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Licensee Event Report (LER) Compilation

For month of June 1982

Oak Ridge National Laboratory

Prepared for
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Oak Ridge National Laboratory
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Abstract

This monthly report contains Licensee Event Report (LER) operational information that was processed into the LER data file of the Nuclear Safety Information Center (NSIC) during the one month period identified on the cover of the document. The LERs, from which this information is derived, are submitted to the Nuclear Regulatory Commission (NRC) by nuclear power plant licensees in accordance with federal regulations. Procedures for LER reporting are described in detail in NRC Regulatory Guide 1.16 and NUREG-0161, *Instructions for Preparation of Data Entry Sheets for Licensee Event Reports*. The LER summaries in this report are arranged alphabetically by facility name and then chronologically by event date for each facility. Component, system, and keyword indexes follow the summaries. The components and systems are those identified by the utility when the LER form is initiated; the keywords are assigned by the NSIC staff when the summaries are prepared for computer entry.

This report for June 1982 continues the transition for the use of LERs processed into the NRC-NIH data file to the use of LERs processed into the NSIC data file. In order to ensure an orderly transition and provide complete coverage, a cross-check of the two data files is still being performed. This monthly report includes a few LERs for 1981 that have not been included in previous monthly reports. Questions concerning this report or its contents should be directed to either

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[1] ARKANSAS NUCLEAR 1 DOCKET 50-313 LER 82-006
LOW FLOW IN CONTROL ROOM VENTILATION SYSTEM.
EVENT DATE: 031682 REPORT DATE: 040182 NSSS: BW TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: FAN SUCTION DIAMETER IS TOO SMALL.

(NSIC 173004) THE CONTROL ROOM EMERGENCY AIR CONDITIONING SYSTEM FAN, VSF-9, INDICATED LOW AIR FLOW OF LESS THAN 90% OF DESIGN FLOW DURING ITS 18 MONTH SURVEILLANCE TEST. TECH SPEC 3.9.1.C REQUIRES THAT FANS BE SHOWN TO OPERATE WITHIN &/- 10% OF DESIGN FLOW. FAN 2VSF-9 WAS OPERABLE AS REQUIRED BY TECH SPEC 3.9.2. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.12.3.2(B). THE DIAMETER OF THE SUCTION RESTRICTION OF FAN VSF-9 WAS DETERMINED TO BE LESS THAN NEEDED FOR NORMAL OPERATION OF THE SYSTEM. DURING INSTALLATION THE DIAMETER OF THE SUCTION RESTRICTION WAS DETERMINED BY THE ORIGINAL AIR BALANCE.

[2] ARKANSAS NUCLEAR 1 DOCKET 50-313 LER 82-008
CONTAINMENT COOLER ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 032982 REPORT DATE: 042182 NSSS: BW TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: PNEUMATIC RELAY FAILURE.

(NSIC 173010) THE REACTOR BUILDING (RB) ISOLATION VALVE FOR THE RB COOLERS CHILLED WATER SUPPLY, CV-6202, WOULD NOT COMPLETELY CLOSE DURING THE STROKE TEST WHICH IS REQUIRED BY TECH SPEC 4.4.1.4. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.12.3.2(B). THE O-RINGS IN THE PNEUMATIC RELAY IN THE AIR SUPPLY TO VALVE CV-6202 FAILED AND CAUSED THE RELAY TO GO TO AN INTERMEDIATE POSITION. THIS PREVENTED THE VALVE CV-6202 FROM GOING FULLY CLOSED OR FULLY OPEN, BECAUSE THE FAILED PNEUMATIC RELAY PROVIDED BOTH AN AIR SUPPLY PATH AND A VENT PATH. THE PNEUMATIC RELAY IS INSTALLED IN PARALLEL WITH THE AIR SUPPLY SOLENOID VALVES FOR THE ACTUATOR OF VALVE CV-6202 AND IS A BACKUP TO ASSURE VALVE CLOSURE UPON LOSS OF INSTRUMENT AIR. THE RELAY WAS REPAIRED AND REINSTALLED. FUNCTIONAL CHECKS PROVED SATISFACTORY. VALVE CV-6202 WAS TESTED AND PROVED OPERABLE.

[3] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 81-034 REV 1
UPDATE ON CHECK VALVE FAILURES DUE TO MANUFACTURING ERROR.
EVENT DATE: 100181 REPORT DATE: 012582 NSSS: CE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES
CAUSE: MANUFACTURING ERROR.

(NSIC 172797) WHILE DISASSEMBLING AN EMERGENCY FEEDWATER PUMP TURBINE STEAM SUPPLY CHECK VALVE TO REPAIR A MINOR HINGE PIN LEAK, INTERNAL DAMAGE WAS DISCOVERED. THE VALVE COUNTERPART ON THE OTHER STEAM GENERATOR MSC HEADER WAS DISASSEMBLED REVEALING SIMILAR RESULTS. VALVE 2MS-39A HAD THE DISK STUD BROKEN FROM THE DISK, AND THE DISK STUD, STUD NUT AND WASHER WERE MISSING. VALVE 2MS-39B HAD THE DISK STUD NUT AND WASHER MISSING. AT FACTORY ASSEMBLY, WIRE WAS USED TO HOLD THE DISK STUD RETAINER NUT ON INSTEAD OF A PIN AS PER THE DESIGN DRAWING. THE WIRE APPARENTLY BROKE AND ALLOWED THE NUT TO BACKOFF. THE DAMAGED PARTS WERE REMOVED AND REPLACED WITH NEW PARTS. SEARCH FOR THE MISSING PARTS WAS CONDUCTED, AND ALL OF THE PARTS WERE FOUND WITH THE EXCEPTION OF ONE NUT. THE VALVE INVOLVED IS AN ANCHOR VALVE COMPANY 4" SWING CHECK VALVES.

[4] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 81-035
LPSI PUMP INOPERABLE DUE TO LOW SW FLOW.
EVENT DATE: 100581 REPORT DATE: 102381 NSSS: CE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PIPES,FITTINGS
CAUSE: CORROSION PRODUCTS IN PIPE.

(NSIC 172914) A SCHEDULED SPECIAL ENGINEERING TEST WAS BEING PERFORMED TO VERIFY

ADEQUATE FLOW THROUGH COMPONENTS IN THE SERVICE WATER SYSTEM. FLOW MEASUREMENTS ON THE SEAL WATER COOLER, 2E52B, FOR B LOW PRESSURE SAFETY INJECTION PUMP INDICATED 3.5 GPM VICE THE REQUIRED 8GPM. THE PUMP WAS THEREFORE TECHNICALLY INOPERABLE. REPORTABLE UNDER TECH SPEC 6.9.1.9.B. A SMALL LENGTH OF 1/2 INCH CARBON STEEL PIPE AT THE COOLER SUPPLY AND RETURN WAS PARTIALLY PLUGGED WITH CORROSION PRODUCTS. PIPING CONVERTED TO STAINLESS STEEL IN THE PAST HAS EXHIBITED LITTLE CORROSION. THIS SECTION OF THE CARBON STEEL PIPING WAS REPLACED WITH STAINLESS STEEL. THE COOLER WAS OPENED AND FOUND TO BE CLEAN. THE FLOW-RATE THROUGH THE COOLER IS NOW WITHIN SPECIFICATIONS. TO PREVENT A SIMILAR OCCURRENCE, THE SAME ACTIONS WERE ACCOMPLISHED ON "A" LOW PRESSURE SAFETY INJECTION PUMP.

[5] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-007 REV 1
UPDATE ON CHARGING LINE LEAKS.
EVENT DATE: 021682 REPORT DATE: 042282 NSSS: CE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: PIPES,FITTINGS
CAUSE: VIBRATION INDUCED CRACKING.

(NSIC 173133) ON 2/16/82, A LEAK WAS DISCOVERED IN A WELD FOR A DRAIN LINE OF THE SUCTION BLADDER OF CHARGING PUMP 2P-36C. ON 4/4/82 A LEAK WAS DISCOVERED IN A WELD ON THE SUCTION ACCUMULATOR VENT LINE. BOTH LEAKS WERE SMALL AND DRAINED TO THE RADWASTE SYSTEM. THE 2/16/82 OCCURRENCE WAS REPORTABLE PER TECH SPEC 6.9.1.9(D). ONLY CHARGING PUMP 2P-36B WAS CONSIDERED OPERABLE AFTER THE 4/4/82 LEAK WAS DISCOVERED CAUSING ENTRY INTO THE ACTION STATEMENT OF TECH SPEC 3.1.2.4. THEREFORE, THE 4/4/82 OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9(B) AND TECH SPEC 6.9.1.9(D). SIMILAR TO LERS 50-368/81-001, 80-090, 80-019, AND 79-031. THE CAUSE OF THE FAILURES IS BELIEVED TO BE VIBRATION INDUCED CRACKING. IN BOTH CASES THE WELD WAS REPAIRED, AND PUMP 2P-36C WAS PROVED OPERABLE AND RETURNED TO SERVICE. AN ENGINEERING EVALUATION IS UNDERWAY TO DETERMINE LONG TERM CORRECTIVE ACTION.

[6] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-012
CHARGING PUMP LEAKS.
EVENT DATE: 033182 REPORT DATE: 042182 NSSS: CE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: PUMPS
CAUSE: CRACKED CYLINDER HEAD.

(NSIC 173134) CHARGING PUMP 2P-36A WAS FOUND TO BE LEAKING DURING A ROUTINE OPERATIONS TOUR. PUMP 2P-36A WAS OPERATING AT THE TIME OF THE DISCOVERY. CHARGING PUMPS 2P-36B & 2P-36C WERE OPERABLE AT THE TIME OF THE OCCURRENCE. THE LEAK WAS SMALL AND DRAINED TO THE RADWASTE SYSTEM. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.D. AS AN ABNORMAL DEGRADATION OF A SYSTEM DESIGNED TO CONTAIN RADIOACTIVE MATERIAL. THE CAUSE OF THE LEAK WAS A CRACKED CYLINDER HEAD. THE PUMP2P-36A WAS TAKEN OUT OF SERVICE AND DECLARED INOPERABLE. PUMPS 2P-36B AND 2P-36C WERE LINED UP TO SATISFY TECH SPEC 3.1.2.4. PUMP 2P-36A WILL BE REPAIRED UPON RECEIPT OF REPLACEMENT PARTS. AN ENGINEERING EVALUATION WILL BE PERFORMED TO DETERMINE ROOT CAUSE AND CORRECTIVE ACTIONS.

[7] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-009
CONTROL ELEMENT ASSEMBLY CALCULATOR FAILS DURING TEST.
EVENT DATE: 040182 REPORT DATE: 042282 NSSS: CE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: COMPUTER SCAN INCONSISTENCY.

(NSIC 173132) CONTROL ELEMENT ASSEMBLY CALCULATOR (CEAC) NO. 2 FAILED DURING PERFORMANCE OF AN EXCORE INSTRUMENT TEST ON CHANNEL 'D'. CORE PROTECTION CALCULATOR (CPC) CHANNELS WERE PLACED IN CEAC NO. 2 INOPERABLE. LOGGING OF CEA POSITIONS EVERY 4 HOURS WAS INITIATED AS REQUIRED BY TECH SPEC 3.3.1.1. THE

MOMENTARY ERRONEOUS CEA POSITION INDICATION WAS APPARENTLY CAUSED BY A COMPUTER SCAN INCONSISTENCY. CEAC NO. 2 DISPLAYED CONTROL RODS AS BEING FARTHER INSERTED THAN ACTUAL AS VERIFIED BY OTHER INDICATIONS. APPROPRIATE PENALTIES WERE APPLIED BY THE CPC'S. POSITION INDICATION HAD RETURNED TO NORMAL WITHIN A SHORT TIME. PERFORMANCE OF COMPUTER DIAGNOSTICS FAILED TO REVEAL ANY ABNORMALITY. THE MONTHLY SURVEILLANCE WAS PERFORMED, AND CEAC NO. 2 WAS PROVED OPERABLE. CEAC NO. 2 WAS RETURNED TO OPERABLE STATUS ON ALL CPC CHANNELS.

[8] ARNOLD DOCKET 50-331 LER 82-021
STANDBY GAS TREATMENT CHARCOAL FILTER BED FOUND WET.
EVENT DATE: 030282 REPORT DATE: 040182 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: VALVES
CAUSE: LEAKY DELUGE VALVE.

(NSIC 172826) WHILE PERFORMING SURVEILLANCE TESTING ON THE STANDBY GAS TREATMENT (SBGT) SYSTEM CHARCOAL BED DELUGE SYSTEM, THE 'A' SBGT SYSTEM CHARCOAL BED WAS FOUND TO BE WET. AS REQUIRED BY TECH SPEC 3.7.B.3, A 7-DAY LIMITING CONDITION FOR OPERATION (LCO) WAS ENTERED. THE REDUNDANT TRAIN OF THE SBGT SYSTEM WAS OPERABLE. THE 7-DAY LCO ENDED AFTER 5.8 DAYS WHEN THE 'A' SBGT SYSTEM WAS MADE OPERABLE. WATER IN THE 'A' SBGT CHARCOAL BED WAS CAUSED BY LEAKING DELUGE VALVE CV-5837A AND PLUGGED ORIFICE IN THE DELUGE DRAIN LINE. CONTRIBUTING CAUSE IS THE DESIGN OF DRAIN LINE PIPING. CV-5837A WAS REWORKED AND ORIFICE CLEARED. CHARCOAL IN 'A' SBGT CHARCOAL BED WAS REPLACED. 'A' SBGT WAS TESTED SATISFACTORILY AND MADE OPERABLE. DRAIN LINE PIPING DESIGN REVIEW PLANNED.

[9] ARNOLD DOCKET 50-331 LER 82-022
HPCI DECLARED INOPERABLE DUE TO FAILURE OF MOUNTING PLATE.
EVENT DATE: 030582 REPORT DATE: 040282 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: DEGRADED CONCRETE EXPANSION BOLTS.

(NSIC 172828) HPCI WAS DECLARED INOPERABLE WHEN A PRELIMINARY DESIGN REVIEW DID NOT CONFIRM THAT A LOOSE MOUNTING PLATE ON SPRING CAN HANGER EBB-14-H8 WOULD NOT ADVERSELY AFFECT THE OPERABILITY OF HPCI. HPCI STEAM SUPPLY VALVES WERE CLOSED AND SYSTEM WAS DEPRESSURIZED. 7-DAY LCO WAS ENTERED PER TECH SPEC 3.5.D.2. DESIGN REVIEW RESULTED FROM PREVIOUSLY IDENTIFIED NONCONFORMANCE. FURTHER REVIEW REVEALED THAT EBB-14-H8 WAS NOT REQUIRED FOR SAFE OPERATION OF HPCI. THE LOOSE MOUNTING PLATE ON EBB-14-H8 WAS CAUSED BY DEGRADED CONDITION OF 'RED HEAD' CONCRETE EXPANSION BOLTS. A TEMPORARY HANGER WAS INSTALLED NEAR EBB-14-H8 USING 'HILTI' CONCRETE EXPANSION BOLTS. AFTER THIS INSTALLATION, HPCI WAS FUNCTIONALLY TESTED SATISFACTORILY AND DECLARED OPERABLE. EBB-14-H8 WILL BE REPAIRED. DESIGN REVIEW OF ANCHOR BOLTS IS PLANNED.

