

OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Licensee Event Report
Reportable Occurrence No. 50-219/77-7-3L

Report Date

May 2, 1977

Occurrence Date

April 7, 1977

Identification of Occurrence

Failure of the secondary containment to demonstrate the capability to maintain a .250 inches of water vacuum under calm wind conditions with a standby gas treatment system filter train flow of not more than 4,000 CFM. This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.b.(4).

Conditions Prior to Occurrence

The major plant parameters at the time of the occurrence were:

Power: Reactor, 1392 MWt
Generator, 471 MWe (g)
Flow: Feedwater, 5.07×10^6 lb/hr
Recirculation, 54.5×10^6 lb/hr
Stack Gas: 11,200 μ ci/sec

Description of Occurrence

On April 7, 1977, at 1140 hours, a secondary containment capability test was performed following the installation of a penetration through the reactor building wall. The test results indicated a vacuum of .233 inches of water with a standby gas treatment system filter train flow of 2,700 CFM.

The cause of the low vacuum condition was traced to air in leakage through the reactor building roof manway which is an airlock with an inner and outer door. The inner door was found to be not fully closed and the outer door had excessive leakage through its seal. Following repairs, the reactor building was retested and a vacuum of .281 was achieved.

Apparent Cause of Occurrence

The reactor building roof manway doors are designed such that either door can be opened and .250 inches water vacuum maintained. The cause of the occurrence is attributed to the deteriorated outer manway door gasket. Gasket deterioration was attributed to age.

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Analysis of Occurrence

The secondary containment is designed to minimize any ground level release of radioactive material which might result during accident conditions. The requirement to maintain a .250 inch water vacuum with the standby gas treatment system in service assures that the leak tightness of the secondary containment is being maintained. The safety significance of the failure to demonstrate sufficient leak tightness is considered to be minimal since the margin of failure was small (.017 inches of water) and there were no accidents for which secondary containment was required to function.

Corrective Action

The outer door was temporarily repaired by packing the hatch seal with rope and caulking it in place. The inner door was closed and latched.

An investigation is being conducted to determine if the seal gaskets and latching mechanism can be improved. In any event, the latching mechanism will be locked and the keys will be placed under the control of the group shift supervisor.

Failure Data

N/A