

**Florida
Power**
CORPORATION

Waiter S. Wilgus
Vice President
Nuclear Operations

February 15, 1988
3F0288-13

Dr. J. Nelson Grace
Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 2900
Atlanta, GA 30323

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
10 CFR 21 Report
Degraded Limatorque Motor Operator Valve Leads

Dear Sir:

Florida Power Corporation (FPC) is submitting this report in accordance with 10 CFR 21.21. I made a verbal report to Mr. Malcolm L. Ernst of your office on February 12, 1988 at 3:20 pm after being notified of the problem by my staff on the same date.

During the performance of the Motor Operated Valve Analysis and Test System (MOVATS) program, while taking test data, electrical arcing was observed on DC motor operated valve leads for the four Emergency Feedwater vector valves (EFV-11, 14, 32 and 33) and the two steam admission valves (ASV-5 and 204) to the turbine-driven Emergency Feedwater pump (EFP-2). The MOVATS program was conducted during the last refueling outage which ended on January 10, 1988. These particular problems were discovered and documented internally on September 29, 1987. The manufacturer and supplier of the equipment is Limatorque Company with a Peerless Co. Motor. There are approximately 16 DC safety related motor operated valves at Crystal River 3 (CR-3).

Field inspections found that the lead wires were frayed, with glass braid exposed and in some instances there were holes in the insulation. The damage observed was localized and did not appear to be age related. The damage appeared to be caused by mechanical rubbing of the wire insulation against the valve actuator body. The fraying created the possibility of common mode concurrent valve failures. This problem had been discussed with your staff prior to the startup of CR-3. (IFI 87-30-05)

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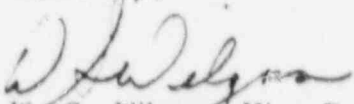
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The resulting action to correct the problem was to contact Limitorque to obtain a recommended repair method. The CR-3 DC valves have an epoxy impregnated glass braid on top of Nomex type insulation which is considered environmentally qualified to 10CFR50.49 per the Limitorque qualification program. FPC prepared procedures, and implemented protection of the leads by applying a heat shrink tubing over the existing leads. It should be noted that the CR-3 Limitorque motor operated valves did not have the type insulation described in IE Information Notice 87-08.

FPC now considers this problem reportable because of the number of valves involved, the potential for the loss of a safety system function, and the potential for generic interest to the nuclear industry.

Sincerely,



W. S. Wilgus, Vice President
Nuclear Operations

WSW/EMG/sdr

xc: Document Control Desk (original + copy)

Mr. T. F. Stotka
Senior Resident Inspector