[10] ARNOLD DOCKET 50-331 LER 82-020 REV 1
UPDATE ON DIESEL GENERATOR FAILS TO START DUE TO MAINTENANCE ERROR.
EVENT DATE: 031582 REPORT DATE: 040582 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: FILTERS
CAUSE: INADEQUATE PROCEDURES.

(NSIC 172821) WHILE PERFORMING SURVEILLANCE TESTING, STANDBY DIESEL GENERATOR 1G-21 TRIPPED IN START SEQUENCE. AS REQUIRED BY TECH SPEC 3.8.B.1, A 7-DAY LCO WAS ENTERED. THE REDUNDANT DIESEL GENERATOR WAS OPERABLE. THE 7-DAY LCO ENDED AFTER APPROXIMATELY 8 HOURS WHEN 1G-21 WAS MADE OPERABLE. SUBSEQUENT TESTING DEMONSTRATED ENGINE WOULD HAVE STARTED WITH AN AUTO START SIGNAL PRESENT. DIESEL TRIP CAUSED BY PROCEDURAL DEFICIENCY WHICH ALLOWED BOTH FUEL OIL FILTERS ON 1G-21 TO BE CHANGED WITHOUT PROPERLY FILLING AND VENTING THE FILTER CASINGS. THIS CAUSED THE ENGINE TO TRIP FROM FUEL STARVATION. FUEL OIL SYSTEM WAS PRIMED AND

VENTED AND ENGINE TESTED SATISFACTORILY. TO PRECLUDE RECURRENCE, MAINTENANCE PROCEDURES HAVE BEEN WRITTEN.

[11] ARNOLD DOCKET 50-331 LER 82-020 REV 2
UPDATE ON DIESEL GENERATOR TRIPS ON START DUE TO MAINTENANCE ERROR.
EVENT DATE: 031582 REPORT DATE: 042382 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: FILTERS
CAUSE: DEFICIENT PROCEDURES.

(NSIC 173129) DURING NORMAL OPERATION WHILE PERFORMING SURVEILLANCE TESTING, STANDBY DIESEL GENERATOR 1G-21 TRIPPED IN START SEQUENCE. AS REQUIRED BY TECH SPEC 3.8.B.1, A 7-DAY LCO WAS ENTERED. THE REDUNDANT DIESEL GENERATOR WAS OPERABLE. THE 7-DAY LCO ENDED AFTER APPROXIMATELY 8 HOURS WHEN 1G-21 WAS MADE OPERABLE. SUBSEQUENT TESTING DEMONSTRATED ENGINE WOULD HAVE STARTED WITH AN AUTO START SIGNAL PRESENT. DIESEL TRIP CAUSED BY PROCEDURE DEFICIENCY WHICH ALLOWED BOTH FUEL OIL FILTERS ON 1G-21 TO BE CHANGED WITHOUT PROPERLY FILLING AND VENTING THE FILTER CASINGS. THIS CAUSED THE ENGINE TO TRIP FROM FUEL STARVATION. FUEL OIL SYSTEM WAS PRIMED AND VENTED AND ENGINE TESTED SATISFACTORY. TO PRECLUDE RECURRENCE, MAINTENANCE PROCEDURES HAVE BEEN WRITTEN.

[12] BEAVER VALLEY 1 DOCKET 50-334 LER 81-101 REV 1
UPDATE ON REACTOR COOLANT PUMP UNDERVOLTAGE RELAY FOUND OFF.
EVENT DATE: 111681 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: PHYSICAL INTERFERENCE BY CABLE BUNDLE.

(NSIC 172906) THE 125V DC HEINIMANN CONTROL POWER SWITCH TO THE 4160V BUS 1C UNDERVOLTAGE RELAY (27-VC100) WAS FOUND IN ITS OFF POSITION. THE EFFECT WAS TO DISABLE ONE INPUT INTO THE REACTOR COOLANT PUMP (RCP) UNDERVOLTAGE REACTOR TRIP LOGIC. TWO OPERABLE CHANNELS REMAINED AS VERIFIED BY CURRENT SURVEILLANCE PROCEDURES AND DC POWER TO THE UNDERVOLTAGE RELAYS SATISFYING TECH SPEC 3.3.1.1. INTERFERENCE BETWEEN THE DC SWITCH AND A CABLE BUNDLE ATTACHED TO THE 1C BUS INSTRUMENTATION CUBICLE DOOR WITH THE POTENTIAL TO PHYSICALLY TRIP THE SWITCH WAS OBSERVED. THE INTERFERENCE WAS ELIMINATED AND DC POWER WAS RESTORED. ALL OTHER 4KV BREAKERS AND BUS INSTRUMENTATION COMPARTMENTS WERE VERIFIED TO HAVE DC CONTROL POWER AND NO POTENTIAL FOR WIRE INTERFERENCE.

[13] BIG ROCK POINT DOCKET 50-155 LER 82-001
REACTOR DEPRESSURIZATION VALVE FAILS TO OPEN.
EVENT DATE: 011182 REPORT DATE: 020582 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: VALVES
CAUSE: STEM HAD SEIZED.

(NSIC 172929) DURING THE QUARTERLY TEST OF THE REACTOR DEPRESSURIZATION SYSTEM, PER TECH SPEC 11.4.1.5.A, ISOLATION VALVE CV4180 FAILED TO OPEN THUS MAKING ONE LOOP INOPERABLE. THE REACTOR WAS SHUTDOWN AT THE TIME WITH THE PRIMARY SYSTEM AT 35 PSIG. DURING SUBSEQUENT MAINTENANCE ACTIVITY, THE 6" 1500#, GATE VALVE WAS EXERCISED AND THE PACKING LUBRICATED. THE VALVE STEM HAD APPARENTLY SEIZED UP BUT NO EVIDENCE OF SCORING OR BUILDUP OF PACKING WAS FOUND ON THE STEM. THE VALVE WAS SUBSEQUENTLY TESTED TO MEET THE TESTING CRITERIA FOR OPERABILITY.

[14] BIG ROCK POINT DOCKET 50-155 LER 82-002
POWER BREAKER FOR ADS SENSOR CHANNEL TRIPS.
EVENT DATE: 011282 REPORT DATE: 020582 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: OVERHEATED TIMER UNIT.

(NSIC 172931) THE POWER SUPPLY BREAKER FOR THE SENSOR CABINET OF CHANNEL A OF THE REACTOR DEPRESSURIZING SYSTEM TRIPPED. THE SENSOR AND ACTUATION EQUIPMENT FOR THE OTHER THREE CHANNELS WAS TESTED AS REQUIRED BY T/S 11.4.1.53. INVESTIGATION REVEALED AN OVERHEATED TIMER UNIT WHICH WAS REPLACED ON 1/12/82. THE FAILURE ITSELF DID NOT RENDER THE LOOP INOPERABLE. HOWEVER, THE LOOP WAS MADE INOPERABLE AS ALLOWED BY THE TECH SPEC, DURING SUBSEQUENT TROUBLESHOOTING EFFORTS. FAILED TIMER IS MANUFACTURED BY AUTOMATIC TIMING AND CONTROLS MODEL #335B.

[15] BIG ROCK POINT DOCKET 50-155 LER 82-003
PIPEWAY AIR COOLER LEAKS IN CONTAINMENT.
EVENT DATE: 012882 REPORT DATE: 020982 NSSS: GE TYPE: BWR
SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: HEAT EXCHANGERS
CAUSE: CORROSION OF TUBING.

(NSIC 172933) INVESTIGATION OF INCREASED WATER COLLECTION IN THE REACTOR CONTAINMENT SUMP REVEALED THROUGH WALL LEAKAGE OF .15 GPM IN THE PIPEWAY AIR COOLER UNIT B ON 1/28/82. THIS REPRESENTED A MINOR DEGRADATION OF CONTAINMENT SINCE THE COOLER IS SUPPLIED BY THE SERVICE WATER SYSTEM SOURCE OUTSIDE CONTAINMENT. THE LEAK WAS IMMEDIATELY ISOLATED BY VALVING. SIMILAR FAILURE TO "A" COOLER REPORTED IN LER 81-24. CORROSION INDUCED FAILURE IN THE TUBING WAS REPAIRED AND THE UNIT WAS RESTORED TO SERVICE ON 1/28/82. COOLING COILS IN BOTH THE "A" AND "B" UNITS WILL BE REPLACED FOLLOWING PROCUREMENT. REPORTABILITY IS BASED ON TECH SPEC 6.9.2A (3) AND THE REPORTING REQUIREMENTS OF IE BULLETIN 80-24.

[16] BIG ROCK POINT DOCKET 50-155 LER 82-007
PROCEDURE FOR CONTAINMENT ISOLATION VALVE TESTING INADEQUATE.
EVENT DATE: 030282 REPORT DATE: 040182 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: ERROR IN PROCEDURE.

(NSIC 172854) DURING INVESTIGATION RELATED TO LER 81-023, THE TEST METHOD FOR CONDUCTING COMPONENT TYPE C VALVE LEAK RATE TESTS FOR THREE OF THE 2" PROCESS LINES THROUGH CONTAINMENT WAS FOUND TO BE INADEQUATE. THE TEST METHOD WAS CORRECT FOR THE OUTER VALVE IN EACH OF THE THREE LINES BUT CALLED FOR APPLICATION OF TEST PRESSURE IN THE NON-CONSERVATIVE DIRECTION FOR THE INNER VALVE IN EACH LINE. REPORTABILITY BASED ON TECH SPECS 6.9.2B(3). VALVE CV4027 IN THE REACTOR DRAIN LINE, VALVE CV4031 IN THE CLEAN SUMP LINE, AND VALVE CV4025 IN THE DIRTY SUMP LINE HAVE BEEN TESTED IN THE NON-CONSERVATIVE DIRECTION DUE TO OVERSIGHT IN DEVELOPMENT OF THE TEST METHOD IN 1977. THE TEST METHOD HAS BEEN REVISED AND ADEQUATE TESTING COMPLETED.

[17] BIG ROCK POINT DOCKET 50-155 LER 82-009
MECHANICAL SNUBBER IN REACTOR DEPRESSURIZATION SYSTEM FAILS.
EVENT DATE: 030382 REPORT DATE: 040182 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: UNDETERMINED.

(NSIC 172853) DURING ROUTINE TESTING OF MECHANICAL SNUBBERS IN THE REACTOR DEPRESSURIZING SYSTEM, SNUBBER PS-115B WAS DEEMED INOPERABLE BASED ON AN ACCELERATION TEST FAILURE. THE SNUBBER IS ONE OF THIRTEEN MECHANICAL SNUBBERS IN THE SYSTEM AND IMPACT OF THE FAILURE ON SYSTEM PERFORMANCE IS NOT READILY DETERMINED. THERE HAVE BEEN NO PREVIOUS FAILURES OF SNUBBERS. REPORTABILITY BASED ON TECH SPECS 6.9.2B(2). EXACT CAUSE OF FAILURE IS NOT KNOWN BUT EVALUATION WILL BE REQUESTED FROM THE VENDOR TO DETERMINE IF FURTHER ACTION IS NECESSARY. THE SNUBBER WAS REPLACED WITH A SPARE UNIT ON 3/17/82. IT HAD BEEN IN SERVICE FOR 6 YEARS. THE SNUBBER IS SUPPLIED BY PACIFIC SCIENTIFIC - MODEL #PSA- 1/2.

[18] BIG ROCK POINT DOCKET 50-155 LER 82-008
SET POINT DRIFT OF TIMERS IN REACTOR DEPRESSURIZING UNIT OCCURS.
EVENT DATE: 030982 REPORT DATE: 040282 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: RELAYS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172873) DURING ROUTINE TESTING OF ACTUATION TIME DELAYS UNITS IN THE REACTOR DEPRESSURIZING SYSTEM INPUT CHANNELS TIMING FOR TWO OF THE FOUR CHANNELS EXCEEDED BY .2 SECONDS, THE 120 SECOND LIMIT SPECIFIED IN TABLE 11.3.5.2 H OF THE TECH SPECS. THE TIMING DEFECTS DID NOT SIGNIFICANTLY DEGRADE THE SAFETY FUNCTION OF THE SYSTEM. THE CAUSE IS ATTRIBUTED TO ELECTRONIC DRIFT IN THE SOLID STATE TIMING UNITS. THE UNITS HAVE BEEN ADJUSTED AND RETIMED FOR PROPER OPERATION. MINOR DRIFT HAS BEEN NOTED IN THE PAST AND THE SETPOINTS ARE UNDER EVALUATION TO DETERMINE IF A WIDER MARGIN IS APPROPRIATE TO PRECLUDE DEVIATIONS.

[19] BIG ROCK POINT DOCKET 50-155 LER 82-011
BACK-UP CONTAINMENT SPRAY VALVE FAILS TO OPEN.
EVENT DATE: 032182 REPORT DATE: 041982 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: ELECTRICAL CONDUCTORS
CAUSE: FAILURE OF SPLICE IN POWER CIRCUIT.

(NSIC 173049) DURING AN OPERABILITY CHECK OF THE BACK-UP CONTAINMENT SPRAY VALVE M07068 THE REMOTE MANUALLY ACTUATED VALVE FAILED TO OPEN. THE VALVE MAY HAVE BEEN INOPERABLE DURING PRIOR POWER OPERATION BUT REDUNDANCY FOR CONTAINMENT SPRAY WOULD HAVE BEEN AVAILABLE BY AUTOMATIC VALVE M07064. REPAIRS AND TESTING WERE COMPLETED ON 4/4/82. REPORTABILITY BASED ON TECH SPEC 6.9.2.B(2). A SPLICE IN THE POWER CIRCUIT TO THE MOTOR OPERATOR HAD OPENED. THE SPLICE AND SIMILAR SPLICES IN THE OTHER TWO 480 VOLT POWER LEADS WERE REPLACED WITH SPLICES OF IMPROVED DESIGN. THE DAMAGE IS BELIEVED TO HAVE BEEN CAUSED WHEN WORK ACTIVITY WAS DONE IN AN ADJACENT AREA DURING THE REFUELING OUTAGE.

[20] BROWNS FERRY 1 DOCKET 50-259 LER 81-071 REV 1
UPDATE ON RCS LEVEL SENSOR DRIFT.
EVENT DATE: 111181 REPORT DATE: 031582 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172948) WHILE PERFORMING SI 4.1.A-7, 1-LIS-3-203B SWITCH 2 (HPCI TURBINE TRIP ON HIGH REACTOR WATER LEVEL) OPERATED AT 586.45 INCHES ABOVE VESSEL ZERO. TECH SPEC 3.2.B LIMIT IS / 583 INCHES ABOVE VESSEL ZERO. LEVEL INDICATING SWITCH 1-LIS-3-203B SWITCH NUMBER 2 CALIBRATION HAD DRIFTED. THE BARTON MODEL 288 SWITCH WAS RECALIBRATED, FUNCTIONALLY TESTED AND RETURNED TO SERVICE. ADVANCES IN TECHNOLOGY MAKE IT POSSIBLE TO REPLACE THE MECHANICAL-TYPE SWITCHES WITH A MORE ACCURATE AND MORE STABLE ELECTRONIC TRANSMITTER-ELECTRONIC SWITCH SYSTEM. TVA EXPECTS TO INSTALL THE ELECTRONIC SYSTEMS DURING THE FIRST REFUELING OUTAGE AFTER RECEIPT OF EQUIPMENT.

