

OYSTER CREEK NUCLEAR GENERATING STATION  
Forked River, New Jersey 08731

Licensee Event Report  
Report Occurrence No. 50-219/83-24/01P

Report Date

December 21, 1983

Occurrence Date

December 20, 1983

Identification of Occurrence

After attending the INPO sponsored "Valve and Valve Motor Operator Workshop" conducted from November 16 through 18, 1983 at Atlanta, Georgia, and reviewing the INPO Significant Operating Event Report No. 83-09 titled, "Valve Inoperability caused by Motor Operator Failures", and INPO report titled "Assessment of Motor Operated Valve Failures", a review of maintenance records disclosed that the torque switch setpoints of many limitorque motor-operated valves were set below the original manufacturer's data listed on the bill of material.

Although data are still being evaluated, we believe 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 reactor was shutdown with the mode switch in refuel position. All fuel has been removed from the vessel during the present plant refueling outage.

Description of Occurrence

On December 20, 1983, during a review of the torque switch setpoints of the limitorque motor operated valves at Oyster Creek, it was discovered that the setpoints on many motor operated valves had been set lower than the manufacturer's data. Further investigation of isolation valves revealed that the torque switch setpoints set by General Electric during the pre-operational testing were found to be lower than the manufacturer's data. In some cases, these setpoints were later changed to valves lower than pre-operational testing in the course of plant operation as determined through maintenance and surveillance testing.

A procedure was issued in 1978 to control and record inspection and maintenance of motor operated valves which included checking the torque switch settings.

8401130155 831221  
PDR ADOCK 05000219  
PDR  
S

TE29

#### Apparent Cause of Occurrence

The apparent cause of occurrence is attributed to lack of sufficient knowledge concerning setpoint design basis and how the setpoints affect safety system functioning. It should be pointed out that during our review we discovered that no formal setpoint specification or documentation identifying the importance of torque switch settings currently exists.

#### Analysis of Occurrence

Pre-operational testing and subsequent surveillance/maintenance testing was apparently conducted under zero differential pressure conditions. The torque switch settings were reduced to prevent applying a force that would cause the valve to jam in the closed position and possibly damage the motor operator or valve during periodic surveillance. Because differential pressure is a contributor in determining the amount of force necessary for full closure, the potential exists that some valves may not fully close or open under design basis accident conditions.

The actual design basis will vary with each valve operator in different systems and these bases are presently under investigation with General Electric Co., the valve manufacturers, and valve operator manufacturer. At this time, due to various unspecified conservatism in chosen setpoints added by either Limitorque or each valve manufacturer, we have not been able to determine that any valve would not have operated during accident conditions with setpoints lower than originally identified.

#### Corrective Action

Immediate corrective action was initiated to investigate the design basis of each valve operator in different systems. This investigation is continuing with General Electric Co., the valve manufacturers, and the valve operator manufacturer. Specific corrective action for each valve determined to be affected will be initiated upon completion of this investigation.

TO: Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, PA 19406


FROM: GPU Nuclear  
Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
Forked River, NJ 08731

SUBJECT: Licensee Event Report 50-219/83-24/01P  
The following is a preliminary report  
submitted in compliance with the Technical  
Specifications, paragraph 6.9.2.a.9.

REPORT DATE: December 20, 1983

Notification of the event described herein  
was made to Mr. Glenn Meyer of the NRC on  
December 20, 1983 at approximately 1200 hours  
by Peter B. Fiedler, Vice President and Director.

Preliminary Approval:

  
Peter B. Fiedler  
Vice President and Director  
Oyster Creek

PBF/dam  
Encs.

cc: Director (2)  
Office of Management Information and  
Program Control  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

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

IE29  
11