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OYSTER CREEK NUCLEAR GENERATING STATION  
Forked River, New Jersey 08731

Licensee Event Report  
Reportable Occurrence No. 50-219/80-10/1T

Report Date

March 7, 1980

Occurrence Date

January 20, 1980

Identification of Occurrence

During verification of as-built conditions for pipe hangers, it was observed that three pipe hangers in the Liquid Poison System were not properly installed.

This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.a.(9).

Conditions Prior to Occurrence

The plant was shutdown for a refueling/maintenance outage.

The reactor was subcritical.

The reactor mode switch was locked in refuel.

The reactor cavity was flooded and less than 212°F.

Description of Occurrence

On Wednesday, February 20, 1980, at approximately 3:50 p.m., during the inspection required for IE Bulletin 79-14, three pipe hangers were discovered improperly installed. The pipe hangers that restrain a vertical section of the liquid poison system piping are numbered NP-2-R8A, NP-2-R8B, and NP-2-R9. These hanger numbers are referenced on Bergen-Patterson Drawings.

Also a restraint, ND-1-R2 on the return line of the cleanup system was of the incorrect design. The system requires restraint of the pipe in two directions and ND-1-R2 was only capable of one directional restraint.

The pipe hangers are used to restrain a pipe from excessive movement during a seismic event. The three hangers all provide horizontal restraint on the vertical pipe. The hanger which consists of a pipe clamp with two lugs welded on the

outside of the clamp, 90° from the pipe clamp end, should rest in a square box made of angle iron. The four equidistant external points should rest on the center of the flats of the box. The box is rigidly supported to the drywell wall. Therefore, if properly installed, the pipe would be allowed minimal horizontal movement. The hangers were found with the pipe clamp located above the restraining box which would permit excessive movement of the pipe in a seismic event.

#### Apparent Cause of Occurrence

Improper installation and incorrect design were the cause of this occurrence.

#### Analysis of Occurrence

The Liquid Poison System is a standby, redundant, independent control system for use in the unlikely event that the control rod system is inoperable. The Liquid Poison System is actuated only by remote manual action from the Control Room and will be used only during extreme emergency conditions.

The cleanup system is a filtration and ionization exchange system for maintaining the purity of the water in the reactor vessel and recirculation lines. The restraint in the return line was only capable of restraint in one direction, therefore, the pipe restraint would be considered inoperable in a seismic event.

The hangers may not have performed their intended function during a seismic event.

#### Corrective Action

The hangers in the Liquid Poison System were properly reset in the boxes.

The restraint in the cleanup system has been reviewed and will be modified to meet the original design criteria. A non-rigid restraint, a snubber, will be added to the return line to give the pipe a two directional restraint.

#### Failure Data

Not Applicable.