[21] BROWNS FERRY 1 DOCKET 50-259 LER 81-072 REV 1
UPDATE ON DRIFT IN RHR LOOP DISCHARGE PRESSURE SENSOR.
EVENT DATE: 111281 REPORT DATE: 031682 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172947) WHILE PERFORMING SI 4.2.B-55 (RHR LOOP B DISCHARGE PRESSURE) 1-PT-74-65 WAS FOUND OUT OF TOLERANCE BY 5.9%. (TECH SPEC TABLE 3.2.B) THIS TRANSMITTER INDICATES DISCHARGE PRESSURE OF RHR SYSTEM II. THE CAUSE IS INSTRUMENT DRIFT. THE GE MODEL 551 PRESSURE TRANSMITTER WAS RECALIBRATED, FUNCTIONALLY TESTED AND RETURNED TO SERVICE.

[22] BROWNS FERRY 1 DOCKET 50-259 LER 81-086
SENSOR OPERATION NOT VERIFIED BY LEVEL PERTUBATION.
EVENT DATE: 121081 REPORT DATE: 010882 NSSS: GE TYPE: BWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: MAINTENANCE ERROR.

(NSIC 172801) DURING NORMAL OPERATION OF UNITS 1 AND 2, AND UNIT 3 IN A REFUELING OUTAGE, IT WAS DISCOVERED BY INSPECTOR THAT REACTOR WATER LEVEL WAS NOT BEING PERTURBED ON EACH OF THE THREE UNITS FOLLOWING SURVEILLANCE INSTRUCTIONS AS DETAILED IN TECH SPEC TABLE 4.1.A, NOTE 5. IT WAS MISTAKENLY BELIEVED THAT VALVING THE LEVEL INSTRUMENT INTO SERVICE PROVIDED A DYNAMIC RESPONSE CHECK AND THIS SATISFIED THE TECH SPEC REQUIREMENT. SI 4.1.A-7 WAS REVISED TO INCLUDE PERTURBATION. IN ADDITION A TECH SPEC CHANGE WILL BE INITIATED TO REMOVE THIS ITEM.

[23] BROWNS FERRY 1 DOCKET 50-259 LER 81-090
DIESEL GENERATOR FAILED TO START DUE TO AIR START MOTORS.
EVENT DATE: 121581 REPORT DATE: 011382 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: VALVES
CAUSE: SOLENOID VALVE FAILURE.

(NSIC 172800) THE 1-A DIESEL GENERATOR RIGHT BANK AIR-START MOTORS FAILED TO DISENGAGE RENDERING THE DIESEL GENERATOR INOPERABLE. THE 1-A DIESEL GENERATOR IS COMMON TO UNITS 1 AND 2. SUSPECTED CAUSE IS MALFUNCTION OF AIR-START SOLENOID VALVE, GRAHAM-WHITE TYPE 912-004. THE INGERSOLL-RAND MODEL D89RH46 RIGHT BANK AIR-START MOTORS WERE REPLACED. MMI-6 WAS PERFORMED AND WILL CONTINUE TO BE IMPLEMENTED AS PART OF PREVENTIVE MAINTENANCE TO INSPECT AND, IF NECESSARY, REBUILD AND/OR REPLACE COMPONENTS MAKING UP THE AIR-START SYSTEM.

[24] BROWNS FERRY 1 DOCKET 50-259 LER 81-091
CONTROL ROOM EMERGENCY VENTILATION SYSTEM INOPERABLE.
EVENT DATE: 122081 REPORT DATE: 011882 NSSS: GE TYPE: BWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: MOTORS
CAUSE: RANDOM MOTOR FAILURE.

(NSIC 172799) WHILE PERFORMING SI 4.2.G-2 (CONTROL ROOM ISOLATION AND PRESSURIZATION) FCO 31-152 WOULD NOT OPEN, RENDERING B CONTROL ROOM EMERGENCY VENTILATION SYSTEM INOPERABLE. (TECH SPEC 3.7.E.3.) SYSTEM IS COMMON TO ALL THREE UNITS. MODUTROL MOTOR FOR FCO 31-152 FAILED DUE TO OPEN WINDINGS. THE HONEYWELL MODEL M445A1000 1 MODUTROL MOTOR WAS REPLACED, SUCCESSFULLY TESTED, AND SI 4.2.G-2 WAS COMPLETED AND RETURNED TO SERVICE WITHIN LCO TIME LIMIT. THIS IS CONSIDERED A RANDOM FAILURE AND NO FURTHER RECURRENCE CONTROL IS REQUIRED.

[25] BROWNS FERRY 1 DOCKET 50-259 LER 82-006
DRIFT IN RECIRCULATION VALVE PRESSURE SENSOR.
EVENT DATE: 011282 REPORT DATE: 020882 NSSS: GE TYPE: BWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172941) 1-PS-3-74B SWITCH NUMBER 1 WAS FOUND TO OPERATE AT 208.4 PSI WHICH IS OUTSIDE THE TECH SPEC TABLE 3.2.B LIMIT OF 230 &/- 15 PSI BY 3 PERCENT. THIS SWITCH GIVES AN OPERATIVE SIGNAL TO CLOSE THE RECIRCULATION PUMP DISCHARGE VALVE. PREVIOUS SIMILAR EVENTS: BFRO-50-259/77002, 78024, 80087, 80029, 81001; 260/80004, 80029, 81027, 81055; 296/79010, 79028, 80018, 80028. THE CAUSE IS INSTRUMENT DRIFT. THE BARTON MODEL 288 PRESSURE SWITCH WAS RECALIBRATED TO PROPER SETPOINT, SI 4.2.B-7 PERFORMED, AND THE SWITCH WAS RETURNED TO SERVICE. DCR 1398 REPLACES THIS SWITCH WITH AN ANALOG TRANSMITTER AND TRIP UNIT. TVA IS

PREPARING AN ACTION PLAN REGARDING THIS DESIGN CHANGE WHICH WILL BE FORWARDED TO NRC IN THE NEAR FUTURE.

[26] BROWNS FERRY 1 DOCKET 50-259 LER 82-010
STACK MONITOR INOPERABLE DUE TO LOW FLOW.
EVENT DATE: 011282 REPORT DATE: 020982 NSSS: GE TYPE: BWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: FROZEN SAMPLE LINE.

(NSIC 172950) STACK MONITOR WAS DECLARED INOPERABLE AFTER LOW-FLOW ALARM. THE FIRST OF THE REQUIRED HOURLY SAMPLES WAS DETERMINED TO BE NONREPRESENTATIVE. (TECH SPEC 3.8.B.1). THIS MONITOR IS COMMON TO ALL UNITS. A 6-FOOT SEGMENT OF SAMPLE LINE, (HEAT TRACED BUT NOT INSULATED) FROZE, DUE TO SEVERE COLD WEATHER, INHIBITING SAMPLE FLOW TO MONITOR WHICH IN TURN INHIBITED TAKING THE FIRST HOURLY SAMPLE. SAMPLING CONTINUED AS THE SAMPLE LINE THAWED COMPLETELY. SEGMENT WAS THEN INSULATED.

[27] BROWNS FERRY 1 DOCKET 50-259 LER 82-007
METEOROLOGICAL INSTRUMENTATION FAILS.
EVENT DATE: 011382 REPORT DATE: 020882 NSSS: GE TYPE: BWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: FREEZING WEATHER.

(NSIC 172942) O-XR-90-104 LOST INDICATION FOR WIND DIRECTION AND WIND SPEED CHANNEL C, ELEVATION 887 MSL. (TECH SPEC TABLE 3.2.I.) THIS INSTRUMENTATION IS COMMON TO UNITS 1, 2, AND 3. PREVIOUS SIMILAR EVENT: BFRO-50-259/80021. THE ANEMOMETER (WIND SPEED) AND VANE (WIND DIRECTION) ICED UP. THE CLIMET MODEL 011-1 ANEMOMETER AND MODEL 012-10 VANE WERE ALLOWED TO THAW AND THEN RETURNED TO SERVICE.

[28] BROWNS FERRY 1 DOCKET 50-259 LER 82-008
REFUELING FLOOR AIR MONITOR PUMP FAILS.
EVENT DATE: 011682 REPORT DATE: 020982 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: PUMPS
CAUSE: PUMP BELT FAILS DUE TO WEAR.

(NSIC 172944) CAM 1-90-250 (REFUEL FLOOR) WAS RENDERED INOPERABLE DUE TO A BROKEN DRIVE BELT. (T.S. 3.8.B.8). PREVIOUS SIMILAR EVENT: BFRO-50-296/81063. THE CAUSE IS NORMAL WEAR DUE TO CONTINUOUS OPERATION. THE STANDARD V-BELT FOR THE SCHWITZER MODEL 325 SERIES AIR PUMP WAS REPLACED AND THE CONTINUOUS AIR MONITOR RETURNED TO SERVICE. AN INSPECTION OF V-BELTS HAS BEEN ADDED TO THE MONTHLY SURVEILLANCE OF THESE CAMS.

[29] BROWNS FERRY 1 DOCKET 50-259 LER 82-009
RELAY ROOM SMOKE DETECTOR FAILS.
EVENT DATE: 011782 REPORT DATE: 021182 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: AGING OF DETECTOR.

(NSIC 172949) A SMOKE DETECTOR IN THE RELAY ROOM ALARMED AND WOULD NOT CLEAR. THE ALARM COULD HAVE MASKED SIGNALS FROM DETECTORS WHICH ARE REQUIRED TO BE OPERABLE BY TECH SPEC 3.11.C.1. PREVIOUS SIMILAR EVENTS: BFRO-50-259/81002, 80041, 79015, 78009, 78001; 260/81036; 296/78028, 78026, 78023, 78017, 78009, 77009. INCREASED DETECTOR SENSITIVITY DUE TO NORMAL, NATURAL AGING WAS THE CAUSE. THERE ARE ALMOST 800 SMOKE DETECTORS IN THE PLANT, AND IT IS NORMAL TO HAVE AN OCCASIONAL FAILURE OF THIS TYPE. THE KIDDE FT-200 IONIZATION SMOKE DETECTOR WAS REPLACED AND SUCCESSFULLY TESTED.

[30] BROWNS FERRY 1 DOCKET 50-259 LER 82-013
SET POINT DRIFT IN DEGRADED VOLTAGE RELAYS.
EVENT DATE: 020282 REPORT DATE: 021282 NSSS: GE TYPE: BWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: RELAYS
CAUSE: DRIFT.

(NSIC 172952) DURING SI 4.9.A.4.C CALIBRATION OF THE DEGRADED VOLTAGE RELAYS ON THE 4KV SHUTDOWN BOARDS (COMMON TO UNITS 1 & 2) THE TRIP SETPOINT OF ALL 12 RELAYS WAS FOUND TO BE BELOW THE MINIMUM TRIP POINT OF 3900V (T.S. TABLE 4.9.A.7.C). THE DEGRADED VOLTAGE RELAYS TRIP SETPOINT HAD DRIFTED DOWN ABOUT 3% IN 6 MONTHS SINCE INSTALLATION. THE GOULD-BROWN VOBERI TYPE ITE 27/59H RELAYS WERE RECALIBRATED AND RETURNED TO SERVICE. CALIBRATION FREQUENCY WILL BE INCREASED AS RECURRENCE CONTROL. IF RELAYS STABLIZE, THE NORMAL CALIBRATION FREQUENCY WILL RESUME.

[31] BROWNS FERRY 1 DOCKET 50-259 LER 82-016
SET POINT DRIFT IN RCS LOW LEVEL SWITCH.
EVENT DATE: 021782 REPORT DATE: 031782 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172995) WHILE PERFORMING SI 4.I.A. 7. 1-LIS-3-203C SWITCH 1 (REACTOR LOW WATER LEVEL) HAD AN AS-FOUND CALIBRATION OF 537.31 INCHES. TECH SPEC TABLE 3.2.A LIMITS TO / 538 INCHES. PREVIOUS SIMILAR EVENTS: BFRO-50-259/77002, 78024, 80087, 80029, 81001; 260/80004, 80029, 81027, 81055; 296/79010, 79029, 80018, 80012. LEVEL INDICATING SWITCH 1-LIS-3-203C SWITCH 1 CALIBRATION HAD DRIFTED. THE BARTON MODEL 288 SWITCH WAS RECALIBRATED, FUNCTIONALLY TESTED AND RETURNED TO SERVICE.

[32] BROWNS FERRY 2 DOCKET 50-260 LER 82-002
SCRAM TRIP LOGIC ANNUNCIATOR FAILS TO ALARM.
EVENT DATE: 011682 REPORT DATE: 021082 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LIMIT SWITCH FAILED.

(NSIC 172956) WHILE PERFORMING MSIV CLOSURE SI, SCRAM TRIP LOGIC AZ ANNUNCIATION FAILED TO ALARM. RELAY 5AK3G WAS NOT DROPPED OUT REVEALING THAT LIMIT SWITCH NUMBER 4 WAS INOPERABLE ON FCV-1-52 WHICH CONSITUTES DEGRADATION OF MINIMUM NUMBER OF OPERABLE OR TRIPPED SYSTEMS (TECH SPEC TABLE 3.1.A, NOTE 1) FOR MSIV SCRAM LOGIC LIMIT SWITCHES. LIMIT SWITCH NUMBER 4 OF FCV-1-52 FAILED TO OPEN, CAUSING A HALF SCRAM. RELAY 5AK3G WAS PLACED IN THE TRIPPED CONDITION BY A TEMPORARY ALTERATION AND SI 4.1.A-11 WAS SATISFACTORILY COMPLETED. LIMIT SWITCH NUMBER 4 AS WELL AS REMAINING UNIT 2 AND 3 LIMIT SWITCHES WILL BE REPLACED DURING U-2 AND U-3 OUTAGES. UNIT 1 LIMIT SWITCHES HAVE ALREADY BEEN REPLACED.

