



GPU Nuclear Corporation

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January 5, 1984

Dr. Thomas E. Murley, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Dr. Murley:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report
Reportable Occurrence No. 50-219/83-24/01T

This letter forwards three copies of a Licensee Event Report (LER) to report Reportable Occurrence No. 50-219/83-24/01T in compliance with paragraph 6.9.2.a.9 of the Technical Specifications.

Very truly yours,

Peter B. Fiedler
Vice President and Director
Oyster Creek

PBF:dam
Enclosures

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

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

NRC Resident Inspector
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
Report Occurrence No. 50-219/83-24/01T

Report Date

January 5, 1984

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" while researching Limitorque torque switch settings to support valve maintenance being performed during the outage, 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 condition existed during all modes of operation since initial plant start up. The current plant condition is that the Reactor is shutdown with the mode switch in refuel. 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 during pre-operational testing were found to be lower than the manufacturer's data. In some cases, these setpoints were later changed to values lower than pre-operational testing in the course of plant operation as determined through maintenance and surveillance testing.

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 the review it was discovered that no formal setpoint requirement 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 low 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 establishing base line 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 historical data on isolation valves based on the limitorque bill of material, pre-operational test data and surveillance/maintenance records.

The following corrective actions on isolation and safety related valves will be initiated prior to startup:

1. Completion of the actual design basis investigation
2. Determining the appropriate torque switch setpoints
3. Resetting the torque switch setpoints on all applicable valves
4. Issue administrative controls to eliminate recurrence of this incident

A follow-up report will be issued upon completion of the investigation.