

Initial Telephone  
Report Date: \_\_\_\_\_

Date of  
Occurrence: November 21, 1978

Initial Written  
Report Date: \_\_\_\_\_

Time of  
Occurrence: 0634

OYSTER CREEK NUCLEAR GENERATING STATION  
FORKED RIVER, NEW JERSEY 08731

Reportable Occurrence  
Report No. 50-219/78/26-1P

IDENTIFICATION  
OF OCCURRENCE:

This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.a.,(3).

CONDITIONS PRIOR  
TO OCCURRENCE:

- |  |  |
|--|--|
| <input type="checkbox"/> Steady State Power            | <input type="checkbox"/> Routine Shutdown        |
| <input type="checkbox"/> Hot Standby                   | <input type="checkbox"/> Operation               |
| <input type="checkbox"/> Cold Shutdown                 | <input type="checkbox"/> Load Changes During     |
| <input checked="" type="checkbox"/> Refueling Shutdown | <input type="checkbox"/> Routine Power Operation |
| <input type="checkbox"/> Routine Startup               | <input type="checkbox"/> Other (Specify)         |
| <input type="checkbox"/> Operation                     | _____  |

Reactor Coolant Temperature - - 160°F.  
Mode Switch in "Shutdown"  
Reactor vented to the drywell.

DESCRIPTION  
OF OCCURRENCE:

On Tuesday, November 21, 1978, during the performance of an Integrated Primary Containment Leak Rate Test, the Torus to Reactor Building differential pressure switches, DPS-66A & B were found to have ruptured diaphragms. This condition was discovered while looking for suspected sources of leakage during the performance of the above test. After closing the instrument root valves for these switches, the total leakage attributable to the rupture of the switch diaphragms was calculated to be approximately 3 SCFM.

APPARENT CAUSE  
OF OCCURRENCE:

- |  |   |
|--|---|
| <input type="checkbox"/> Design                        | <input type="checkbox"/> Procedure                            |
| <input type="checkbox"/> Manufacture                   | <input checked="" type="checkbox"/> Unusual Service Condition |
| <input type="checkbox"/> Installation/<br>Construction | <input type="checkbox"/> Inc. Environmental                   |
| <input type="checkbox"/> Operator                      | <input type="checkbox"/> Component Failure                    |
|  | <input type="checkbox"/> Other (Specify)                      |
|  | _____   |

The cause of this occurrence can be attributed to the fact that the differential pressure switches are rated for a maximum of 10 psid continuous and a surge pressure of 25 psid. Containment pressure at the time of the discovery was 36.6 psia. The differential pressure switches are not designed to withstand the differential pressure to which they were subjected.

ANALYSIS OF  
OCCURRENCE:

The rupture of the diaphragms in the differential pressure switches opened a path for the release of atmosphere from the pressure absorption chamber. Had an accident situation occurred and fission products were carried over to the pressure absorption chamber, a release could occur from the primary containment to the reactor building. The reactor building is designed to minimize ground level release of airborne radioactive materials, and to provide for controlled, elevated release of the building atmosphere under accident conditions. To prevent ground level leakage of fission products from the reactor building, subsequent to design basis accidents, the standby gas treatment system has the capability to maintain a negative pressure of 0.25 inches of water within the reactor building. The system effluent is processed through filters before being discharged through the stack. Leakage from the differential pressure switches would have been processed through the standby gas treatment system and released through the plant stack.

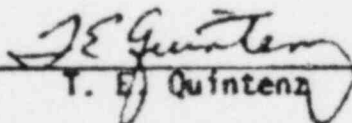
CORRECTIVE  
ACTION:

The root valves for the differential pressure switches were closed. Replacement of the switches with ones which satisfy the design criteria specified for the absorption chamber is being investigated.

FAILURE DATA:

Manufacturer: Dwyer Instruments, Inc.  
Catalog #1637-12  
0-12 inches of water (setpoint adjustment)  
rated at 10 psid

Prepared by:

  
T. E. Quintenz

Date: 11-22-78