[33] BROWNS FERRY 2 DOCKET 50-260 LER 82-003
SET POINT DRIFT IN RCS LOW PRESSURE SWITCHES.
EVENT DATE: 011682 REPORT DATE: 020982 NSSS: GE TYPE: BWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172962) WHILE PERFORMING SI 4.2.B-7, PS-3-74A SWITCH NUMBER 1 AND PS-68-96 SWITCH NUMBER 1, REACTOR LOW-PRESSURE SWITCHES, WERE OUT OF TOLERANCE BY 4 AND 6 PERCENT RESPECTIVELY. (TECH SPEC TABLE 3.2.B). THESE ARE RECIRCULATION DISCHARGE VALVE ACTUATION SWITCHES. PREVIOUS SIMILAR EVENTS: BFRO-50-259/77002, 78024, 80087, 80029, 81001; 260/80004, 80029, 81027, 81055; 296/79010, 79028, 80018, 80028. THE CAUSE IS INSTRUMENT DRIFT. THE BARTON MODEL 288 AND BARKSDALE B2T-M1ZSS PRESSURE SWITCHES WERE RECALIBRATED TO PROPER SETPOINTS AND SI 4.2.B-7

WAS SUCCESSFULLY COMPLETED. DCR 1398 REPLACES THESE SWITCHES WITH ANALOG TRANSMITTERS AND TRIP UNITS. TVA IS PREPARING AN ACTION PLAN REGARDING THIS DESIGN CHANGE WHICH WILL BE FORWARDED TO NRC IN THE NEAR FUTURE.

[34] BROWNS FERRY 2 DOCKET 50-260 LER 82-011
DRIFT IN TORUS LEVEL INDICATOR.
EVENT DATE: 021582 REPORT DATE: 031582 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: TRANSMITTER DRIFT.

(NSIC 172977) WHILE PERFORMING SI 4.7.A.1.A (SUPPRESSION CHAMBER WATER CHECK) 2-LI-64-66 WAS OBSERVED TO INDICATE IMPROPER TORUS LEVEL AND DECLARED INOPERABLE (TECH SPEC TABLE 3.2.F). THE INDICATOR WAS 6 4% (3.2 INCHES) BELOW TRUE TORUS LEVEL. PREVIOUS SIMILAR EVENTS: BFRO-50-260/81051; 296/81053. LEVEL TRANSMITTER 2-LT-64-66 CALIBRATION HAD DRIFTED AND POSSIBLY HAD AIR IN THE REFERENCE LEG. THE ROSEMONT TRANSMITTER-MODEL 1151DPGP4B22MP WAS CALIBRATED AND RETURNED TO SERVICE.

[35] BROWNS FERRY 3 DOCKET 50-296 LER 82-001
FALSE SMOKE ALARM DUE TO VALVE ACTUATION.
EVENT DATE: 011482 REPORT DATE: 021282 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PERSONNEL ERROR.

(NSIC 172946) A FIXED SPRAY FIRE PROTECTION VALVE WAS ACCIDENTALLY INITIATED CAUSING A SMOKE DETECTOR TO BE WETTED, CAUSING A FALSE SMOKE ALARM. THE ALARM COULD HAVE MASKED ALARMS FROM OTHER DETECTORS WHICH ARE REQUIRED TO BE OPERATIONAL BY TECH SPEC 3.11.C.1. PREVIOUS SIMILAR EVENT: BFRO-50-259/81087. THE FIXED SPRAY STATION IS ADJACENT TO A STAGING AREA. UNKNOWN PERSONNEL HUNG COATS ON THE VALVE STATION. EITHER THE WEIGHT OF THE COAT OR THE ACTION OF THE PERSON REMOVING THE COAT ACTUATED THE VALVE. THE VALVE WAS RESET AND THE KIDDE CPD-1201 SMOKE DETECTOR WAS REPLACED. MORE FREQUENT CHECKS OF FIRE PROTECTION STATIONS FOR IMPROPER STORAGE OF MATERIALS WILL BE MADE DURING REFUELING OUTAGES OF A UNIT.

[36] BROWNS FERRY 3 DOCKET 50-296 LER 82-004
SET POINT DRIFT IN HPCI TEMPERATURE SWITCHES.
EVENT DATE: 020782 REPORT DATE: 030582 NSSS: GE TYPE: BWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 173139) WHILE PERFORMING SI 4.2.B - 37A, 3-TS-73-2A AND 3-TS-73-2B SWITCHES (HPCI STEAM LINE SPACE HIGH TEMPERATURE) HAD AS-FOUND CALIBRATION OF 202 F AND 208 F RESPECTIVELY. TECH SPEC TABLE 3.2.B LIMIT IS / 200 F. PREVIOUS SIMILAR OCCURRENCE: BFRO-50-259/80083. TEMPERATURE SWITCHES 3-TS-73-2A AND 3-TS-73-2B CALIBRATION HAD DRIFTED. THE FENWAL CAT. NO. 17023-6 SWITCHES WERE REPLACED AND SYSTEM RETURNED TO SERVICE. THE REMOVED SWITCHES WERE CALIBRATED, AND NO FURTHER RECURRENCE CONTROL IS PLANNED.

[37] BRUNSWICK 1 DOCKET 50-325 LER 82-033
REACTOR RECIRCULATION PUMP TRIPPED DURING TESTING.
EVENT DATE: 022282 REPORT DATE: 032382 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: MAINTENANCE ERROR.

(NSIC 172820) WHILE PERFORMING RPT SYSTEM REACTOR LOW WATER LEVEL NO. 2 CHANNEL CALIBRATION AND FUNCTIONAL TEST, PT-A5, 1B REACTOR RECIRCULATION PUMP TRIPPED

WHEN PLANT TECHNICIANS INADVERTENTLY ACTUATED ATWS-RPT INSTRUMENT, 1-B21-LTM-N025B-2. FOLLOWING A DETERMINATION OF THE CAUSE OF THE EVENT, THE PUMP WAS RESTARTED AND REACTOR POWER WAS RETURNED TO THAT PRIOR TO THE TRIP. THE PUMP WAS OUT OF SERVICE A TOTAL OF 35 MINUTES. TECH SPECS 3.41.1., 6.9.1.9B. PLANT TECHNICIANS MISINTERPRETED THE PT PROCEDURE AND UNKNOWINGLY BYPASSED REDUNDANT INSTRUMENT N024B-2 RATHER THAN N025B-2, WHICH WAS UNDER TEST, RESULTING IN ACTUATION OF N025B-2 WHEN A TEST SIGNAL WAS APPLIED. INVOLVED PERSONNEL WERE COUNSELED ON THE IMPORTANCE OF PROPER INTERPRETATION OF TEST PROCEDURES. A REVIEW OF MAINTENANCE PROCEDURES IS IN PROGRESS TO IDENTIFY AND CORRECT MISLEADING INSTRUCTIONS.

[38] BRUNSWICK 1 DOCKET 50-325 LER 82-029
CONTAINMENT ATMOSPHERIC OXYGEN ANALYZER FAILS UPSCALE.
EVENT DATE: 022582 REPORT DATE: 032482 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: TRANSMITTER FAILURE.

(NSIC 172822) ROUTINE SURVEILLANCE REVEALED PRIMARY CONTAINMENT ATMOSPHERIC OXYGEN ANALYZER, 1-CAC-AT-1263-2, WAS SHOWING AN UNEXPECTED UPSCALE INDICATION TREND OF DRYWELL OXYGEN CONCENTRATION. AT THE TIME OF THIS DISCOVERY, REDUNDANT ANALYZER, 1-CAC-AT-1259-2, WAS SHOWING A NORMAL, EXPECTED INDICATION OF DRYWELL OXYGEN CONCENTRATION. TECH SPECS 3.3.5.3, 3.6.6.4, 6.9.1.9B. THE 1263-2 ANALYZER UPSCALE INDICATIONS RESULTED FROM A SHIFT OF THE ANALYZER TRANSMITTER INSTRUMENT ZERO REFERENCE. AN INSTRUMENT CHECK OF THE TRANSMITTER DID NOT REVEAL THE CAUSE OF SHIFT AND ATTEMPTS TO CALIBRATE THE INSTRUMENT WERE UNSUCCESSFUL. THE TRANSMITTER, MODEL NO. SC-306, WAS REPLACED, CALIBRATED, AND THE ANALYZER WAS RETURNED TO SERVICE, SHOWING NORMAL EXPECTED INDICATIONS.

[39] BRUNSWICK 1 DOCKET 50-325 LER 82-028
SUPPRESSION CHAMBER LEVEL INSTRUMENT PROVIDES ERRONEOUS INDICATION.
EVENT DATE: 030182 REPORT DATE: 032582 NSSS: GE TYPE: BWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LOSS OF REFERENCE FLOW.

(NSIC 172883) DURING ROUTINE SURVEILLANCE, A COMPARISON OF RTGB INDICATIONS OF SUPPRESSION CHAMBER WATER LEVEL REVEALED THAT RTGB INSTRUMENT, 1-CAC-LR-2602, INDICATED A LEVEL OF -30" WHILE RTGB INSTRUMENT, 1-CAC-LI-2601-3 INDICATED A LEVEL OF -27.8". A CHECK OF THE LOCAL LEVEL INDICATOR DETERMINED THE ACTUAL LEVEL TO BE -26". THIS VALUE EXCEEDED THE SPECIFIED UPPER LIMIT AND IS BEING REPORTED IN LER 1-82-31. A LOSS OF TRICKLE FLOW TO THE WET REFERENCE LEG OF EACH INSTRUMENT'S RESPECTIVE TRANSMITTER, 1-CAC-LT-2602 AND LT-2601, MODEL NO. BQ15221, CAUSED BOTH TRANSMITTERS TO SEND INCORRECT INPUT SIGNALS TO THEIR PARTICULAR INDICATORS. THE TRICKLE FLOW WAS PROPERLY ESTABLISHED AND EACH TRANSMITTER WAS CALIBRATED AND RETURNED TO SERVICE.

[40] BRUNSWICK 1 DOCKET 50-325 LER 82-031
SUPPRESSION CHAMBER WATER LEVEL INCORRECT.
EVENT DATE: 030182 REPORT DATE: 032582 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: RTGB LEVEL INSTRUMENT FAILURE.

(NSIC 173102) A ROUTINE COMPARISON OF RTGB SUPPRESSION CHAMBER WATER LEVEL INDICATIONS REVEALED A 2.2 INCH DISCREPANCY BETWEEN THE NARROW AND WIDE RANGE INSTRUMENT INDICATIONS. A CHECK OF THE LOCAL LEVEL INDICATOR REVEALED THE LEVEL WAS -26 INCHES. THE LEVEL WAS RETURNED TO WITHIN SPECIFICATION IN ACCORDANCE WITH THE SPECIFIED TIME LIMITATIONS. THE INSTRUMENTATION FAILURE IS BEING REPORTED IN LER 1-82-28. SEE TECH SPECS 3.6.2.1, 6.9.1.9B. THIS EVENT OCCURRED DUE TO THE INOPERABILITY OF THE SUBJECT RTGB LEVEL INSTRUMENTS. PRIOR TO THIS

EVENT THERE WERE NO PLANNED LEVEL CHANGES WHICH WOULD HAVE ALERTED THE CONTROL OPERATOR OF THE INSTRUMENTS' INOPERABILITY. IT IS FELT THAT PRESENT PLANT PROCEDURES, WHICH REQUIRE A LEVEL INSTRUMENTATION COMPARISON PRIOR TO ANY PLANNED LEVEL CHANGES, ARE SUFFICIENT IN THE PREVENTION OF FUTURE SIMILAR EVENTS.

[41] BRUNSWICK 1 DOCKET 50-325 LER 82-034
REACTOR PRESSURE INDICATOR READING INCORRECT.
EVENT DATE: 030482 REPORT DATE: 032982 NSSS: GE TYPE: BWR
SYSTEM: SYS REQRD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INDICATOR FAILURE.

(NSIC 173101) ROUTINE SURVEILLANCE REVEALED THAT REACTOR PRESSURE INDICATOR 1-C32-PI-3332, LOCATED ON THE REMOTE SHUTDOWN PANEL, SHOWED 1,030 PSI WHILE ACTUAL PRESSURE WAS 1,000 PSI. THE INDICATOR WAS THEN DECLARED INOPERABLE IN ACCORDANCE WITH TECH SPECS. SEE TECH SPECS 3.3.5.2, 6.9.1.9B. A CALIBRATION CHECK DETERMINATION THAT THE INDICATOR WAS OUT OF TOLERANCE, COMBINED WITH A FAILED INDICATOR CONVERSION RESISTOR, R5, CAUSED THIS EVENT. THE INDICATOR, MODEL NO. 1151, AND THE CONVERSION RESISTOR WERE REPLACED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND THE INDICATOR WAS RETURNED TO SERVICE.

[42] BRUNSWICK 1 DOCKET 50-325 LER 82-035
RHRSW PRESSURE TRANSMITTER FAILS.
EVENT DATE: 030482 REPORT DATE: 032982 NSSS: GE TYPE: BWR
SYSTEM: SYS REQRD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: CORROSION OF MODULE DIAPHRAGM.

(NSIC 173106) WHILE PERFORMING THE CALIBRATION OF RHRSW DIFFERENTIAL PRESSURE INSTRUMENTATION LOCATED ON THE REMOTE SHUTDOWN PANEL, PT-55.9PC, IT WAS DISCOVERED THAT THE OUTPUT OF RHRSW D/P TRANSMITTER, 1-E11-PDT-N002BX, REMAINED CONSTANT REGARDLESS OF THE INPUT SIGNAL. AS A RESULT, THE TRANSMITTER AND ITS ASSOCIATED INDICATOR, 1-E11-PDI-3344, WERE DECLARED INOPERABLE IN ACCORDANCE WITH TECH SPEC. SEE TECH SPECS 3.3.5.2, 6.9.1.9B. A FAILURE OF THE TRANSMITTER SENSOR MODULE OCCURRED DUE TO CORROSION OF THE MODULE DIAPHRAGM RESULTING IN THE CONSTANT TRANSMITTER OUTPUT SIGNAL. THE SENSOR MODULE WAS REPLACED. THE TRANSMITTER, MODEL NO. 1152, WAS CALIBRATED AND THE PT WAS SATISFACTORILY COMPLETED.

[43] BRUNSWICK 1 DOCKET 50-325 LER 82-039
CONTAINMENT INTEGRITY BREACHED WHEN AIRLOCK DOORS OPEN.
EVENT DATE: 031282 REPORT DATE: 040982 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN
CAUSE: LOOSE AND MISSING SCREWS ON DOOR INTERLOCK.

(NSIC 173107) BOTH REACTOR BUILDING 20 FOOT ELEVATION PERSONNEL AIRLOCK DOORS WERE SIMULTANEOUSLY OPENED CAUSING A BREACH OF SECONDARY CONTAINMENT INTEGRITY. THE DOORS WERE IMMEDIATELY CLOSED AND ACCESS WAS RESTRICTED THROUGH THIS AIRLOCK UNTIL THE PROBLEM WAS CORRECTED. SEE TECH SPEC 3.6.5.1, 6.9.1.9B. TWO OF FOUR FASTENING SCREWS FOR THE OUTER DOOR INTERLOCK DEVICE COVER PLATE WERE MISSING AND THE REMAINING TWO WERE LOOSE. THIS CAUSED MECHANICAL BINDING OF THE INTERLOCK ALLOWING CONCURRENT OPENING OF THE DOORS. THE MISSING SCREWS WERE REPLACED AND ALL FOUR SCREWS WERE TIGHTENED USING LOCTITE AND THE AIRLOCK INTERLOCK SYSTEM, FOLGER-ADAM CO. 40-AL ELECTRIC BOLT ASSEMBLY, WAS THEN RETURNED TO SERVICE.

