U. S. NUCLEAR REGULATORY COMMISSION RC FORM 366 80 051 30575 1.771 LICENSEE EVENT REPORT CONTROL BLOCK (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION) LI I I G 1.1 DON'T REPORT L 6 0 5 0 0 0 2 4 9 7 0 4 2 5 8 0 8 0 5 0 8 8 0 9 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80 0 1 1 SOURCE EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10 During startup following refueling outage, combinations of the 3A Target Rock Valve 0 2 and 3B, 3C and 3E Electromatic Relief Valves failed to open at rated reactor pressure 0 3 while performing operability surveillance in six unsuccessful startup attempts. 0 4 Minimal effect on public health and safety because HPCI system immediately proven 0 15 operable and orderly shutdown initiated in each event. Similar event: R.O. 77-078/ 0 16 03L-0. 0 7 CODE CAUSE COMP VALVE SUBCODE SUBCODE COMPONENT CODE 12 E 12 (13) 177 1V E (16 1.9 SEQUENTIAL REPORT NO. OCCURRENCE REVISION REPORT CODE LEP/RO TYPE NO 011 REPORT 10 12 11 T 0 NUMBER EFFECT NPRD PRIME COMP COMPONENT ACTION METHOD SUBMITTED HOURS (22) FORM SUB MANUFACTURER SUPPI IFR Y 24 10 10 10 23 C 0 N 2 A D (26 CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27) 3A Target Rock had an improperly bolted air operator, 3B electromatic had various : 0 pilot valve problems, 3C electromatic had a jammed cutout switch on the solenoid coils, and 3E electromatic had pilot valve out of adjustment and blocked pilot discharge line, All problems finally corrected and each valve successfully operated at rated reactor 1 2 pressure. 1 4 80 METHOD OF FACILITY (30) DISCOVERY DESCRIPTION (32) OTHER STATUS S POWER C 28 0 15 (31) veillance Va 80 ACTIVITY CONTENT AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36) RELEASED OF RELEASE 16 33 2 (34) 80 PERSONNEL EXPOSURES DESCRIPTION (39 TYPE NUMBER 0 10 80 PERSONNEL INJURIES DESCRIPTION 4" NUMBER (40) N/A 80 OSS OF OR DAMAGE TO FACILITY 43 DESCRIPTION N/A 13 1/42 PUBLICIT SSUED DESCRIPTION 45 NAC USE ONLY 1111111 58 69 80. Randall Snernff 7_276

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During initial startup on April 25, 1980, following the refueling outage, the 3A Target Rock and the 3E Electromatic Relief Valves failed to open at rated reactor pressure while performing a relief valve operability surveillance. All other electromatic relief valves operated successfully. All of the relief valves had operated correctly at 300 psi reactor pressure prior to reaching rated pressure. HPCI was immediately proven operable and an orderly shutdown commenced. Subsequent inspection of the Target Rock revealed missing nuts on the air operator. Since the air operator was not attached properly to the valve, actuation was not possible. The problem was corrected by properly bolting the operator on the valve. The 3E Electromatic was found to have the leak off line restricted by the gasket. The gasket was replaced.

Unit startup was again attempted. All relief valves successfully functioned at 250 psi reactor pressure. The 3B and 3E Electromatics failed to open at rated reactor pressure during the surveillance on 4-26-80. All of the remaining relief valves operated successfully. HPCI was proven operable and an orderly shutdown was begun. Pressure was dropped to about 200 psi. Adjustments were made to the pilot valves, and the valves functioned correctly at 450 psi reactor pressure. Reactor pressure was increased to the rated pressure, and the relief valves were tested. The 3B valve failed to open again. The unit was brought to a cold shutdown as required by Technical Specifications. The 3B valve was repaired by replacing the pilot valve gasket and adjusting the stroke of the adjustment arm of the pilot valve.

Unit startup was again attempted. All of the relief valves were operable at 300 psi reactor pressure. However, the 3B Electromatic relief valve failed to open at the rated pressure on 4-28-80. All other relief valves functioned successfully. HPCI was immediately proven operable and an orderly shutdown commenced. The 3B valve was examined, and the pilot valve mechanism was replaced with a new pilot assembly whose disk to stem clearance gave greater effective pilot valve stroke.

Unit startup begun. All of the relief valves functioned correctly at 400 psi reactor pressure. The 3B Electromatic failed co open at rated pressure during the operability surveillance on 4-29-80. HPCI was immediately proven operable and an orderly shutdown commenced. The entire 3B Electromatic Relief valve was replaced to correct the problem.

Starrup was begun and all relief valves were functional at low pressure. However, 3B and 3C Electromatic Relief Valves failed to open at rated reactor pressure. All remaining relief valves were operable. HPCI was immediately proven operable and an orderly shutdown commenced. The 3C Electromatic was found to have a binding cutout switch for the solenoid coils. Necessary cleaning and adjusting was performed to provide proper clearances on all electromatic solenoids. The 3B valve was reexamined, measurements made, pilot valve readjustments made, discharge line aligned with one of the discharge ports, and a final corrective measure was made, as suggested by the Dresser Representative, consisted of changing the pilot valve bleed off discharge line from 3/4" to 1" diameter.

Unit startup begun and all valves were successfully tested on May 3, 1980. There was minimal effect on public health or safety because the HPCI system was immediately proven operable in all cases, and an orderly shutdown initiated. Improved valve design and system configurations are being evaluated and will be implemented at the next refueling outage if deemed necessary.

The 3A Target Rock model number is 67F and the Dresser Electroma ic Relief valves model numbers are 1525VX.