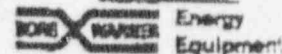


Nuclear Valve Division

Borg-Warner Corporation
7500 Tyndal Ave., Van Nuys, California 91410

NOTIFICATION REPORT

to
Nuclear Regulatory Commission

PART NUMBER	Various	N/R No.	0001
PART NAME	Gate Valve, 3"	CUSTOMER	Various
MANUFACTURER	Nuclear Valve Div.	PROJECT	Various
	Borg-Warner Corp.	DATE DEFECT DISCOVERED	Jan. 16, 1980 (Approx.)

**DESCRIPTION OF NONCONFORMANCE, ANALYSIS OF CONDITION, AND CORRECTIVE ACTION
(ATTACH SUPPORTING DATA).**

Duke Power Co., as part of an operability test program, established a test loop at their Marshal Steam Generating Station (non-nuclear) near Charlotte, North Carolina. Installed in that test loop was NYD P/N 74380, a 3", 1500# motor operated gate valve. During November of 1979 NYD was notified that the subject valve had failed to completely close when actuated under operating conditions. The operating conditions were 2485 psi @ 650°F with a flow rate of 220,000 lbs per hour of steam, which is equivalent to a velocity of approx. 40 ft/sec. Under these conditions the valve closed to about 10% of full closure.

Extensive testing and evaluation was conducted by Duke Power Co. in conjunction with NYD to determine the exact cause of the nonconformance so that a proper corrective action could be accomplished. By approximately, Jan. 16, 1979, it was confirmed that the basic cause of the failure was inadequate guiding of the valve gate.

Continued on Page 2

**QUANTITY AND LOCATION OF ALL SIMILAR ITEMS DELIVERED WITHIN THE U.S.A. THAT
CONTAIN THE SAME NONCONFORMANCE.**

Refer to Page 2

Warren L. Whiston
Director, Quality Assurance

2/12/80
Date

NOTIFICATION REPORT TO U.S. NUCLEAR REGULATORY COMMISSION

N/R No. 0001

Page 2 - Continued

A modification of the gate guides was accomplished by NVD and the valve re-tested by Duke Power Co. verifying the adequacy of the corrective action.

NVD understands that Duke Power Co. had made the NRC in their region aware of the situation and on Feb. 7, 1980, the NRC in Region V was notified by telephone by NVD of the situation. This formal notification report is issued to complete NVD's obligation under 10CFR21 with respect to similar valves delivered by NVD. NVD has determined that a total of thirty-four (34) valves of similar design have been delivered. The pertinent data on those valves is listed below. The four (4) Customers involved have been notified and asked to evaluate if the installations of these valves at their sites represent a substantial safety hazard. NVD is prepared to respond in a timely fashion to whatever action the Customers deem necessary.

It should be noted that the valves involved are not all subject to the severe operating environment encountered in the Duke testing and that under less severe conditions of pressure, temp. and flow could be expected to perform satisfactorily.

The valves listed below have been identified by NVD as having a potential generic problem related to the Duke test failure described above. All four (4) Customers involved have been notified by telecon as of 2/11/80.

- (1) Customer: Combustion Engineering Site: Palo Verde ✓
NVD P/N: 77910 Qty: Four (4)
C.E. Tag No's SI604 and SI609
Valve ΔP: 2500 psi Temp: 350° F
- (2) Customer: T.V.A. Site: Bellefonte ✓
NVD P/N: 79190 Qty: Sixteen (16)
TVA Tag No: 3BW0456-KC-30 Valve ΔP: 2500 psi
Temp: 650° F Flow: 100 GPM (Approx. 4.54 ft/sec)
- (3) Customer: Bechtel Site: Arkansas Nuclear One-Unit2
NVD P/N: 75460 Qty: Two (2)
Bechtel Tag No's: 3ACA-GT-MO-2CV4698-1-PL
3ACA-GT-MO-2CV4697-2-PL
Valve ΔP: 2485 psi Temp: 658° F
- (4) Customer: Duke Power Co. Site: Catawba ✓
NVD P/N: 74380-1 Qty: Six (6)
Duke Tag No: 9J-239 Valve ΔP: 2485psi
Temp: 680° F
Duke Power Co. Site: McGuire ✓
NVD P/N: 74380 Qty: Six (6)
Duke Tag No: 9J-221 Valve ΔP: 2485 psi
Temp: 680° F

ATTACHED IS A PART 21 REPORT FROM IE MAIL UNIT - ROOM 359E/W

PART 21 IDENTIFICATION NO. 80-197-000 COMPANY NAME Bur

DATE OF LETTER 2/12/80 DOCKET NO. 50-369, 50-413, 50-528, 50-438, 50-348

DATE DISTRIBUTED 2/21/80 ORIGINAL REPORT ☒ SUPPLEMENTARY ☐

DISTRIBUTION:

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BOB DENNIG, MPA

ACTION:

PRELIMINARY EVALUATION OF THE ATTACHED REPORT INDICATES LEAD RESPONSIBILITY FOR FOLLOW-UP AS SHOWN BELOW:

IE ☒

NRR ☐

NMSS ☐

OTHER ☐

RCI
ROI
SG
FFMSI