[44] BRUNSWICK 1 DOCKET 50-325 LER 82-040
CONTAINMENT MULTIPOINT TEMPERATURE RECORDER PRINTS ERRATICALLY.
EVENT DATE: 031982 REPORT DATE: 041482 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS

CAUSE: FOULED RELAY CONTACTS.

(NSIC 173067) DURING PLANT OPERATION, ROUTINE SURVEILLANCE REVEALED THAT PRIMARY CONTAINMENT MULTIPOINT TEMPERATURE RECORDER, 1-CAC-TR-1258, WAS PRINTING ERRATICALLY. A SIMILAR EVENT INVOLVING THIS INSTRUMENT WAS REPORTED IN LER 1-82-2. TECH SPECS 3.3.5.3, 6.9.1.9B. THIS EVENT OCCURRED DUE TO FOULED ELECTRICAL CONTACTS IN THE RECORDER POINT SELECT RELAY. THE RELAY CONTACTS WERE CLEANED AND THE RECORDER, MODEL NO. 551, WAS RETURNED TO SERVICE. THIS INSTRUMENT IS CLEANED AND INSPECTED EVERY THREE MONTHS AND CALIBRATED EVERY SIX MONTHS TO ENSURE DEPENDABLE OPERATION.

[45] BRUNSWICK 1 DOCKET 50-325 LER 82-041
2 RHRSW PUMPS FAIL TO START DUE TO BREAKER TRIP.
EVENT DATE: 032582 REPORT DATE: 040782 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: UNKNOWN.

(NSIC 173108) IT WAS DISCOVERED THAT CIRCUIT BREAKER 19, OF ELECTRICAL DISTRIBUTION PANEL 1B, WAS IN THE TRIPPED POSITION. THIS BREAKER BEING OPEN PREVENTS 1B AND 1D RHRSW PUMPS FROM STARTING, THEREBY RENDERING THE B LOOP OF RHRSW INOPERABLE. AT THE TIME OF THE DISCOVERY THE A LOOP RHRSW WAS UNDER CLEARANCE AND UNAVAILABLE. THE BREAKER WAS IMMEDIATELY RESET AND THE B LOOP OF RHRSW WAS RESTORED TO OPERABILITY. SEE TECH SPECS 3.7.1.1, 6.9.1.8C. AT SOME TIME FOLLOWING THE SATISFACTORY COMPLETION OF THE RHRSW PIPING FLUSH, PT-08.2.6, ON 3-23-82 THE BREAKER TRIPPED. AN EXHAUSTIVE INVESTIGATION OF THIS EVENT WHICH INCLUDED TESTING THE BREAKER AND THE AFFECTED CIRCUITRY DID NOT REVEAL ANY EVIDEN T PROBLEMS WITH ITS OPERATION. THE BREAKER, TYPE EQB, WAS REPLACED AS A PRECAUTIONARY MEASURE.

[46] BRUNSWICK 2 DOCKET 50-324 LER 82-030
CONTROL ROD POSITION INDICATION FAILS.
EVENT DATE: 022682 REPORT DATE: 032482 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: DEFECTIVE REED SWITCH.

(NSIC 172865) DURING PLANT OPERATION, IT WAS DISCOVERED THAT FULLY WITHDRAWN CONTROL ROD 18-27 HAD A "6" DIGIT SUPERIMPOSED ON THE "8" DIGIT FOR THE "48" POSITION INDICATION AS DISPLAYED ON THE RTGB. ACTUAL ROD POSITION WAS THEN VERIFIED AT THE "48" POSITION BY ALTERNATE METHODS IN ACCORDANCE WITH TECH SPECS. TECH SPECS 3.1.3.7, 6.9.1.9B. INITIAL TROUBLESHOOTING HAS DETERMINED THE MOST PROBABLE CAUSE OF THE INDICATION PROBLEM IS A DEFECTIVE ROD POSITION INDICATION PROBE REED SWITCH. THIS PROBLEM WILL BE FULLY IDENTIFIED AND CORRECTED DURING THE UPCOMING REFUELING OUTAGE.

[47] BRUNSWICK 2 DOCKET 50-324 LER 82-050
OPERATING PROCEDURE IMPLEMENTED PRIOR TO PROPER APPROVAL.
EVENT DATE: 022782 REPORT DATE: 032682 NSSS: GE TYPE: BWR
SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: OPERATOR ERROR.

(NSIC 172825) DURING A PLANT NUCLEAR SAFETY COMMITTEE (PNSC) REVIEW OF PLANT PROCEDURES, IT WAS DISCOVERED THAT A NEW PLANT PROCEDURE HAD BEEN IMPLEMENTED WITHOUT REQUIRED PRIOR PNSC AND PLANT GENERAL MANAGER REVIEW AND APPROVAL. THE PROCEDURE, WHICH PERMITS OBTAINING REACTOR COOLANT SAMPLES WHILE THE NORMAL RWCU SAMPLING SYSTEM WAS UNAVAILABLE, PARALLELS ALREADY EXISTING APPROVED PROCEDURES BUT PROVIDES ADDITIONAL GUIDANCE. TECH SPECS 6.8.2, 6.9.1.9B. THIS EVENT RESULTED FROM A FAILURE OF RESPONSIBLE PLANT MANAGEMENT PERSONNEL TO FOLLOW EXISTING INSTRUCTIONS FOR IMPLEMENTATION OF NEW PROCEDURES. THE INVOLVED

PERSONNEL HAVE DISCUSSED THIS EVENT AND WILL REVIEW THIS REPORT TO ENSURE THEIR COGNIZANCE OF THE APPLICABLE INSTRUCTIONS. THE SUBJECT PROCEDURE WAS PROPERLY REVIEWED AND APPROVED BY PNSC AND THE PLANT GENERAL MANAGER WITHIN 24 HOURS AND WAS IMPLEMENTED.

[48] BRUNSWICK 2 DOCKET 50-324 LER 82-042
SUPPRESSION CHAMBER TEMPERATURE RECORDER FAILS.
EVENT DATE: 022782 REPORT DATE: 032482 NSSS: GE TYPE: BWR
SYSTEM: SYS REQRD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PRINT ACTUATION SOLENOID OUT OF ADJUSTMENT.

(NSIC 172827) IT WAS DISCOVERED THAT SUPPRESSION CHAMBER WATER TEMPERATURE RECORDER, 2-CAC-TR-778, LOCATED ON THE REMOTE SHUTDOWN PANEL, WAS SHOWING NORMAL, EXPECTED INDICATIONS OF TEMPERATURES, BUT WAS NOT RECORDING THEM ON THE CHART RECORDER. SIMILAR EVENTS INVOLVING THIS RECORDER HAVE BEEN REPORTED IN LERS 2-81-134, 2-82-10 AND 2-82-17. THE RECORDER PRINT ACTUATION SOLENOID WAS OUT OF ADJUSTMENT RESULTING IN THE EVENT. THE SOLENOID WAS ADJUSTED FOR PROPER OPERATION AND THE RECORDER, MODEL NO. 551, WAS RETURNED TO SERVICE. TO HELP PREVENT FUTURE SIMILAR EVENTS, THIS RECORDER WILL BE REBUILT FOLLOWING THE RECEIPT OF REPLACEMENT PARTS.

[49] BRUNSWICK 2 DOCKET 50-324 LER 82-046
CRD ACCUMULATOR INOPERABLE DUE TO LOW PRESSURE.
EVENT DATE: 030282 REPORT DATE: 032982 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVES
CAUSE: LEAKY NITROGEN CHARGING VALVE.

(NSIC 173105) THE CRD ACCUMULATOR LOW PRESSURE/HIGH LEVEL ANNUNCIATOR FOR CONTROL ROD 06-43 WAS RECEIVED. A CHECK OF THE ROD'S HYDRAULIC CONTROL UNIT (HCU) REVEALED AN ACCUMULATOR PRESSURE OF 650 PSIG. THE AFFECTED ACCUMULATOR WAS THEN DECLARED INOPERABLE IN ACCORDANCE WITH TECH SPECS. SEE TECH SPECS 3.1.3.5, 6.9.1.9B. THE LOW ACCUMULATOR PRESSURE OCCURRED DUE TO A VALVE PACKING LEAK ON THE ACCUMULATOR NITROGEN CHARGING INLET ISOLATION VALVE, V111. THE VALVE PACKING WAS ADJUSTED TO ELIMINATE THE LEAK AND THE ACCUMULATOR WAS CHARGED TO A PRESSURE OF 1100 PSIG AND RETURNED TO SERVICE WITHIN ONE HOUR OF THE EVENT DISCOVERY.

[50] BRUNSWICK 2 DOCKET 50-324 LER 82-047
SUPPRESSION CHAMBER WATER LEVEL INDICATOR INCORRECT.
EVENT DATE: 030482 REPORT DATE: 032982 NSSS: GE TYPE: BWR
SYSTEM: SYS REQRD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DESIGN ERROR.

(NSIC 173104) DURING ROUTINE SURVEILLANCE, IT WAS DISCOVERED THAT SUPPRESSION CHAMBER WATER LEVEL INDICATOR, 2-CAC-LI-3342, LOCATED ON THE REMOTE SHUTDOWN PANEL, INDICATED A LEVEL OF -33 INCHES. ACTUAL LEVEL AS READ AT THE LOCAL INDICATOR WAS 029.5 INCHES. A SIMILAR EVENT WAS REPORTED IN LER 2-82-2 ON FEBRUARY 1, 1982. SEE TECH SPECS 3.3.5.2, 6.9.1.9B. A CHANGE IN TRICKLE FLOW TO THE WET REFERENCE LEG OF THE INDICATOR TRANSMITTER 2-CAC-LT-3342, MODEL NO. 1152, CAUSED THE TRANSMITTER TO BE OUT OF CALIBRATION. THE TRICKLE FLOW WAS PROPERLY ESTABLISHED, THE TRANSMITTER WAS CALIBRATED AND THE INDICATOR WAS RETURNED TO SERVICE. PLANT MODIFICATION 80-78 HAS BEEN DEVELOPED TO ELIMINATE FURTHER SIMILAR EVENTS. INSTALLATION IS SCHEDULED FOR THE NEXT REFUELING OUTAGE.

[51] BRUNSWICK 2 DOCKET 50-324 LER 82-052
MUD TANK AND FIRE PROTECTION TANK LEVELS BELOW LIMIT.
EVENT DATE: 030882 REPORT DATE: 040782 NSSS: GE TYPE: BWR
SYSTEM: DEMIN WATER MAKE-UP COMPONENT: ACCUMULATORS

CAUSE: MAINTENANCE AND OPERATOR ERROR.

(NSIC 173103) ROUTINE SURVEILLANCE REVEALED THE MAKEUP DEMINERALIZED WATER (MUD) TANK INVENTORY WAS 89,500 GALLONS, (90,000 GALLONS REQUIRED) WHILE THE FIRE PROTECTION WATER TANK INVENTORY WAS LESS THAN THE REQUIRED 200,000 GALLONS. THE FIRE PROTECTION WATER TANK INVENTORY WAS RESTORED TO 200,000 GALLONS IN 2.5 HOURS AND THE MUD TANK TO 90,000 GALLONS IN 7.25 HOURS. SEE TECH SPECS 3.7.7.1B, 6.9.1.9B. THIS EVENT OCCURRED WHEN THE FIRE PROTECTION WATER TANK MAKEUP SUPPLY WAS ISOLATED WHILE THE DEMINERALIZED WATER TANK MAKEUP SUPPLY WAS UNAVAILABLE DUE TO PLANNED MAINTENANCE. THE ISOLATION VALVE TO THE FIRE PROTECTION TANK WAS OPENED AND THE TANK RESTORED TO 200,000 GALLONS, AND MAKEUP TO THE MUD TANK WAS REESTABLISHED AND ITS LEVEL RESTORED TO 90,000 GALLONS.

[52] BRUNSWICK 2 DOCKET 50-324 LER 82-036
REACTOR COOLANT ACTIVITY EXCEEDS LIMIT AFTER SCRAM.
EVENT DATE: 031482 REPORT DATE: 041382 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
CAUSE: LEAKING FUEL ELEMENTS.

(NSIC 173071) FOLLOWING A REACTOR SCRAM FROM 57% POWER 3-13-82, REACTOR COOLANT ACTIVITY EXCEEDED TECH SPEC LIMIT OF 0.2 MICRO CURIE/GM FOR SEVEN HOURS WITH THE HIGHEST RECORDED ACTIVITY BEING 0.280 MICRO CURIE/GM. TECH SPECS 3.4.5, 6.9.1.9B. THIS EVENT RESULTED FROM AN INCREASE IN COOLANT FISSION PRODUCT INVENTORY ORIGINATING FROM LEAKING FUEL ELEMENTS. THE IODINE ACTIVITY RETURNED TO WITHIN SPECIFICATIONS BY UTILIZING THE RWCU SYSTEM AND INCREASING REACTOR POWER. THE UNIT NO. 2 FUEL BUNDLES WILL BE SIPPED DURING THE NEXT REFUELING OUTAGE AND THE LEAKING BUNDLES WILL BE REMOVED FROM THE CORE.

[53] BRUNSWICK 2 DOCKET 50-324 LER 82-041
SET POINT DRIFT OF RELIEF VALVE FOR STANDBY LIQUID CONTROL SYSTEM.
EVENT DATE: 031482 REPORT DATE: 041382 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVES
CAUSE: MECHANICAL DRIFT.

(NSIC 173075) DURING PLANT OPERATION, PERFORMANCE OF THE STANDBY LIQUID CONTROL SYSTEM (SLC) RELIEF VALVE OPERABILITY TEST, PT-06.2.1, REVEALED SLC RELIEF VALVE 2-C41-F029A LIFTED AT 1465 PSIG. THE REQUIRED LIFTING SET POINT FOR THIS VALVE IS 1400 &/- 50 PSIG. TECH SPECS 3.1.5, 6.9.1.9B. MECHANICAL DRIFT OF THE VALVE LIFTING SETPOINT WAS DETERMINED AS THE CAUSE OF THIS EVENT. THE SETPOINT WAS ADJUSTED AND THE PT WAS PERFORMED SATISFACTORILY. PLANT ENGINEERING IS PRESENTLY EVALUATING THIS FAILURE TO DETERMINE IF FURTHER ACTIONS ARE REQUIRED TO ENSURE RELIABLE LIFTING SETPOINT ACCURACY OF THESE TYPE VALVES, MODEL NO. DB-70D-SP.

