Office of I&E

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INTERIM REPORT OF SIGNIFICANT CONSTRUCTION DEFICIENCY NO. 93 "LETDOWN CONTAINMENT ISO VALVE 1CH-F-2501 A/B"

INTRODUCTION

This report is submitted pursuant to 10CFR50.55(e). It describes the failure of valve 1CH-F-2501 A/B (CVC-103) to close following Hot Functional Testing (HFT). This problem is considered reportable under the requirements of 10CFR50.55(e).

To the best of our knowledge, this deficiency has not been reported to the USNRC pursuant to 10CFR21.

DESCRIPTION OF PROBLEM

Following the cooldown after HFT, it was discovered that the valve 1CH-F-2501 A/B (CVC-103), (supplied by WKM), was stuck in the open position. This valve had been exposed to 550° F service temperature for several days during HFT of the charging and letdown system.

It appears that the malfunction occurred due to upstream float of the seat which reduced the clearance between the seat and the gate, thereby causing the gate to stick open.

SAFETY IMPLICATIONS

Valves 1CH-F-2501 A/B (inside Containment, powered from SB division) and 2CH-F-1518 A/B (outside Containment, SA division) provide Containment isolation for the letdown line. Failure of 1CH-F-2501 A/B to close would violate the isolation requirements of GDC55. Although there is in fact another safety Class 1 valve (1CH-F-1516 A/B) upstream of the affected valve 1CH-F-2501 A/B), which would automatically close on high containment pressure or low pressurizer pressure, it is powered from the SA division. The requirements for independent power sources would therefore, not be met if valve 1CH-F-2501 A/B failed to close.

CORRECTIVE ACTION

Vendor (WKM) service technician has repaired the valve with new seats which are sized for maximum interference fit in the seat pocket in order to eliminate the previously experienced seat float. The closure of this valve has since been satisfactorily tested in the cold fluid condition.

Further testing has been recommended to verify the proper operation of this valve during hot fluid conditions and the subsequent cooldown.

JUSTIFICATION FOR INTERIM OPERATION

As stated above, the subject letdown line isolation valve has been repaired. The closure time has been satisfactorily tested within technical specification requirements only during cold fluid conditions. Retesting during HFT conditions has been recommended by WKM.

This additional testing is not considered a constraint to fuel load for the reason that even in the highly unlikely event of the valve's failure to operate, the lack of fission products prior to Mode 2 provides assurance that the health and safety of the public will not be adversely affected.