

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-I-88-41

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region I staff on this date.

Facility:  
Millstone Nuclear Sta. Unit 3  
Waterford, CT  
50-423

Licensee Emergency Classification:  
 Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

Subject: RCS UNIDENTIFIED LEAKAGE EXCEEDS LIMIT

On April 14, 1988, the plant was in hot standby after an April 13 plant trip due to loss of condenser vacuum caused by high circulating water traveling screen differential pressure. At 5:15 p.m., April 14, an Unusual Event was declared when Reactor Coolant System (RCS) unidentified leakage increased to ~6 gpm. The licensee identified that the inner of two Reactor Vessel (RV) O-rings had begun to leak at 1:00 p.m. That sent steam to the Containment Drain Transfer Tank (CDTT). Feedback to valve stem leakoffs directed to the CDTT is hypothesized to have caused other leakage to begin. The 6 gpm leakage began after the telltale drain from the inner O-ring cavity was isolated. The licensee detected the leak by noting increasing pressure in the CDTT and increased containment gaseous radiation concentration.

A Containment entry was made at 8:00 p.m., and a leak was identified from the "B" PORV block valve packing leakoff line. A manual valve in the leakoff line was shut at 9:10 p.m., April 14. CDTT pressure then dropped below the 75 psi relief setpoint and the CDTT relief reset. The licensee concluded the leak had been found and that the block valve outer packing and lantern rings were holding, and the plant de-escalated from the Unusual Event at 9:30 p.m. About 2:00 p.m., April 15, the licensee concluded that unidentified RCS leakage was ~1.1 gpm, and re-declared an unusual event. A Containment entry began about 3:00 p.m., to check for leaks and investigate high temperature (>120F) in the pressurizer cubicle. If the leakage problem is not clearly resolved in four hours, the licensee plans to go to cold shutdown.

Seaweed and other debris that clogged the intake screens due to easterly winds is being removed. CDTT pressurization to at least 100 psi due to PORV block valve packing leakage is under evaluation.

Local new media were informed of the Unusual Event declarations by the licensee. The State of Connecticut has been notified.

This PN is current as of 3:15 p.m., April 15, 1988.

CONTACT: W. Raymond                      E. McCabe                      L. Bettenhausen  
203-442-5357                      215-337-5231                      215-337-5233

0/1  
TE-34