[54] BRUNSWICK 2 DOCKET 50-324 LER 82-054
SET POINT DRIFT OF REACTOR LOW WATER LEVEL SWITCH.
EVENT DATE: 031482 REPORT DATE: 041382 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 173079) FOLLOWING A REACTOR SCRAM ON LOW LEVEL NO. 1, PERFORMANCE OF RPS REACTOR LOW WATER LEVEL NO. 1 CHANNEL CALIBRATION AND FUNCTIONAL TEST, PT-01.1.4PC, REVEALED THAT REACTOR LOW SWITCH, 2-B21-LIS-N017D-1 ACTUATED AT A SIMULATED REACTOR LEVEL OF 162.44". THE REPORTABLE LIMIT FOR THIS SWITCH IS 162.5". THIS INSTRUMENT IS USED TO INITIATE A REACTOR SCRAM SIGNAL AND A GROUP 2, 6, 7, AND 8 ISOLATION SIGNAL AT / 162.5". TECH SPECS 2.2.1, 3.3.2, 6.9.1.9B. N017D-1 ACTUATED OUT OF SPECIFIED TOLERANCES DUE TO INSTRUMENT DRIFT. THE INSTRUMENT WAS CALIBRATED AND RETURNED TO SERVICE. AS A RESULT OF PAST SIMILAR EVENTS INVOLVING THE RELIABILITY OF THE INSTRUMENT (THE MOST RECENT EVENT

REPORTED IN LER 2-82-13) THIS TYPE INSTRUMENT WILL BE REPLACED WITH ANALOG-TYPE INSTRUMENTATION DURING UPCOMING REFEULING OUTAGES.

[55] BRUNSWICK 2 DOCKET 50-324 LER 82-055
AUTOMATIC ISOLATION VALVES NOT PROTECTED BY PIPE WHIP RESTRAINT.
EVENT DATE: 031682 REPORT DATE: 031982 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: DESIGN ERROR.

(NSIC 172824) DURING REVIEW OF THE HIGH ENERGY LINE BREAK ANALYSES FOR BRUNSWICK UNIT NOS. 1 & 2, IT WAS DETERMINED THAT THE RWCU RETURN LINE DID NOT MEET THE COMMITMENT OF FSAR SECTION 5.2.4.5 IN THAT THERE IS NO PIPE WHIP RESTRAINT TO PROTECT THE AUTOMATIC ISOLATION VALVE (G31-F042). THIS IS CONSIDERED REPORTABLE UNDER TECH SPECS SECTION 6.9.1.8I AND 10 CFR 21. PRELIMINARY DESIGN WORK HAS BEEN INITIATED ON THE RESTRAINTS FOR BOTH UNITS. THESE RESTRAINTS WILL BE INSTALLED DURING THE NEXT AVAILABLE OUTAGE OF SUFFICIENT LENGTH AFTER RECEIPT OF MATERIAL AND DESIGN DETAILS.

[56] BRUNSWICK 2 DOCKET 50-324 LER 82-053
FIRE HOSE STATION INOPERABLE DUE TO MISSING NOZZLE.
EVENT DATE: 031682 REPORT DATE: 041482 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
CAUSE: UNKNOWN.

(NSIC 173077) DURING PLANT OPERATION, IT WAS DISCOVERED THAT FIRE HOSE STATION, 2-RB-22, LOCATED ON THE 20' ELEVATION OF THE REACTOR BUILDING, WAS INOPERABLE DUE TO A MISSING HOSE NOZZLE. TECH SPECS 3.7.7.4A, 6.9.1.9B. THE MISSING HOSE NOZZLE COULD NOT BE LOCATED. IT IS NOT KNOWN WHY THE NOZZLE WAS REMOVED OR WHO REMOVED IT. THE NOZZLE, MODEL NO. 7160, WAS REPLACED WITHIN 55 MINUTES OF DISCOVERING IT MISSING AND THE HOSE STATION WAS RETURNED TO SERVICE. PLANT HOSE STATIONS ARE VISUALLY INSPECTED ON A MONTHLY BASIS; NO FURTHER ACTION TO THIS EVENT IS PLANNED.

[57] BRUNSWICK 2 DOCKET 50-324 LER 82-057
TORUS-REACTOR BUILDING VACUUM BREAKER VALVE FAILS TO OPERATE.
EVENT DATE: 031782 REPORT DATE: 041582 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVE OPERATORS
CAUSE: UNKNOWN.

(NSIC 173068) DURING PLANT OPERATION, WHILE PERFORMING TORUS-REACTOR BUILDING VACUUM BREAKERS' AIR OPERATED BUTTERFLY VALVE ACTUATION TEST, PT-02.3.5, THE AUTO-OPEN ACTUATION SWITCH OF BUTTERFLY VALVE, 2-CAC-V16, ACTUATED, HOWEVER, THE VALVE DID NOT OPEN AS REQUIRED. THE TEST RESULTS OF PT-02.3.5 ARE REPORTED IN LER 2-82-56. AN ELECTRICAL CONTINUITY CHECK OF THE VALVE SOLENOID OPERATOR SV-4222, MODEL NO. 732CSR80, DID NOT REVEAL ANY PROBLEMS. THE VALVE WAS SUCCESSFULLY CYCLED FROM THE RTGB TO VERIFY ITS OPERABILITY AND THE PT WAS SATISFACTORILY COMPLETED. TO CORRECT ANY POSSIBLE UNIDENTIFIED INTERMITTENT FAILURE OF THIS SOLENOID OPERATOR IN THE FUTURE, IT WILL BE REPLACED DURING THE UPCOMING REFUELING OUTAGE.

[58] BRUNSWICK 2 DOCKET 50-324 LER 82-051
CONTAINMENT ATMOSPHERE HYDROGEN ANALYZER OPERATES ERRATICALLY.
EVENT DATE: 031882 REPORT DATE: 041582 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DIRTY CONTACTS.

(NSIC 173073) DURING PLANT OPERATION WITH AN INERTED PRIMARY CONTAINMENT, PRIMARY

CONTAINMENT ATMOSPHERIC HYDROGEN ANALYZER, 2-CAC-AT-1263-1, INDICATED A 0% TO 1.8% CHANGE IN HYDROGEN CONCENTRATION IN THE DRYWELL. ON 3-25-82 A 3% HYDROGEN CONCENTRATION CHANGE WAS OBSERVED. IN EACH CASE THE REDUNDANT ANALYZER, 2-CAC-AT-1259-1, INDICATED A NORMALLY EXPECTED 0% HYDROGEN CONCENTRATION IN THE DRYWELL. TECH SPECS 3.3.5.3, 3.6.6.4, 6.9.1.9B. THE 1263-1 ANALYZER OUTPUT SIGNAL COARSE SPAN ADJUSTMENT POTENTIOMETER, R3, AND COARSE ZERO ADJUSTMENT POTENTIOMETER, R5, WERE BOTH ERRATIC DUE TO DIRTY CONTACTS. IN EACH CASE, BOTH POTENTIOMETERS WERE DISASSEMBLED AND CLEANED. THE 1263-1, MODEL NO. 7C6A-1A3AX, WAS THEN CALIBRATED AND RETURNED TO SERVICE.

[59] CALVERT CLIFFS 1 DOCKET 50-317 LER 81-002 REV 1
UPDATE ON LOW AFWS FLOW RATE.
EVENT DATE: 011181 REPORT DATE: 120781 NSSS: CE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES
CAUSE: FLOW RATE WAS ABOVE MINIMUM.

(NSIC 172806) AFTER THOROUGH INVESTIGATION IT WAS CONCLUDED THAT THE FACTS UNDERLYING THE EVENT DID NOT MEET THE CRITERIA FOR SUBMISSION OF AN LER. THE DESIGN AUXILIARY FEEDWATER FLOW RATE WAS ALWAYS MAINTAINED ABOVE THE MINIMUM REQUIRED, ALTHOUGH THAT WAS NOT INITIALLY CLEAR TO PERSONNEL IN THE FIELD AT THE PLANT.

[60] CALVERT CLIFFS 1 DOCKET 50-317 LER 81-074 REV 1
UPDATE ON POTENTIALLY UNCONSERVATIVE CONTAINMENT ISOLATION VALVE FAILURE.
EVENT DATE: 102281 REPORT DATE: 120181 NSSS: CE TYPE: PWR
SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: VALVES
CAUSE: DESIGN ERROR.

(NSIC 172907) PLANT PERSONNEL DISCOVERED THAT COMPONENT COOLING ISOLATION VALVE TO CONTAINMENT CC-3832-CV, WOULD FAIL OPEN ON LOSS OF INSTRUMENT AIR (IA), FAILING THE VALVE IN THE UNCONSERVATIVE POSITION. THE VALVE WAS DECLARED INOPERABLE (T.S. 3.7.3.1). IN ACCORDANCE WITH T.S. 3.0.3, SHUTDOWN BEGAN AT 1545. A MODIFICATION WAS MADE SO THE VALVE WOULD FAIL ON LOSS OF IA. THE MODIFICATION WAS COMPLETED, VALVE TESTED AND DECLARED OPERABLE AT 2000. SIMILAR EVENT: 50-318/81-45. THE INCIDENT APPEARS TO BE AN ISOLATED EVENT. VALVE HAS BEEN CONFIGURED TO FAIL OPEN ON A LOSS OF INSTRUMENT AIR SINCE BEFORE AN OPERATING LICENSE WAS ISSUED. A FACILITY CHANGE REQUEST TO MODIFY VALVE WAS NOT IMPLEMENTED DUE TO FAILURE OF ADMINISTRATIVE CONTROLS WHICH HAVE BEEN REVISED AND SHOULD NOW ADEQUATELY PREVENT FUTURE SIMILAR INCIDENTS.

[61] CALVERT CLIFFS 1 DOCKET 50-317 LER 82-015
PRESSURIZER LEVEL EXCEEDS LIMIT.
EVENT DATE: 040782 REPORT DATE: 042382 NSSS: CE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 173013) WHILE PERFORMING MAINTENANCE ON PRESSURE TRANSMITTER - 102C, PRESSURIZER (PZR) LEVEL EXCEEDED THE &/- 5% PROGRAMMED BAND (TECH SPEC 3.4.4). PARTIAL DRAINING OF THE COMMON REFERENCE LEG FOR PT-102C AND LT-110Y CAUSED AN OSCILLATION IN PZR LEVEL SUCH THAT LEVEL INCREASED TO 230 INCHES, A 6.5% DIFFERENCE FROM THE PROGRAMMED LEVEL. PZR LEVEL WAS RESTORED TO THE &/- 5% BAND. THE CAUSE OF THIS INCIDENT WAS FAILURE ON THE PART OF THE CONTROL ROOM OPERATOR AND TECHNICIAN TO REALIZE THE COMMONALITY OF THE REFERENCE LEG FOR PT-102C AND LT-110Y. THIS INCIDENT HAS BEEN DISCUSSED WITH THE PERSONNEL INVOLVED. ADDITIONALLY, ALL I&C TECHNICIANS AND LICENSED OPERATORS WILL BE INFORMED OF THE DETAILS OF THIS EVENT.

[62] CALVERT CLIFFS 2 DOCKET 50-318 LER 82-014
CONTAMINATED OIL ADDED TO DIESEL GENERATOR LUBE OIL SYSTEM.
EVENT DATE: 030482 REPORT DATE: 040282 NSSS: CE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
CAUSE: INADEQUATE PROCEDURES.

(NSIC 172823) AT 0140, AN OPERATOR WAS SAMPLING OIL FROM #21 EMERGENCY DIESEL GENERATOR (EDG) LUBE OIL DAY TANK PRIOR TO RETURNING IT TO SERVICE, WHEN HE OBSERVED THE OIL TO BE CONTAMINATED WITH FREE STANDING WATER PRESENT. THIS IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.1.9.C. THE EDG REMAINED OPERABLE AS NO CONTAMINATED OIL ENTERED THE CRANKCASE. CONTAMINATED OIL WAS REPLACED AND GOOD OIL ADDED. LUBE OIL DAY TANK WAS FILLED THE PREVIOUS DAY WITH A BARREL OF UNSAMPLED OIL WHICH WAS FOUND TO HAVE A SIGNIFICANT AMOUNT OF WATER AND SEDIMENT. A RADCHEM PROCEDURE TO ESTABLISH A PROGRAM FOR SAMPLING OIL AND SIMILAR CONSUMABLES PRIOR TO USE IS BEING FORMULATED AND WILL BE COMPLETE BY APRIL 30, 1982.

[63] COOK 1 DOCKET 50-315 LER 82-014
FEEDWATER ISOLATION VALVE FAILS TO CLOSE DURING REACTOR TRIP.
EVENT DATE: 030582 REPORT DATE: 040282 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: CORROSION IN VALVE OPERATOR CONNECTION BOX.

(NSIC 172838) DURING A REACTOR TRIP COINCIDENT WITH A LOW TAVG, FEEDWATER ISOLATION VALVE FMO-203 FAILED TO CLOSE ON A FEEDWATER ISOLATION SIGNAL, CONTRARY TO REQUIREMENTS OF TECH SPEC TABLE 3.3-3, ITEM 1. THE OTHER FEEDWATER ISOLATION VALVES DID CLOSE. THE VALVE WAS REPAIRED PRIOR TO UNIT STARTUP. THE APPARENT CAUSE WAS A BUILDUP OF CORROSION PRODUCTS WITHIN THE LIMITORQUE ACTUATOR ELECTRICAL CONNECTION BOX. THE SOURCE OF CORROSION PRODUCTS COULD NOT BE DETERMINED. THE SWITCH CONTACTS WERE CLEANED AND ADJUSTED. THE VALVE WAS TESTED. SIMILAR VALVES IN BOTH UNITS WERE INSPECTED. NO EVIDENCE OF CORROSION WAS FOUND.

[64] COOK 1 DOCKET 50-315 LER 82-015
PRESSURIZER PRESSURE BELOW REQUIREMENT DURING COOLDOWN TRANSIENT.
EVENT DATE: 030582 REPORT DATE: 040282 NSSS: WE TYPE: PWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PROBLEMS WITH INITIAL PRESSURE LIMITER CIRCUITS.

(NSIC 172840) A POWER INCREASE WAS IN PROGRESS USING THE TURBINE LOAD LIMITER TO INCREASE TURBINE LOAD. AT 46%, THE TURBINE WOULD NOT ACCEPT ADDITIONAL LOAD. WHILE ATTEMPTING TO DETERMINE THE CAUSE, THE SETPOINT WAS INCREASED ON THE INITIAL PRESSURE LIMITER AND A TURBINE RUNBACK OCCURRED. THE COOLDOWN ASSOCIATED WITH FEEDWATER ADDITIONS AND STEAM DUMP OPERATION TO DECREASE TAVG/TREF DEVIATION CAUSED PRESSURIZER PRESSURE TO DECREASE TO 2204 PSIG FOR APPROXIMATELY ONE MINUTE. THIS IS CONTRARY TO TECH SPEC 3.2.5. THE CAUSE OF THE TRANSIENT WAS TRACED TO PROBLEMS IN THE INITIAL PRESSURE LIMITER CIRCUITS. PLACING THE AUTOMATIC ROD CONTROL SYSTEM IN AUTOMATIC PARTWAY THROUGH THE TRANSIENT AND MANUAL OPERATION OF STEAM GENERATOR LEVEL CONTROL MAY HAVE ADVERSELY AFFECTED THE OVERALL SYSTEM RESPONSE. THE INITIAL PRESSURE LIMITER CIRCUITRY WAS REMOVED FROM THE CONTROL SYSTEM.

