

UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I
970 BROAD STREET
NEWARK, NEW JERSEY 07102

FEB 27 1973

To: Files

THRU: Don Caphton, Senior Reactor Inspector *WIS*

OYSTER CREEK BLOWDOWN, December 29, 1972

Corrective Action Planned

1. Electromatic Relief Valves

The "D" electromatic relief valve which hung open was disassembled and inspected. The disc retainer lock arm, lock screw and tie wire were missing from the disc retainer. A piece of thread from the disc retainer was found in the pilot valve which caused the valve to hang open and caused the blowdown. The lock screw was found; however, the lock arm and the tie wire were not recovered. In addition, a piece of the lock arm on the "B" valve was missing. A fix was to remove all the lock arms, lock screws and tie wires and install set screws in threads between the disc retainer and the valve body. This set screw would prevent the disc retainer from becoming unscrewed. Prior to returning to power all the relief valves were functionally tested after reactor pressure and temperature were increased to normal. The future program includes a review of the adequacy of procedures associated with the blowdown and a revision of procedures based on this experience.

2. Plan to inspect stop valve strainers on the refueling shutdown to recover the missing locking arm and the wire.
3. Investigate with the manufacturer the history of failures of this type of valve and obtain recommendations to improve the reliability of this valve.

4. Main Steam Isolation Valves

The IV B steam isolation valve failed to operate because of a sticking cylinder in one of the solenoid operated pilot air valves.

Corrective action included replacing the pilot valve and inspecting the solenoid operated valves for the other three main steam isolation valves. Corrective action included increasing the test frequency for

A/313

closure from three months to six weeks or at each shutdown, and to reviewing the adequacy of the daily test program in which each main steam isolation valve is moved off its seat using a test solenoid valve. There is a possibility of using a normal closing circuit for the daily test. This would be using the same controls that are required upon initiation of an isolation signal.

The Jersey Central is currently financing a long-term study of the suitability of the main steam isolation valve for their present function. This program will be expanded to include the reliability of the pilot valves.

5. Isolation Condenser Condensate Valve

Jersey Central Management apparently believes that the condensate valve that stuck in the closed position had been hand seated prior to failure even though the valve had been tested satisfactorily the previous day. To date, however, they have not been able to determine who, if anyone, hand seated the valve. The future program includes obtaining electrical data during each test which should provide a reference for comparison with future tests. Also to be reviewed, is the performance of limit torque operators and settings on these operators. In addition, Oyster Creek plans to increase the frequency of testing the relief valve from monthly to weekly. Currently there is a wisp of steam coming out of the isolation condenser vent, which indicates that the B-isolation valve is leaking through. This wisp of steam is being checked daily by plant supervision to determine that the valve is still leaking which would be an indication that the condensate valve had not been hand seated.

The following safety related valves were not tested during the outage:

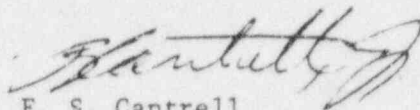
Containment spray - Valves are normally lined up, and open. No valve movement is required for emergency function.

Liquid poison valves - These valves are explosive valves.

Fire protection system for emergency core cooling - Valves were not tested because the valves were manually operated.

Control rod drive hydraulic system - No valves are required to open for automatic operation.

Feedwater system - These valves are open and depend on check valves for isolation.



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Reactor Inspector