



LER SUPPLEMENTAL INFORMATION

SQRO-50-327/83056

Technical Specification Involved: 3.6.1.3

Reported Under Technical Specification: 6.9.1.12.b

Date of Occurrence: 05/03/83

Time of Occurrence: 2339 CDT

Identification and Description of Occurrence:

On 05/02/83, a routine surveillance of the airlock was performed and it passed all acceptance criteria. The assistant unit operator (AUO) who discovered the failure reported the door was chained and locked prior to his entry. Containment integrity was intact until this time. The AUG entered the airlock, discovered the failed inner door, and exited.

Conditions Prior to Occurrence:

Unit 1 was at 100% Rx power with the temperature and pressure at 578 degrees F and 2235 psig.

Apparent Cause of Occurrence:

A stud weld and cam follower bearing failed, thus causing the inner door to fail to completely seal. The probable cause for failure was the broken cam follower bearing exerting excessive stress on the stud. The probable cause of the bearing failure is normal wear.

Analysis of Occurrence:

Upon discovering the inner door failure, the AUO immediately exited. Containment was breached for approximately 25 seconds. During this time, the containment pressure was less than that in the auxiliary building. This caused air flow into the containment building and prevented any release of contamination. To comply with action statement 'a' of LCO 3.6.1.3, the outer door was chained and locked. Further investigation by maintenance personnel showed the inner door was inoperable due to a failure of the operating mechanism for the latch bar. The door would close but not latch. The latch bar is connected to a welded stud on one of the operating plates by a connecting rod assembly. The stud had broken at the weld. Upon continued investigation, it was discovered that one of the cam follower bearings had failed. After discovering the bad bearing, it was concluded that the most probable cause of the latch mechanism failing was the broken bearing exerting excessive stress on the stud.

Corrective Action:

When the inner door was discovered inoperable, the AUO chained and locked the outer door to comply with action statement 'a' of LCO 3.6.1.3. The broken stud was rewelded and the cam follower bearing replaced. After repairs,

a surveillance test was performed and the operability of the airlock was verified. At the next refueling outage, the airlock will be completely inspected and any questionable parts will be replaced. Presently, TVA is discussing possible solutions to the airlock failures with Chicago Bridge and Iron.

Failure Data:

None.