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Writer's Direct Dial Number:

March 10, 1982

Mr. Ronald C. Haynes, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Haynes:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report
Reportable Occurrence No. 50-219/82-11/03L



This letter forwards three copies of a Licensee Event Report to report Reportable Occurrence No. 50-219/82-11/03L in compliance with paragraph 6.9.2.b.2 and 6.9.2.b.3 of the Technical Specifications.

Very truly yours,

Peter B. Fiedler
Vice President & Director
Oyster Creek

PBF:lse
Enclosures

cc: Director (40 copies)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Director (3)
Office of Management Information and
Program Control
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

NRC Resident Inspector (1)
Oyster Creek Nuclear Generating Station
Forked River, NJ 08731

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OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Licensee Event Report
Reportable Occurrence No. 50-219/82-11/03L

Report Date

March 10, 1982

Occurrence Date

February 8, 1982

Identification of Occurrence

Operation in a degraded mode permitted by a limiting condition for operation (Section 3.5.A.8) when three (3) hydraulic snubbers were determined to be inoperable during functional testing. These snubbers are located on the containment spray and isolation condenser systems.

In addition, the accelerated surveillance of Technical Specification 4.5.Q.3, required for snubbers whose seal materials have not been demonstrated to be compatible with the operating environment, was not performed.

This event is considered to be a Reportable Occurrence as defined in the Technical Specifications, paragraph 6.9.2.b.2 and 6.9.2.b.3.

Description of Occurrence

On February 8, 1982, snubbers at locations -19/1, -19/2, and 95/9 were found to be inoperable during functional testing per Procedure 775.1.005. These snubbers were replaced with new operable snubbers in accordance with Technical Specification requirements (3.5.A.8.D). The results of the functional tests for these three snubbers follows:

| <u>Snubber Location</u> | <u>Serial Number</u> | <u>System</u> | <u>Drag Load</u> | <u>Lock Up Velocity</u> | <u>Release Rate Vel.</u> |
|-------------------------|----------------------|---------------------|------------------|-------------------------|--------------------------|
| -19/1 | F95222-2 | Contain. Spray | Pass | Pass | Fail (C) |
| -19/2 | F93501 B | Contain. Spray | Pass | Fail (T) | Pass |
| 95/9 | F93502 H | Isolation Condenser | Pass | Pass | Fail (C) |

(C) - Compression
(T) - Tension

All of the above snubbers were tested on a Bergen Patterson test machine which was calibrated on 12/17/81.

Apparent Cause of Occurrence

All three snubbers were visually examined prior to functional testing and were identified as being acceptable. After functional testing, the snubbers were disassembled to determine the actual cause of oil leakage discovered during the functional testing. Snubber -19/1 exhibited a split manifold seal and evidence of seal particles caught in the poppet valves. This snubber leaked oil throughout the functional test.

Snubber at location -19/2 exhibited a high locking velocity in the tension mode. Also, the release rate velocity observed during the tension test, although within procedural guidelines, was found to be higher than usual. This is attributed to poppet valves with incorrect seating and/or wear beyond acceptable tolerances. This snubber also leaked oil throughout the functional test.

Snubber 95/9 was disassembled and was found to have air trapped in the hydraulic fluid. This snubber contained molded polyurethane seal material rather than the ethylene-propylene seal material which -19/1 and -19/2 possess. This type seal material, molded polyurethane, is the old type seal which was thought to have been replaced by the ethylene-propylene seal material because of its poor properties in a radioactive, high temperature environment. This snubber leaked oil through the manifold throughout its functional test.

Analysis of Occurrence

Hydraulic snubbers are installed to limit piping movement during seismic events and during transient conditions. Another function is the ability of the piston to move freely during normal operation to compensate for thermal expansion or contraction. As a result of these inoperable snubbers found in the affected piping systems, the ability of these systems to perform their intended function during a seismic event may have been degraded. In addition, snubber -19/2 was the only snubber to fail due to high lock-up velocity, which would occur during a seismic event.

Corrective Action

All three inoperable snubbers were replaced with brand new 2500 series snubbers. These inoperable snubbers are to be rebuilt, tested, and kept as operable spares.

There are eighty-eight (88) hydraulic snubbers in the Reactor Building outside the drywell. As of March 9, 1982, seventy-one (71) of these snubbers are new (1981 and 1980 models) and have been certified as to material and operability by Bergen Patterson or have been recently rebuilt at Oyster Creek and tested on the calibrated Bergen Patterson test machine. The remaining seventeen (17) will be visually inspected on a monthly schedule until they are replaced. All snubbers inside the drywell are mechanical.

Snubbers with external piping (400000 series) will be removed from service permanently. Snubbers with integral valve manifolds (F500000-X series) will be removed from service, tested, rebuilt, and reinstalled.

Further investigation into the cause of this event, including the reasons for the presence of molded polyurethane seal material, will be included in the supplemental report to be submitted concerning Reportable Occurrence No. 81-61. Additional corrective action, if necessary, will be included in the supplemental report.

Failure Data

Bergen Patterson Hydraulic Shock and Sway Arrestors
All Type HSSA - 10 Kip
2-1/2" Bore
6" Stroke