

DUKE POWER COMPANY

P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

April 15, 1983

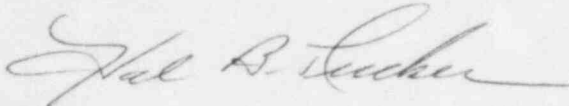
Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

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 413-414/83-05.

Very truly yours,



Hal B. Tucker

RWO/pnp
Attachment

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

Mr. P. K. Van Doorn
NRC Resident Inspector
Catawba Nuclear Station

Palmetto Alliance
2135½ Devine Street
Columbia, South Carolina 29205

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

Mr. Robert Guild, Esq.
Attorney-at-Law
P. O. Box 12097
Charleston, South Carolina 29412

83 APR 22 A10:01
NRC REGION II
ATLANTA, GA 30303

8304260495 830415
PDR ADDCK 05000413
S PDR

OFFICIAL COPY
IE 27

Duke Power Company
Catawba Nuclear Station
Significant Deficiency

Report Number: SD 413-414/83-05

Report Date: April 15, 1983

Facility: Catawba Nuclear Station Units 1 and 2

Identification of Deficiency: NCI number 16293, dated February 17, 1983, identified allen set screws backing out of the worm shaft clutch on Limitorque actuators. The deficiency was identified on Limitorque model number SBD-3, supplied by Westinghouse per Duke Power Design Specification CNS-1205.00-0008 and Mill Power Order A-98524.

Initial Report: Initial report was made to Mr. A. Ignatonis, Region II NRC, on March 18, 1983 by Messrs. W. O. Henry and J. K. Berry, Duke Power Company.

Description of Deficiency: Allen set screws in the affected shaft clutches had been secured by center punching material adjacent to the allen screws. Spot checks of the clutches revealed that in some cases center punching was not close enough to the screws for securing. This allowed several screws to begin backing out. Limitorque actuators using a similar gear and clutch arrangement are models SMB 1-3, SBD 1-3 and SB 1-3 with 3600 rpm AC, or 1800 rpm DC current motors.

Analysis of Safety Implications: Valves 1&2NI054A, 1&2NI065B, 1&2NI076A and 1&2NI088B are low pressure accumulator tank discharge isolation valves. Valves 1&2NI183B are residual heat removal header to hot leg injection isolation valves.

Screws backing completely out of the clutch could become lodged between the worm shaft gear and motor pinion gear. This could preclude these active valves from completing their safety function.

Corrective Action: Defective parts have been removed from service in all actuators affected. Allen set screws in replacement parts were secured with Lok-Tite. Duke is reviewing similar valve applications at other Nuclear Stations and will notify the NRC should any deficiencies be identified.