[65] COOK 2 DOCKET 50-316 LER 81-055 REV 1
UPDATE ON GAS RELEASE FROM VCT.
EVENT DATE: 110181 REPORT DATE: 120281 NSSS: WE TYPE: PWR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT. VALVES
CAUSE: LEAKY VALVE.

(NSIC 172924) AN ALARM WAS RECEIVED ON RADIATION MONITORING CHANNEL R-26 SUGGESTING A SMALL GASEOUS RELEASE WAS IN PROGRESS. THE RELEASE APPARENTLY STARTED AT 0800 HOURS ON OCTOBER 30, 1981, AND CONTINUED TO 0000 HOURS ON NOVEMBER 2, 1981. DURING THIS INTERVAL A TOTAL OF 29.687 CURIES WERE RELEASED AT A RATE OF 1.29 E-14 CURIES PER SECOND (27.117 CURIES OF XENON-133 AND 2.57 CURIES OF XENON-135). THIS VALUE WAS 0.233% OF THE TECH SPEC LIMIT. PREVIOUS SIMILAR OCCURRENCES INCLUDE 050-315/81-035, 81-01. THE INVESTIGATION REVEALED THAT GAS FROM THE VOLUME CONTROL TANK HAD LEAKED PAST VALVE NS-186 AND ENTERED THE WASTE DISPOSAL SYSTEM AND OFF GASSED AS AN UNPLANNED RELEASE. THE RELEASE WAS CONCLUDED WITH THE CLOSING OF ISOLATION VALVE CS-374. VALVE NS-186 (WHITEY-P/N SS-IVS8) WAS REPLACED FOLLOWING LEAK TESTING AND OPERATIONS PROCEDURES HAVE BEEN MODIFIED TO INCLUDE A PRECATUION CONCERNING THIS EVENT.

[66] COOK 2 DOCKET 50-316 LER 81-054 REV 1
UPDATE ON RELEASE OF CONTROL FLUID TO LAKE.
EVENT DATE: 110381 REPORT DATE: 120281 NSSS: WE TYPE: PWR
SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: HEAT EXCHANGERS
CAUSE: TUBE FAILURE IN COOLER.

(NSIC 172921) A LOW LEVEL ALARM ON THE CONTROL FLUID SYSTEM WAS RECEIVED INDICATING A LOSS OF FLUID. THIS SYSTEM TYPICALLY CONTAINS 2500 GALLONS OF FYRQUEL FLUID, A FIRE RESISTANT TRIARYL PHOSPHATE EASTER. BY NOVEMBER 1, 1981, 275 GALLONS HAD BEEN ADDED TO THE SYSTEM TO MAKE UP DUE TO THE LOW LEVEL ALARM. AT THIS TIME IT WAS DETERMINED THAT THE LEAK EXISTED IN THE SYSTEM COOLERS, THESE COOLERS WERE THEN ISOLATED. THE INVESTIGATION REVEALED THAT A TUBE FAILURE HAD OCCURRED IN A COOLER ALLOWING 275 GALLONS OF FLUID TO ENTER THE LAKE THROUGH THE CIRCULATING WATER DISCHARGE. ONE TUBE WAS FOUND TO HAVE FAILED, THE TUBE WAS PLUGGED AND THE UNIT RETURNED TO SERVICE. IN THE FUTURE, THE COOLERS WILL BE IMMEDIATELY ISOLATED UPON RECEIPT OF THE LOW LEVEL ALARM IF NO LEAK IS APPARENT.

[67] COOK 2 DOCKET 50-316 LER 82-004
RCS IODINE CONCENTRATION EXCEEDS LIMIT.
EVENT DATE: 011682 REPORT DATE: 021182 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
CAUSE: REACTOR TRIP.

(NSIC 172891) FOLLOWING A REACTOR TRIP, THE REACTOR COOLANT SYSTEM (RCS) DOSE EQUIVALENT (DOSEQ) IODINE I-131 CONCENTRATION EXCEEDED THE 1.0 MICROCI/GRAM STEADY STATE LIMIT OF TECH SPEC 3.4.8. AN UNUSUAL EVENT WAS DECLARED AT 2103 HOURS ON JANUARY 16, 1982, DUE TO THE IODINE VALUES EXCEEDING THE STEADY STATE LIMITS. THE UNUSUAL EVENT WAS TERMINATED AT 0740 HOURS ON JANUARY 17, 1982, WHEN THE IODINE VALUES WERE WITHIN SPECIFICATION. PREVIOUS SIMILAR OCCURRENCES INCLUDE: 50-315/78-026, 76-059; THE RCS DOSEQ-I-131 SPIKED TO 2.04 MICROCI/GRAM. PRIOR TO THE TRIP, RCS DOSEQ-I-131 WAS AVERAGING 6 X 10(-2) MICROCI/GRAM. FOLLOWING THE TRIP THE UNIT WAS RETURNED TO FULL POWER OPERATION AT 1230 HOURS ON JANUARY 18, 1982, AND THE RCS IODINE VALUES LEVELED OUT AT APPROXIMATELY 8 X 10(-2) MICROCI/GRAM.

[68] COOK 2 DOCKET 50-316 LER 82-006
TWO CONTAINMENT RADIATION MONITORS INOPERABLE WHEN PUMP TRIPS.
EVENT DATE: 011682 REPORT DATE: 021182 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: FILTER PAPER JAM.

(NSIC 172893) THE CONTAINMENT AIR PARTICULATE AND GASEOUS RADIATION MONITORING SYSTEM (R-11/R-12) SAMPLE PUMP TRIPPED ON LOW FLOW. ATTEMPTS TO RESTART THE SAMPLE PUMP WERE UNSUCCESSFUL, THEREFORE, R-11 AND R-12 WERE DECLARED INOPERABLE. SEE TECH SPECS 3.3.3.1, 3.3.2.1, TABLE 3.3-3 AND 3.4.6.1. INVESTIGATION FOUND

THAT THE FILTER PAPER HAD TORN NEAR THE TAKE-UP REEL CAUSING THE PAPER TO JAM. THE FILTER PAPER WAS REPLACED, VERIFIED TO BE OPERATING CORRECTLY AND RETURNED TO SERVICE. NO FURTHER ACTION IS PLANNED AT THIS TIME SINCE RFC 12-2448 WILL REPLACE THIS EQUIPMENT.

[69] COOK 2 DOCKET 50-316 LER 82-005
STEAM GENERATOR STEAM FLOW CHANNEL READS LOW TWICE.
EVENT DATE: 011782 REPORT DATE: 021182 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: SENSING LINES LOST THEIR FILL.

(NSIC 172892) ON TWO SEPARATE OCCASIONS, NUMBER 3 STEAM GENERATOR STEAM FLOW CHANNEL 1 (MFC-131) WAS FOUND TO BE INDICATING LOW. THE FIRST OCCURRENCE WAS ON JANUARY 17, 1982, DURING REACTOR STARTUP AND THE SECOND OCCURRENCE WAS JANUARY 29, 1982, DURING POWER REDUCTION. THESE EVENTS ARE NON-CONSERVATIVE WITH RESPECT TO TECH SPEC TABLE 3.3-1 ITEM 15 AND 3.3-3, ITEM 4.D. PREVIOUS SIMILAR OCCURRENCES INCLUDE: 50-316/81-061. IT IS BELIEVED THAT IN BOTH OCCURRENCES THE SENSING LINES LOST THEIR FILL, CAUSING THE TRANSMITTER TO READ INCORRECTLY. THE SENSING LINES WERE FILLED, THE TRANSMITTER (BARTON, MODEL 764) WAS VERIFIED OPERATIONAL AND RETURNED TO SERVICE. IN ADDITION, THE TRANSMITTER HAS BEEN SCHEDULED TO BE CALIBRATED DURING THE NEXT OUTAGE. IF ANY PROBLEMS ARE FOUND AN UPDATED LER WILL BE SUBMITTED.

[70] COOK 2 DOCKET 50-316 LER 82-019
CONTAINMENT RADIATION MONITOR SAMPLE PUMP TRIPS ON LOW FLOW.
EVENT DATE: 031182 REPORT DATE: 040882 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: UNDETERMINED.

(NSIC 172887) FOLLOWING A UNIT SHUTDOWN, THE CONTAINMENT AIR PARTICULATE AND GASEOUS RADIATION MONITORING SYSTEM (R-11/R-12) SAMPLE PUMP TRIPPED ON LOW FLOW. ATTEMPTS TO RESTART THE SAMPLE PUMP WERE UNSUCCESSFUL, THEREFORE, R-11 AND R-12 WAS DECLARED INOPERABLE AT 1650 HOURS ON MARCH 11, 1982. THE EVENT IS NON-CONSERVATIVE WITH RESPECT TO TECH SPECS 3.3.2.1 TABLE 3.3-3, 3.3.3.1 AND 3.4.6.1. INVESTIGATION FOUND THE SAMPLE PUMP TRIPPING AT APPROXIMATELY 8 SCFM, WHICH IS THE LOW FLOW TRIP SETPOINT. THE FLOW WAS ADJUSTED TO THE CORRECT LEVEL OF 10 SCFM. THE EXACT CAUSE OF THE LOW FLOW CONDITION COULD NOT BE DETERMINED. THE SAMPLE SYSTEM WAS VERIFIED TO BE OPERATING CORRECTLY AND RETURNED TO SERVICE AT 2230 HOURS NO MARCH 11, 1982.

[71] COOK 2 DOCKET 50-316 LER 82-024
ROLLUP FIRE DOOR FAILS TO CLOSE.
EVENT DATE: 032582 REPORT DATE: 042382 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
CAUSE: FABRICATION ERROR IN TORQUING MECHANISM.

(NSIC 173012) DURING A PREVENTIVE MAINTENANCE INSPECTION, ROLL-UP FIRE DOOR #344 WOULD NOT CLOSE UPON AUTOMATIC CLOSURE ACTIVATION. THIS CONSTITUTED AN INOPERABLE PENETRATION FIRE BARRIER, CONTRARY TO TECH SPEC 3.7.10. THE DISCHARGE SPRING TORQUING MECHANISM APPEARED TO HAVE BEEN ASSEMBLED DURING MANUFACTURE WITH AN IMPROPERLY SIZED TRAVELING LINK. THE BROKEN SPIRAL AND TRAVELING LINK WERE REPLACED AND SIMILAR DOORS ARE BEING INSPECTED.

[72] COOPER DOCKET 50-298 LER 82-004
MINIMUM CRITICAL POWER RATIO FALLS BELOW LIMIT.
EVENT DATE: 010982 REPORT DATE: 030582 NSSS: GE TYPE: BWR
SYSTEM: OTHER SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

CAUSE: LICENSED OPERATOR ERROR.

(NSIC 173138) DURING A PLANNED POWER REDUCTION TO INITIATE A REACTOR SHUTDOWN, THE MINIMUM CRITICAL POWER RATIO (MCPR) WAS BELOW THE MCPR OPERATING LIMIT WITHOUT THE INITIATION OF CORRECTIVE ACTIONS AS REQUIRED BY SECTION 3.11.C OF THE CNS TECH SPECS. THIS OCCURRENCE WAS DISCOVERED ON 2/3/82. INVESTIGATION DEMONSTRATED THAT MCPR WAS ERRONEOUSLY CALCULATED DUE TO AN INCORRECT INDICATION OF CORE FLOW BECAUSE OF SINGLE RECIRCULATION LOOP OPERATION AND WAS NOT ACTUALLY IN VIOLATION OF THE LIMIT. THE CAUSE WAS PERSONNEL ERROR IN THAT THE SURVEILLANCE REQUIREMENTS OF SECTION 4.11.C OF THE TECH SPECS WERE NOT MET. THE OPERATING PROCEDURES WILL BE REVISED BY 4/1/82 TO ADDRESS THIS PROBLEM AND TO PROVIDE A METHOD FOR THE OPERATORS TO DETERMINE CORE FLOW WHEN OPERATING WITH A SINGLE RECIRCULATION LOOP. THIS LER WILL BE ROUTED TO ALL LICENSED PERSONNEL AND THE REACTOR ENGINEERS.

[73] COOPER DOCKET 50-298 LER 82-003
RHR VALVE OVERLOAD ALARM RECEIVED.
EVENT DATE: 012682 REPORT DATE: 021782 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: BRAKE COIL FAILED.

(NSIC 172815) DURING S.P. 6.3.5.2, AN OVERLOAD ALARM CONDITION WAS RECEIVED WHILE CLOSING RHR-MO-26B VALVE. THE VALVE DID GO FULLY CLOSED; THE OVERLOAD CONTACTS WERE RESET AND ALARM CLEARED. THE SUBJECT VALVE IS THE OUTBOARD ISOLATION VALVE FOR THE 'B' LOOP CONTAINMENT SPRAY. FAILURE OF THIS VALVE IN ANY POSITION OTHER THAN FULL OPEN WOULD REDUCE THE FLOW FOR 'B' LOOP CONTAINMENT SPRAY IN WHICH CASE THE 'A' LOOP COULD SUPPLY 100% REQUIRED FLOW. OPERATOR FOR SUBJECT VALVE IS LIMITORQUE SMB 0. THE MOTOR BRAKE COIL FAILED TO RELEASE. THIS IN TURN CAUSED THE MOTOR TO OVERLOAD AND GIVE OVERLOAD ALARM CONDITION. NEW MOTOR AND BRAKE WERE INSTALLED AND TESTED SATISFACTORILY.

[74] COOPER DOCKET 50-298 LER 82-005
MSIV CLOSING TIME IS TOO FAST.
EVENT DATE: 022182 REPORT DATE: 031982 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVES
CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 172987) WHILE PERFORMING ROUTINE SURVEILLANCE TEST PROCEDURE 6.3.9.4, MSIV-86A WAS FOUND TO HAVE A CLOSING TIME FASTER THAN ALLOWED BY TECH SPEC 3.7.D. IMMEDIATE CORRECTIVE ACTION WAS TO ADJUST CLOSING TIME FOR MSIV-86A AND LOCK THE CONTROL VALVE INTO THE REQUIRED POSITION. THE VALVE IS AN AIR OPERATED ROCKWELL EDWARDS 24" ANGLE GLOBE VALVE, MODEL #1612-JMMNY. RALPH A. HILLER CO. SUPPLIED THE AIR OPERATOR #SA-A051.

[75] COOPER DOCKET 50-298 LER 82-006
DUCTWORK FAILURE CAUSES EXCESSIVE TIME TO INERT DRYWELL.
EVENT DATE: 032282 REPORT DATE: 042182 NSSS: GE TYPE: BWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: OTHER COMPONENTS
CAUSE: DESIGN ERROR.

