

POWER REACTOR

EVENT NUMBER: 24515

FACILITY: DRESDEN REGION: 3
UNIT: [] [2] [3] STATE: IL
RX TYPE: [1] GE-1, [2] GE-3, [3] GE-3
NOTIFICATION DATE: 10/27/92
NOTIFICATION TIME: 21:21 [ET]
EVENT DATE: 10/27/92
EVENT TIME: 19:40 [CST]
LAST UPDATE DATE: 10/27/92

NRC NOTIFIED BY: PALANYK
HQ OPS OFFICER: GREG SCARFO

NOTIFICATIONS

EMERGENCY CLASS: NOT APPLICABLE
10 CFR SECTION:
ADEG 50.72(b)(1)(ii) DEGRAD COND DURING OP
NLCO TECH SPEC LCO A/S

GARY SHEAR RDO

UNIT	SCRAM CODE	RX CRIT	INIT PWR	INIT RX MODE	CURR PWR	CURR RX MODE
2	N	Y	91	POWER OPERATION	91	POWER OPERATION
3	N	Y	96	POWER OPERATION	96	POWER OPERATION

EVENT TEXT

TWO CORE SPRAY PUMPS WERE DECLARED INOPERABLE AFTER THE DISCOVERY THAT FOUR SAFETY BUSES UTILIZED ABB TYPE 27N RELAYS AS SECONDARY UNDERVOLTAGE RELAYS.

AFTER THE REVIEW OF THE PART 21 (SETPOINT DRIFT DUE TO TOTAL DOSE EXPOSURE) REGARDING ABB TYPE 27N RELAYS, IT WAS DETERMINED THAT THESE RELAYS WERE USED AS SECONDARY UNDERVOLTAGE RELAYS ON SAFETY BUSES "23-1", "24-1", "33-1", AND "34-1". THE POTENTIAL INCREASE IN THE RELAY TRIP SETPOINT COULD RESULT IN PREVENTING CORE SPRAY PUMPS AND LOW PRESSURE CORE INJECTION (LPCI) PUMPS FROM STARTING DURING A LOSS-OF-OFFSITE-POWER EVENT. CORE SPRAY PUMPS "2B" AND "3A" HAVE BEEN DECLARED INOPERABLE AND TECHNICAL SPECIFICATION ACTION STATEMENT 3.5.A.2 (7 DAY LCO) WAS ENTERED.

THE ABOVE CORE SPRAY PUMPS WERE DECLARED INOPERABLE DUE TO THE FOLLOWING SCENARIO: DURING A POSTULATED LOCA WITH FUEL FAILURE, THE "2B" AND "3A" CORE SPRAY PUMPS WOULD PUMP TORUS INVENTORY THROUGH LINES THAT PASS CLOSE TO THE FOUR AFFECTED SAFETY BUSES. WITH FISSION-PRODUCTS ENTRAINED IN THE COOLANT, THE SECONDARY UNDERVOLTAGE RELAYS ON THOSE SAFETY BUSES WOULD BE EXPOSED TO ELEVATED RADIATION LEVELS. SETPOINT DRIFT WOULD OCCUR AND PREVENT THE COMPLETION OF A "PUMP START PERMISSIVE" (WHOSE INPUTS COME FROM THESE RELAYS) DURING A LOSS OF OFFSITE POWER.

THE SHORT-TERM CORRECTIVE ACTION IS TO INSTALL SHIELDING TO THE SECONDARY UNDERVOLTAGE RELAYS AND THE CORE SPRAY SYSTEM. LONG TERM CORRECTIVE ACTIONS WILL BE DETERMINED PENDING THE COMPLETION OF AN INVESTIGATION. THE LICENSEE INFORMED THE NRC RESIDENT INSPECTOR.

180002

9211190036 921027
PDR ADDCK 05000237
S PDR

Handwritten signature/initials