Nuclear Valve Division

Borg-Warn in Corporation 7500 Tyror e Ave., Van Nuys, California 91409 • Telephone: 213-781-4000 Mailing Address: P. O. Box 2185, Van Nuys, California • TWX 910-495-1726



1984 NOV 23 AM 10: 06

November 21, 1984 Refer to: 0-84-327/PLM

REGION VIOL

John B. Martin, Director, Region V Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission 450 Maria Lane, Suite 210 Walnut Creek, California 94596

Subject: 10CFR21 Notification Report #0007

Dear Mr. Martin:

The attached report serves as formal written notification of a hardware problem as required by 10CFR21, which was discovered at Cleveland Electric Company, Perry Nuclear Station Units 1 & 2. This report is filed on the basis of one known safety related application of a deficient valve delivered to Cleveland Electric.

The attached report should be considered preliminary and is being submitted for information orly. A formal final report will be submitted when our analysis of the condition is completed and the required corrective action is determined.

If additional information is required, please do not hesitate to contact me.

Very truly yours,

BORG-WARNER CORPORATION Nuclear Valve Division

P.L. Milinazzo

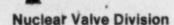
Manager, Quality Assurance

PLM/sa

Attachment

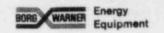
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Borg-Warner Corporation 7500 Tyrone Ave., Van Nuys, California 91409

NOTIFICATION REPORT



Nuclear Regulatory Commission

PART NUMBER	81040-2, S/N 54512	N/R No.	0007
PART NAME G	ate Valve, 20 Inch, 900#	CUSTOMER	Cleveland Electric Company
MANUFACTURER	Nuclear Valve Division	PROJECT	Perry Station, Units 1 & 2
	Borg-Warner Corporation	DATE DEF	

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

During the cycling of the above stated gate valve, the valve failed to open completely. Said valve was disassembled and reinspected to determine the cause of failure. The welded in body gate guides were found to be damaged due to galling caused by the gate. This condition was the result of a design error which allowed the guides to be welded in a position which creates a misalignment between the gate and the body guide rails. This condition could potentially exist on a total of ten (10) 20" valves supplied to the Cleveland Electric Illuminating Company by Borg-Warner, Nuclear Valve Division under various part numbers. This condition is isolated only to the 20" gate valves supplied to Cleveland Electric for Perry Nuclear Power Plants 1&2.

During NVD's analysis of said failed valves, it was discovered that a second design problem existed. The fillet weld for welding in the guides to the body is not adequate for any valve which might be subjected to a differential pressure in excess of 600 psi during cycling of the valve. A review of the customer valve data sheets indicates that four (4) valves would be subjected to a differential pressure above the 600 psi range.

Borg-Warner, Nuclear Valve Division, in cooperation with the Cleveland Electric Illuminating Company, is formulating an inspection and corrective action plan to resolve these deficiencies.

QUANTITY AND LOCATION OF ALL SIMILAR ITEMS DELIVERED WITHIN THE U.S.A. THAT CONTAIN THE SAME NONCONFORMANCE. NONE

Geter & Milinamo Manager , Quality Assurance

11/19/84

Log Sheet No. 52

PART 21 REPORT LOG SHEET

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10. Additional Comments -	Jest 1/1/25/01	0.	Additional Comments -

TE-1901

RETE MILINASSO 818-904-5625

MANAGER DIVISION

BOLL WALKER
VAN NUYS, CA.

TEN OF RELOCE

- · INVOLVED VALUES THAT HAS BEEN SENT TO THE CLEVELANDS ELECTRIC PERRY SITE (CONSTRUTION SITE)
- · PROBLEM INVOLVES VALUE LOCK-up during cycline AS A
 RESULT OF BINDING (GAULING) OF GATE AGAINST GATE GUIDES
- PROBLEM IS LIMITED TO 10 OF 14 VALUES THAT HAVE BEEN DELIVERED TO SITE AND INVOLVES ONLY THUSE HAVING WELDED GATE GUIDES
- PROBLEM IS A DESIGN / MANUFACTURING PROBLEM IN THAT WELDED GATE GUIDES ALL NOT INSTALLED PARALLEL TO GATE AND THUS WHEN GATE IS CLOSED IT BINDS AGAINST GUIDES.
- · CLEVELAND ELECTRIC IS A DAKE OF PROBLEM AND THRY
 ARE CURRENTLY WOLKING WITH BOLD WALNER IN
 DEVELOPING a Solution to PROBLEM. For
- DENTIFIED IF DIFFERENTIAL PRESSURE ACCESS GATE IS

 CREATER THAN 600 psi. Another PROBLEM Comes into

 Play which is an under sized fillel weld used to
 hold gate guides into place

Milinaggo is in Process of Sending in A writer PART 21 Report to Region U.

Into TAKEN By B Faulkenberry at 11:00 A on 11/21/84