UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REACTOR REGULATION WASHINGTON. D.C. 20555

March 9, 1990

NRC INFORMATION NOTICE NO. 90-18: POTENTIAL PROBLEMS WITH CROSBY SAFETY RELIEF VALVES USED ON DIESEL GENERATOR AIR START RECEIVER TANKS

Addressees:

All holders of operating licenses or construction permits for nuclear power reactors.

Purpose:

This information notice is intended to alert addressees to potential problems with Crosby safety relief valves that could result in a loss of starting air to the emergency diesel generators (EDGs). It is expected that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. However, suggestions contained in this information notice do not constitute NRC requirements; therefore, no specific action or written response is required.

<u>Description of Circumstances:</u>

On March 13, 1989, Cooper Industries was made aware of circumstances at Perry Unit 1 that led to the Division I EDG being declared inoperable. A Crosby safety relief valve on one of the two EDG starting air receiving tanks was inadvertently hit during maintenance activities. The force of the impact caused the valve to open and blow down both air receiving tanks. The safety relief valve did not reseat until approximately 30 psig below the EDG automatic start lockout signal. On January 12, 1990, Cooper Industries learned that a similar event had occurred at Comanche Peak. On January 17, 1990, Cooper Industries submitted a 10 CFR Part 21 report on the affected safety relief valves (Crosby style JMBU and JRU safety relief valves).

Discussion of Safety Significance:

Although Crosby-style JMBU and JRU safety relief valves were designed to meet the requirements of Section VIII of the ASME Boiler and Pressure Vessel Code, they were not seismically qualified. In addition, the blowdown characteristics of the valves were not consistent with the functional requirements of the system in which they were installed. Cooper Industries has recommended replacing these valves with seismically qualified valves that have the proper blowdown reseat characteristics.



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All licensees with Transamerica Delaval Inc. (TDI) diesel generators were notified of this problem by Cooper Industries via the Part 21 notification. However, Crosby safety relief valves (style JMBU, JRU, and possibly non-code style JMB) may be installed on EDGs manufactured by other vendors. Licensees may wish to verify that the relief valves installed in their EDG air start systems have appropriate qualifications and characteristics.

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please contact the technical contact listed below or the appropriate NRR project manager.

Charles E. Rossi, Director

Division of Operational Events Assessment Office of Nuclear Reactor Regulation

Technical Contact: John Thompson, NRR

(301) 492-1175

Attachment: List of Recently Issued NRC Information Notices

LIST OF RECENTLY ISSUED NRC INFORMATION NOTICES

Information		Date of	
Notice No.	Subject	Issuance	Issued to
90-17 	Weight and Center of Gravity Discrepancies for Copes-Vulcan Valves	3/8/90	All holders of OLs or CPs for nuclear power reactors.
89-59, Supp. 2	Suppliers of Potentially Misrepresented Fasteners	3/7/90	All holders of OLs or CPs for nuclear power reactors.
90-16	Compliance with New Decommissioning Rule	3/7/90	All materials licensees
90-15	Reciprocity: Notification of Agreement State Radiation Control Directors Before Beginning Work in Agreement States	3/7/90	All holders of NRC materials licenses which authorize use of radioactive material at temporary job sites.
90-14	Accidental Disposal of Radioactive Materials	3/6/90	All U.S. NRC byproduct material licensees.
90-13	Importance of Review and Analysis of Safeguards Event Logs	3/5/90	All holders of OLs or CPs for nuclear power reactors.
90-12	Monitoring or Interruption of Plant Communications	2/28/90	All holders of OLs or CPs for nuclear power reactors.
90-11	 Maintenance Deficiency Associated with Solenoid- Operated Valves 	2/28/90	All holders of OLs or CPs for nuclear power reactors.
90-10	Primary Water Stress Corrosion Cracking (PWSCC) of Inconel 600	2/23/90	All holders of OLs or CPs for PWRs.
90-09	Extended Interim Storage of Low-Level Radioactive Waste by Fuel Cycle and Materials Licensees	2/5/90	All holders of NRC materials licenses.

OL = Operating License CP = Construction Permit

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Attachment: List of Recently Issued NRC Information Notices

Document Name: NRC INFORMATION NOTICE

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