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DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

'81 JUL 7 A8:05

July 1, 1981

Mr. James P. O'Reilly, Director
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Re: Catawba Nuclear Station
Units 1 and 2
Docket Nos. 50-413, -414

Dear Mr. O'Reilly:

Pursuant to 10CFR 50.55e, please find attached Significant Deficiency Report SD 413-414/81-11.

Very truly yours,

William O. Parker, Jr.

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

IE27
S1/1

Duke Power Company

Catawba Nuclear Station

Report No.: SD 413-414/81-11

Report Date: July 1, 1981

Facility: Catawba Nuclear Station, Units 1 & 2

Identification of Deficiency: Borg-Warner Corp., Nuclear Valve Div. Motor Operated Gate Valves

Description of Deficiency:

On June 2, 1981, W. O. Henry, and J. K. Berry advised Mr. Art Johnson, NRC of the following deficiency.

Valve 1KC230A failed during dry cycling due to the valve disc becoming wedged between the body guides. Operating the valve from the closed position, the leading edge of the lower disc guide gouged the bottom body guide such that the valve could not be fully opened. In addition, the pull of the operator caused the upper side of the disc to rotate slightly about the fixed lower side resulting in the disc wedging between the body guides. The valve is oriented with the stem centerline in a horizontal plane.

This is an active, 8 inch, 150 lb., ASME Class 3 gate valve with a Rotork electric motor operator. Borg-Warner Corporation, Nuclear Valve Division's part number is 76110.

Analysis of Safety Implications:

Valve 1KC230A is used to isolate the essential KC header from the nonessential header during an accident condition. Failure of this valve to isolate could result in cooling water flow to essential components being reduced below acceptable levels should the nonessential KC header fail.

Corrective Action:

The valve disc will be returned to Borg-Warner for removal of sharp leading edges on guides and for closing gap associated with their flex-wedge design. Body guides will be repaired to remove gouges. Other gate valves with cast body guides, power operators, and horizontal orientation will be identified and checked for sharp leading edges. Repairs will be made as required.

Other Duke stations will be reviewed for this deficiency, reported, and corrected as applicable.