



**Consumers
Power**

**POWERING
MICHIGAN'S PROGRESS**

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Kenneth W Berry
Director
Nuclear Licensing

February 27, 1990

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
10CFR PART 21 REPORT - PORV BLOCK VALVE WITH LIMITORQUE
ACTUATOR TYPE SMB-00-25

The attachment to this letter provides a report on the discovery that a PORV Block Valve with Limatorque Actuator SMB-00-25 procured from Edward Valves, Inc. for installation at the Palisades Nuclear Power Plant was defective and malfunctioned to the point of actuator motor failure during preoperational testing. The malfunction resulted from a missing pin that connects the limit switch drive gear to the main actuator drive train. Since this was one of two PORV Block Valves with Limatorque Actuators received from Edward Valves Inc., a subsequent inspection was conducted and verified the required pin was in place on the second assembly. In that this is a one out of two occurrence for assemblies Consumers Power Company obtained from the supplier plus the fact that additional frequency of occurrence data has not been supplied to us in support of an isolated incident position, we have made the conservative determination to submit the attached 10 CFR Part 21 Report. This letter confirms the telephone report made to BBurgess of the NRC Region III Staff on February 22, 1990.

Kenneth W Berry

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Director, Nuclear Licensing

CC Administrator, Region III, USNRC
NRC Resident Inspector - Palisades

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ATTACHMENT

Consumers Power Company
Palisades Plant
Docket 50-255

PORV BLOCK VALVE WITH LIMITORQUE
ACTUATOR TYPE SMB-00-25
10 CFR PART 21 REPORT

February 27, 1990

2 Pages

OC0290-0261-NL04

PORV BLOCK VALVE WITH LIMITORQUE ACTUATOR
TYPE SMB-00-25

10 CFR Part 21 Report

The following information is provided in accordance with 10CFR21.21 when a deficiency is considered to be reportable under Part 21:

1. Name and address of individual informing the Commission
 - a. Telecon: BDJohnson, P24-606
Consumers Power Company
1945 Parnall Road
Jackson MI, 49201
 - b. Written: KWBerry, P24-614A
Same address
2. The facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect is:

PORV Block Valve with Limitorque actuator type SMB-00-25 procured from Edward Valves, Inc. for installation at Palisades Nuclear Power Plant.
3. The firm constructing the facility or supplying the basic component which fails to comply or contains a defect is:

Limitorque actuator installed on Edward's Block Valve.
4. Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply is:

Missing pin in Limitorque actuator resulted in failure of actuator and self-destruction of actuator motor.
5. The date on which the information of such defect or failure to comply was obtained is:

The initial failure occurred on November 14, 1989. Subsequent evaluations by Limitorque and Edward, has not provided satisfactory resolution.
6. In the case of a basic component which contains a defect or fails to comply, the number and location of all such components in use at, supplied for, or being supplied for one or more facilities or activities subject to Part 21.

Two components received. Inspection of the second component disclosed that the pin was properly installed.

7. The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action is as follows:

The valve actuator was disassembled to find the cause of the malfunction. This disassembly revealed that a pin which connects the limit switch drive gear to the main actuator drive train was missing. The other Block Valve with Limitorque Actuator which had been received from Edward Valve Inc. was disassembled to verify the presence of the pin found missing in the first assembly. The pin was found to be in place. No additional corrective action is planned, since no other PORV Block Valves with Limitorque Actuator type SMB-00-25 are on site.

Consumers Power Company requested a root cause evaluation from Edward Valve Inc. Edward Valve Inc. deferred the evaluation to Limitorque, who indicated it was an isolated occurrence but provided no supporting documentation.

8. Advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees is as follows:

The valve and actuator performed adequately initially (apparently by friction). The missing pin eluded several inspections and tests. Disclosure of the missing pin prior to in-service use was fortuitous.