

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

February 9, 1979

IE Information Notice No. 79-03

LIMITORQUE VALVE GEARED LIMIT SWITCH LUBRICANT

Description of Circumstances:

At Commonwealth Edison reactors excessive failure rates of the Limitorque valve geared limit switches were being experienced. Investigation revealed that the failure mode was a drying out and hardening of the Beacon 325 lubricant. Once hardening takes place, the brass gears within the limit switch become immobile and destroy themselves when an attempt is made to operate the valve.

The Limitorque Corporation has recommended Mobilgrease 28 as a replacement grease for switch applications where the temperature exceeds 140 degrees Fahrenheit. Tests conducted by Mobil and Limitorque Corporation indicate that Mobilgrease 28, in addition to having a superior temperature rating, will satisfy the same environmental conditions and meet the same qualification parameters as Beacon 325.

All licensee and construction permit holders should consider conducting a review to determine if Beacon 325 lubricant is being used in geared limit switches in environments conducive to drying out and subsequent hardening of the lubricant.

If conditions are found to be conducive to failures, consideration should be given to replacing the grease with a more suitable grease.

This information is provided as an early 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:

List Of IE Information Notices
Issued in 1979

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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