

USNRC REGION II  
**DUKE POWER COMPANY**  
P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

83 SEP 9 P1:09  
September 1, 1983

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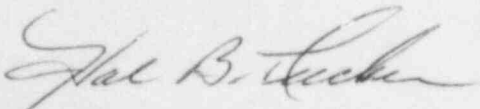
✓ Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Re: Catawba Nuclear Station  
Units 1 and 2  
Docket No. 50-413 and 50-414

Dear Mr. O'Reilly:

Pursuant to 10 CFR 50.55e, please find attached Significant Deficiency Report  
SD 413-414/83-09.

Very truly yours,



Hal B. Tucker

RWO/php

Attachment

cc: Director  
Office of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

NRC Resident Inspector  
Catawba Nuclear Station

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# CATAWBA NUCLEAR STATION

REPORT NUMBER: SD 413-414/83-09

REPORT DATE: September 1, 1983

FACILITY: Catawba Nuclear Station Units 1 & 2

## IDENTIFICATION OF DEFICIENCY:

Swing check valves supplied by Borg-Warner Corporation have a tack weld in the stud and disc assembly joint. The tack weld needs to be replaced with fillet weld.

## INITIAL REPORT:

On August 5, 1983 V. Brownlee, NRC Region II was notified of the subject deficiency by L. M. Coggins and J. K. Berry of Duke Power Company, 422 S. Church Street, Charlotte, NC 28242.

## COMPONENT AND/OR SUPPLIER:

Attachment 1 identifies the Duke Item Number, Tag Number and Borg-Warner Part Number for the swing check valves involved. The valves were manufactured by Borg-Warner Corporation, Nuclear Valve Division.

## DESCRIPTION OF DEFICIENCY:

Borg-Warner has indicated to the NRC and to Duke there is a possible hardware problem with swing check valves supplied to Duke. Valves having a tack weld in the disc and stud assembly joint could possibly fail. Failure of deficient weld could cause the disc to become detached precluding the intended safety function and the resulting detached parts possibly damaging downstream equipment.

## ANALYSIS OF SAFETY IMPLICATIONS:

Loss of disc in valves shown on Attachment 1 in the Auxiliary Feedwater System (CA) could block flow causing insufficient auxiliary feedwater flow to steam generators.

Loss of disc in valves INS098 and INS099 could block flow through their respective containment spray flow paths. This would be a loss of either A or B train spray flow.

Safety implications associated with valve INV482 is loss of reciprocating charging pump in the Chemical and Volume Control System.

Corrective Action:

The valves will be repaired by Borg-Warner in accordance with Borg-Warner repair procedures. All valves will be repaired by November 30, 1983.

This problem is being reviewed at other Duke Nuclear Stations and will be reported if a safety significance is identified.

## CHECK VALVES

<u>Duke Item</u>	<u>Size</u>	<u>Duke Tag Number</u>	<u>Valve Serial Number</u>
6H-203	4"	1CA049	22442
6H-203	4"	1CA065	22443
6H-203	4"	1CA037	22444
6H-203	4"	1CA053	22445
6H-203	4"	2CA065	22446
6H-203	4"	2CA053	22447
6H-203	4"	2CA037	22448
6H-203	4"	2CA049	22449
9D-217	8"	1NS098	11716
9D-217	8"	1NS099	11717
4D-208	4"	1NV482	11657
2B-238	6"	2CA172	11707
2B-238	6"	1CA171	11708