

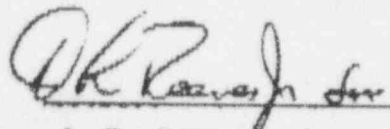
To: James P. O'Reilly
Directorate of Regulatory Operations
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

From: Jersey Central Power and Light Company
Oyster Creek Nuclear Generating Station Docket #50-219
Forked River, New Jersey 08731

Subject: Abnormal Occurrence Report No. 73-32

The following is a preliminary report being submitted
in compliance with the Technical Specifications,
paragraph 6.6.2.

Preliminary Approval:


J. T. Carroll, Jr. 12/20/73
Date

cc: Mr. A. Giambusso

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Preliminary
Abnormal Occurrence
Report No. 73-32

SUBJECT: Failure of the test spool valve for NS04A to properly reset after 5% closure test which resulted in a condition which may have caused the MSIV to close slower than normal should an isolation signal have occurred during the test interval.

This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15D. Notification of this event, as required by the Technical Specifications, paragraph 6.6.2.a, was made to AEC Region I, Directorate of Regulatory Operations, by telephone on Thursday, December 20, 1973 at 0900, and by telecopier at 1500.

SITUATION: It had been observed on December 17 and 18 that MSIV NS04A was apparently overtravelling during the daily 5% closure exercise, thereby causing pressure transients of 6 psig and 10 psig, respectively. Analysis of the problem indicated that possibly the overtravel was a result of the improper resetting of the test spool valve. To explore this possibility, reactor power was reduced to 853 MWt (<40% of rated power) so that further examination of the test spool valve assembly could be conducted with reduced possibility of a reactor scram due to valve closure, and to reduce radiation levels in the work areas.

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The 5% valve closure test was redone with an instrument technician in local observance of the test. The sticking condition had apparently worsened, thereby causing the MSIV to go approximately 50% closed and then reopen in the normal manner. The technician concluded that the test valve was the cause of the problem. Thus, a situation was created whereby had the valve been required to isolate during the test interval (approximately 2-3 minutes) it is unlikely that it would have met the required closure time of <u>10</u> seconds, since exhaust air from the underside of the valve operator piston is required to pass through the test valve assembly. Because of the malpositioned valve assembly, the exhaust air would have been restricted, thereby slowing the valve closure time.

CAUSE:

Upon removal and disassembly of the test spool valve, it was observed that foreign material resembling rod powder was found on and between the spool and sleeve assembly, although it has not been conclusively determined that this was the cause of the valve sticking. The spool assembly is being sent to a testing lab for further evaluation.

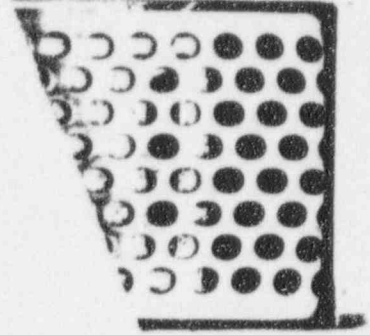
REMEDIAL ACTION:

The test spool valve assembly for NS04A was replaced. The 5% closure test was repeated satisfactorily, as well as a full closure timing test (6.7 seconds).

December 19, 1973

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the 5% closure test, had an isolation signal been introduced the valve may not have closed in the required time. The sequences of this event were minimized since the redundant NSOISA would have provided isolation and closed in the required time, in the event of a reactor isolation. Furthermore, the "slow closure condition" was only present for the length of time the 5% closure test was in progress (2-3 minutes).



Prepared by: Arthur K. Rose

Date: December 20, 1973

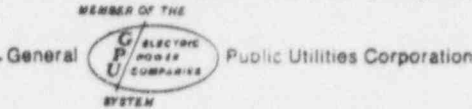
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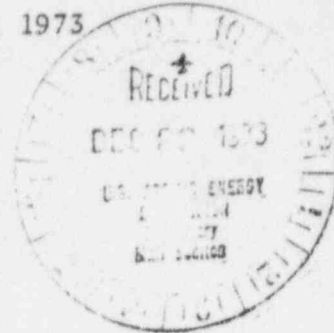
Jersey Central Power & Light Company



MADISON AVENUE AT PUNCH BOWL ROAD • MORRISTOWN, N. J. 07960 • 201-539-8111



December 20, 1973



Mr. A. Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Giambusso:

Subject: Oyster Creek Station
Docket No. 50-219
Damaged Relay

The purpose of this letter is to report to you, as a matter of interest, the threatened failure of relay 6K43 in the plant protection system. This relay is one of two relays which causes operation of the torus to reactor building vacuum breaker block valves. It is a normally energized relay which maintains closed contacts in the valve circuit for closing the block valves, V-26-18 and V-26-16. The function of these valves is to assure that the primary containment is not operated at a negative pressure relative to the reactor building. Should either one of two differential pressure switches trip on the given setpoint of 0.5 psig, its associate relay 6K43 or 6K44 will de-energize with the subsequent opening of the block valves.

On November 21, 1973 at 12:41 p.m., smoke was observed emanating from relay 6K43, located in panel 10F in the control room. The function of the relay was determined, and at 1:05 p.m., an instrument technician, upon instruction from the shift foreman, deenergized the relay to avoid any possibility of damaging adjacent wires and relays. A jumper was then placed across the contacts in the valve circuit which again closed the valves. The valves remained open for approximately one minute, which essentially is the amount of time they are open while performing the normal monthly surveillance test. While the valves were closed in this manner, the redundant pressure switch associated with relay 6K44 would have performed the pressure protection function.

The damaged relay was removed and a new relay of higher voltage was installed. A surveillance test was performed and the system was returned to normal by 3:49 p.m. Since the incident, the bus voltage has been reduced from the prior 125V AC value to 120V AC.

The damaged relay was removed to the electrical shop for testing; however, the cause of the failure could not be determined. The relay will be sent to the vendor's testing lab for further evaluation. The relay was a

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Mr. Giambusso

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December 20, 1973

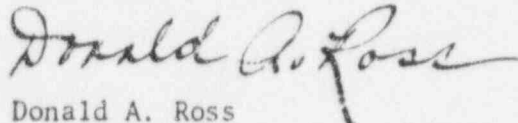
General Electric Control Industrial Relay, Serial No. CR120A 02202AA, 300V AC, 10 amp maximum 115V, 60 cycle, coil series A.

During the period when the temporary jumper was installed (1:06 p.m. - 3:30 p.m.), the redundancy of two pressure switches was lost. However, one pressure switch is capable of causing the valves to open. In addition, a switch in the control room could have been used to open the valves should it have been required. The conditions that would cause the torus to go negative would evolve generally after an extended period of time, following a loss of coolant accident. Consequently, sufficient time for action would have been available. More importantly was the necessity to maintain the primary containment integrity provided by these valves. Consequently, keeping the valves closed rather than letting them remain open during the repair was justified.

As per prior General Electric recommendations, failed relays will be replaced with ones of a higher voltage rating. Further action will be considered based upon the vendor's inspection results of the damaged relay.

Enclosed are forty copies of this report.

Very truly yours,



Donald A. Ross
Manager, Nuclear Generating Stations

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cc: Mr. J. P. O'Reilly, Director
Directorate of Regulatory Operations, Region I