

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
WASHINGTON, D.C. 20555

March 21, 1979

IE Information Notice No. 79-05

USE OF IMPROPER MATERIALS IN SAFETY-RELATED COMPONENTS

Two instances of the addition of improper materials to safety-related components during maintenance have recently been identified by NRC inspections.

Materials on Valve Seating Surfaces

An NRC inspector found that maintenance personnel at the Surry nuclear power plant had added wax or grease to certain valve seating surfaces. These valves included the containment spray and recirculation spray isolation valves. This material could have affected the measured leak rate through these containment penetrations. VEPCO personnel said that the material was believed to have been added to prevent damage to the valve seating surfaces during dry valve testing. It had not been removed following completion of the maintenance procedure. VEPCO personnel also reported that a lack of any definitive administrative guidance as to what lubricants, if any, could be used during valve maintenance, contributed to this problem. The corrective action included modification of the procedures to include more precise inspection by quality control personnel following valve maintenance.

Grease in Snubbers

An NRC inspector found that maintenance personnel at the Browns Ferry nuclear power plant had added grease to the hydraulic fluid reservoirs of eight Bergen-Paterson snubbers. The grease had mistakenly been added, during a scheduled lubrication procedure, through the alemite type fittings used for normal fluid addition. A similar error involving thirteen snubbers had previously been made at this facility. At that time the decision had been made to install a different type of fitting on the snubbers. However, the replacement parts had not arrived in time for installation prior to the more recent lubrication. At the time of the earlier occurrence, TVA personnel had removed the affected snubbers and tested them for lock-up and bleed rate. The results had been within specification. Nevertheless, the units had been disassembled and cleaned prior to reinstallation. NRC inspectors witnessed the disassembly of one of the later set of greased snubbers (a four-inch unit). Approximately one cubic inch of grease was found in the reservoir. Although the grease

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Grease in Snubbers (continued)

had been in the reservoir for only four days, and stroking of the snubbers was limited to that which occurred during its removal, grease was found in the control valve assembly and the snubber cylinder. All of the recently greased snubbers were replaced by spare units.

These two occurrences illustrate the necessity of controlling construction and maintenance practices through the use of carefully developed procedures designed to prevent errors, such as the introduction of foreign materials into safety-related components.

This information is provided as a notification of a possibly significant matter. It is expected that recipients will review the information for possible applicability to their facilities. No specific action or response is requested at this time. If further NRC evaluations so indicate, an IE Circular or Bulletin will be issued to recommend or request specific licensee actions. If you have questions regarding this matter, please contact the Director of the appropriate NRC Regional Office.

Enclosure:  
Listing of IE Information  
Notices Issued in 1979

LISTING OF IE INFORMATION NOTICES  
ISSUED IN 1979

Information Notice No.	Subject	Date Issued	Issued To
79-01	Bergen-Paterson Hydraulic Shock and Sway Arrestor	2/2/79	All power reactor facilities with an OL or a CP
79-02	Attempted Extortion - Low Enriched Uranium	2/2/79	All Fuel Facilities
79-03	Limitorque Valve Geared Limit Switch Lubricant	2/9/79	All power reactor facilities with an OL or a CP
79-04	Degradation of Engineered Safety Features	2/16/79	All power reactor facilities with an OL or a CP
79-05	Use of Improper Materials in Safety-Related Components	3/21/79	All power reactor facilities with an OL or CP