From:

Region 1 Incident Response Center

To:

resident1

Date:

4/17/05 4:19PM

Subject:

Millstone Event - 04/17/05

On 4/17/05, at 8:29 a.m. a reactor trip occurred at Millstone Unit 3 on low steam line pressure on one steam generator. The licensee subsequently declared an Alert due to what appeared to be several main steam relief valves lifting and at least one failing to initially reclose. Safety Injection and Main Steam Line Isolation automatically occurred. The safety injection resulted in the pressurizer going solid and lifting of the pressurizer power operated relief valves and/or safety valve. The NRC entered "monitoring" mode at 9:53 a.m. and activated the RI incident response center at 10:30 a.m. Resident inspectors responded to site. We anticipate that monitoring will require backshift operations. As a result, the SRI from IP was also dispatched to the site to provide coverage for the back shift. The Region also established a watchbill for backshift coverage.

SUGGESTED AREA FOR FOLLOW-UP

Millstone Unit 3 Reactor Trip/Safety Injection EAL Alert Declared - Main Steam Line Safety Valve Failed to Reseat

- 1) Understand initiation of event and its cause(s), as well as the detailed event sequence (In particular, any relation to previous maintenance, equipment issues, or precursor events).
- 2) Understand safety system response, such a why only Train 'A' SIAS/MSI actuated automatically.
- 3) Understand equipment performance, including:
 - Trip of turbine-driven auxiliary feedwater pump.
 - Charging system valve packing leakage (leaked ~ 1000 gallons of RCS into the Primary Auxiliary Building).
 - Behavior of steam generator safeties, PORVs, primary reliefs.
 - PORVs and primary safeties condition including an assessment of potential damage which could have occurred as a result of water relief.
- 4) Understand application of the Technical Specifications and Technical Specification action statement time limits (e.g., time required to reach hot shutdown with inoperable steam generator safety valves).
- 5) Understand licensee operational performance, including:
 - Operator initial response.
 - use of EAL's/implementation of EOP's, AOP's E-Plan.
 - response to plant equipment issues, including:
 - continuing input into PRT (should they have investigated sooner and reacted sooner to indication of PORV leakage)
 - efforts to confirm that no primary-to-secondary leakage was occurring; including S/G sampling and other evaluations and analyses (also decisionmaking about steaming from the 'D' S/G w/o a sample).
- 6) Evaluate the licensee post-event assessments, including causal analyses, extent-of-condition reviews, prompt corrective actions before restart, and longer term corrective and preventive measures.