(NSIC 173007) AFTER PLANT STARTUP AND WHILE INERTING THE DRYWELL, DUCTWORK BETWEEN THE PRIMARY CONTAINMENT AND REACTOR BUILDING VENTILATION WAS FOUND TO BE FAILED IN SEVERAL PLACES. AS A RESULT, THE OXYGEN CONTENT AND DIFFERENTIAL PRESSURE BETWEEN THE TORUS AND DRYWELL COULD NOT BE ESTABLISHED IN THE REQUIRED TIME FRAME. A TECH. SPEC. CHANGE WAS REQUESTED AND GRANTED. THE OXYGEN SPECIFICATION WAS REACHED IN 28 HOURS VERSUS 24 ADVERSE AFFECTS TO THE PUBLIC HEALTH AND SAFETY. COMPLETE FAILURE OF DUCTWORK BETWEEN THE DRYWELL ISOLATION VALVES AND THE AIR PURGE VALVE WAS CAUSED BY A RAPID RELEASE OF PRESSURE. THE

DUCTWORK WAS ISOLATED. NEW DUCTWORK WAS FABRICATED USING STRONGER MATERIAL AND SOCKET WELDS. LOWERED NITROGEN MAKEUP LINE RELIEF SETPOINT. BRIEFED OPERATORS TO SECURE NITORGEN ON GROUP ISOLATION. DESIGN TO ELIMINATE NITROGEN MAKEUP FROM DUCTWORK TO THE BE DONE DURING MAY 1982 OUTAGE.

[76] COOPER DOCKET 50-298 LER 82-007
DRYWELL TO TORUS PRESSURE DROP FALLS BELOW LIMIT.
EVENT DATE: 032482 REPORT DATE: 042282 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: OTHER COMPONENTS
CAUSE: RHR TEST LINE DESIGN ERROR.

(NSIC 173000) PERFORMANCE OF S.P. 6.3.5.1 RESULTED IN UNCOVERING A DOWNCOMER CAUSING DRYWELL TO TORUS DP TO BE REDUCED BELOW TECH SPEC 3.7.E REQUIREMENTS, DP REMAINED AT 0.95 PSID OR HIGHER AND WAS RESTORED TO 1 PSID WITHIN ONE HOUR. DRYWELL/TORUS DP REDUCED BELOW TECH SPEC WHEN DOWNCOMER IN TORUS UNCOVERED BY FLOW WAVE WHILE RUNNING RHR FULL FLOW TEST. DP WAS RESTORED. DESIGN CHANGE TO REDIRECT TEST LINE RETURN FLOW TO BE ACCOMPLISHED MAY 1982.

[77] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-008
LETDOWN COOLER LEAKS.
EVENT DATE: 012782 REPORT DATE: 022682 NSSS: BW TYPE: PWR
SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: HEAT EXCHANGERS
CAUSE: TUBE TO SHELL LEAK.

(NSIC 173137) AN INCREASING ACTIVITY LEVEL WAS FOUND IN THE SERVICE WATER SYSTEM AT RML-3. AN RCS LEAK OF LESS THAN 0.1 GALLON PER MINUTE WAS DISCOVERED IN LETDOWN COOLER 'A'. THIS CREATED AN EVENT REPORTABLE UNDER TECH SPEC 6.9.1.9.D. THE CAUSE OF THIS EVENT IS ATTRIBUTED TO A TUBE-TO-SHELL LEAK IN LETDOWN COOLER 'A'. LETDOWN COOLER 'A' WAS ISOLATED AND WILL BE REPLACED.

[78] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-009
TWO CONTAINMENT ISOLATION VALVES FAIL TO CLOSE.
EVENT DATE: 020482 REPORT DATE: 031682 NSSS: BW TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: TORQUE SWITCHES OUT OF ADJUSTMENT.

(NSIC 172843) AT 0400, DURING PERFORMANCE OF SP-435, IT WAS DISCOVERED THAT CONTAINMENT ISOLATION VALVES MUV-259 AND 260 FAILED TO CLOSE. THIS CREATED AN EVENT NOT ATTRIBUTED TO A SPECIFIC SHUTDOWN ACTIVITY AS REQUIRED BY REG. GUIDE 1.16, AND THEREFORE, CONTRARY TO TECH SPEC. 3.6.3.1. REDUNDANCY IS PROVIDED BY MUV-253. MAINTENANCE WAS INITIATED AND OPERABILITY WAS RESTORED TO MUV-259 AND 260 ON 2/5/82. THE CAUSE OF MUV-259 AND 260 FAILING TO CLOSE CAN BE ATTRIBUTED TO INSUFFICIENT TORQUE SWITCH SETTING. THE TORQUE SWITCH SETTINGS WERE INCREASED. MUV-259 AND 260 WERE TESTED SATISFACTORILY PER SP-435. MP-402 WILL BE REVISED TO ENSURE THAT TORQUE SWITCH SETTINGS ARE MAINTAINED ABOVE THE MINIMUM TORQUE SETTING REQUIRED TO OPERATE LIMITORQUE VALVES.

[79] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-010
RADIATION MONITOR FAILS ON THREE OCCASIONS.
EVENT DATE: 021782 REPORT DATE: 031782 NSSS: BW TYPE: PWR
SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: WATER FROM ROOF LEAKS.

(NSIC 172856) AT 2050, DURING NORMAL SHUTDOWN OPERATION, RMG-14 FAILED AND WAS DECLARED INOPERABLE. THIS CREATED AN EVENT CONTRARY TO TECH SPEC 3.3.3.1. CHEM/RAD DEPARTMENT WAS NOTIFIED AND MAINTENANCE WAS INITIATED. OPERABILITY WAS RESTORED ON 2/18/82. THIS SAME EVENT OCCURRED WITH RMG-14 ON 2/22/82 AND

2/26/82. CHEM/RAD DEPARTMENT WAS NOTIFIED AND MAINTENANCE WAS INITIATED. OPERABILITY WAS RESTORED ON 2/23/82 AND 2/27/82. THESE ARE THE FIRST OCCURRENCES FOR RMG-14, AND THE FOURTH, FIFTH, AND SIXTH EVENT REPORTED UNDER THIS SPECIFICATION. THE CAUSE OF THESE EVENTS IS ATTRIBUTED TO A LEAK OR LEAKS IN THE ROOF, ALLOWING WATER TO ENTER THE ELECTRICAL CONNECTOR. THE CONNECTOR WAS CLEANED AND REPAIRED. CORRECTIVE ACTION ASSIGNMENT 82-41 WAS WRITTEN TO REPLACE THE ROOF, INSTALL CONNECTOR CABLES WITH DRIP LOOPS, AND TO WATERPROOF THE ELECTRICAL CONNECTOR.

[80] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-011
REACTOR COOLANT FLOW CHANNEL FAILS OUT OF CALIBRATION.
EVENT DATE: 022482 REPORT DATE: 031782 NSSS: BW TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: VOLTAGE TRANSFORMER SHORT.

(NSIC 172852) AT 1800, DURING PERFORMANCE OF SP-112, RC FLOW, CHANNEL 'A' WAS FOUND OUT-OF-CALIBRATION. THIS CREATED AN EVENT NOT ATTRIBUTED TO A SPECIFIC SHUTDOWN ACTIVITY AS REQUIRED BY REG. GUIDE 1.16, AND, THEREFORE, CONTRARY TO TECH SPEC 3.3.1.1. MAINTENANCE WAS INITIATED AND OPERABILITY WAS RESTORED ON 2-26-82. THIS IS THE SECOND OCCURRENCE FOR RC FLOW, CHANNEL 'A', AND THE ELEVENTH REPORT UNDER THIS SPECIFICATION. THE CAUSE OF THIS EVENT IS ATTRIBUTED TO THE LINEAR VOLTAGE DIFFERENTIAL TRANSFORMER SHORTING OUT. THE LINEAR VOLTAGE DIFFERENTIAL TRANSFORMER WAS REPLACED AND THE INSTRUMENT WAS CALIBRATED PER SP-112.

[81] DAVIS-BESSE 1 DOCKET 50-346 LER 81-068 REV 1
UPDATE ON CORE DRILL THROUGH FIRE WALL NOT SEALED.
EVENT DATE: 102481 REPORT DATE: 031582 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: INADEQUATE PROCEDURES.

(NSIC 172902) AT 0930 HOURS, A QUALITY CONTROL INSPECTOR FOUND, DURING AN INSPECTION, AN IMPROPERLY SEALED CORE DRILL. THE CORE DRILL WAS IN A FIRE WALL IN ELECTRICAL PENETRATION ROOM #2. TECH SPEC 3.7.10 REQUIRES THAT NO PENETRATION BE LEFT OPEN THROUGH A FIRE WALL WITHOUT HAVING A FIRE WATCH STATIONED. THE CAUSE WAS PROCEDURAL INADEQUACY. THE CONSTRUCTION PERSONNEL WHO DRILLED THE HOLE AND PUT THE CONDUIT THROUGH IT DID NOT RESEAL THE HOLE. THE HOLE WAS IMMEDIATELY STUFFED WITH KAOWOOL AND WILL BE FILLED PERMANENTLY WITH BISCO. THE CORE DRILL PROCEDURE, CORE BORE LOG, AND THE CORE DRILL REPORT ARE ALSO BEING REVISED AS AN ADDITIONAL PRECAUTION TO PREVENT A RECURRENCE.

[82] DAVIS-BESSE 1 DOCKET 50-346 LER 82-009 REV 1
UPDATE ON EMERGENCY VENTILATION SYSTEM BOUNDARY DOOR TWICE FOUND OPEN.
EVENT DATE: 020982 REPORT DATE: 032282 NSSS: BW TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: DESIGN ERROR AND PERSONNEL ERROR.

(NSIC 172877) ON 2/9/82 AND AGAIN ON 2/17/82, DOOR 107 WAS FOUND BLOCKED OPEN. THIS IS THE ACCESS DOOR FROM THE #2 EMERGENCY CORE COOLING SYSTEM PUMP ROOM 115 TO THE MISCELLANEOUS WASTE MONITOR TANK ROOM 114. IT IS PART OF THE NEGATIVE PRESSURE BOUNDARY FOR THE EMERGENCY VENTILATION SYSTEM (EVS) AND WHEN OPEN WOULD REDUCE THE EFFECTIVENESS OF THE SYSTEM. THIS WAS AN ENTRY INTO THE ACTION STATEMENT OF TECH SPEC 3.6.5.3 WHICH REQUIRES THIS DOOR BE CLOSED IN MODES 1, 2, 3, AND 4. THE CAUSE IN THE FIRST INCIDENT IS A DESIGN DEFICIENCY. THERE IS NO DEMINERALIZED WATER SOURCE IN ROOM 114. THE CAUSE OF THE SECOND FINDING IS PERSONNEL ERROR IN BLOCKING A DOOR WITHOUT SHIFT SUPERVISOR PERMISSION. FCR 78-309, WHEN IMPLEMENTED, WOULD ELIMINATE THE NEED FOR FLUSHING. THERE ARE

ONGOING EFFORTS IN GENERAL ORIENTATION AND REQUALIFICATION CLASSES AS WELL AS SPECIAL CLASSES WITH THE CONTRACTORS.

[83] DAVIS-BESSE 1 DOCKET 50-346 LER 82-011
DROPPED ROD CAUSES QUADRANT POWER TILT.
EVENT DATE: 022582 REPORT DATE: 032582 NSSS: BW TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: BLOWN FUSE.

(NSIC 172875) AT 0320 HOURS DURING THE PERFORMANCE OF ST 5013.04, CONTROL ROD EXERCISING TEST, CONTROL ROD 5-2 DROPPED TO 0% WITHDRAWN. THE STATION ENTERED THE ACTION STATEMENT OF TECH SPEC 3.1.3.1. THE DROPPED ROD IN QUADRANT X-Y CAUSED QUADRANT POWER TILT TO INCREASE TO APPROXIMATELY 9% IN QUADRANT WX AND ZW IN EXCESS OF THE TRANSIENT LIMIT BUT LESS THAN THE MAXIMUM LIMIT OF TECH SPEC 3.2.4. THE CAUSE OF THE ROD DROP WAS A BLOWN FUSE IN THE TRANSFER SWITCH MODULE ASSEMBLY 'B' PHASE. THIS APPEARS TO BE A RANDOM FUSE FAILURE AS THE UNIT HAS NOT EXPERIENCED DIFFICULTIES PRIOR TO THIS EVENT. THE BLOWN FUSE WAS REPLACED AT 0530 HOURS. ROD 5-2 WAS DECLARED OPERABLE AT 550 HOURS ON FEBRUARY 25, 1982. AT 0650 HOURS, THE QUADRANT POWER TILT HAD RETURNED TO BELOW THE STEADY STATE LIMIT.

[84] DAVIS-BESSE 1 DOCKET 50-346 LER 82-013
SAFETY FEATURES ACTUATION CHANNEL FAILS.
EVENT DATE: 030282 REPORT DATE: 033182 NSSS: BW TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: WIRING AND CIRCUIT BOARD FAILURES.

(NSIC 172872) AT 2116 HOURS, RE 2007 IN SAFETY FEATURES ACTUATION SYSTEM (SFAS) CHANNEL 4 FAILED LOW. THE LOW RADIATION BISTABLE TRIPPED WHICH GAVE THE ALARM TO THE CONTROL ROOM OPERATOR. PER TECH SPEC 3.3.2.1 THE HIGH RADIATION BISTABLE WAS TRIPPED. AT 1905 HOURS ON 3/6/82 AND AT 1046 HOURS ON 3/7/82, RE 2007 AGAIN FAILED LOW. THE REMAINING THREE SFAS CHANNELS WERE OPERABLE THROUGHOUT THESE OCCURRENCES. THE CAUSE OF THE FAILURE ON 3/2/82 WAS DETERMINED TO BE A BROKEN WIRE IN THE CABLE CONNECTOR IN PENETRATION BOX P4LIGX. UNDER MWO IC-193-82, THE CABLE CONNECTOR WAS RETERMINATED AND THE SFAS CHANNEL RETURNED TO SERVICE ON 3/4/82. THE DETECTOR WAS REPLACED 3/7/82 UNDER MWO IC-216-82. ST 5031.04 WAS RUN AND THE SFAS CHANNEL RETURNED TO SERVICE ON 3/10/82.

[85] DAVIS-BESSE 1 DOCKET 50-346 LER 82-012
BORON INJECTION FOR LONG TERM SHUTDOWN LESS THAN REQUIRED CONCENTRATION.
EVENT DATE: 031482 REPORT DATE: 032682 NSSS: BW TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVE OPERATORS
CAUSE: OPERATOR ERROR.

(NSIC 172874) DURING THE FINAL STAGES OF REACTOR COOLANT SYSTEM (RCS) COOLDOWN FOR THE REFUELING OUTAGE, THE WATER INJECTED TO MAKEUP FOR THE RCS INVENTORY SHRINKAGE WAS OF A LOWER THAN EXPECTED BORON CONCENTRATION. THIS WAS DUE TO A FAILURE TO COMPLETELY CLOSE THE DEMINERALIZED WATER MAKEUP VALVE. ALTHOUGH THE REACTOR WAS MAINTAINED AT LEAST 14% SHUTDOWN, TECH SPEC 6.9.1.8.D REQUIRES A REPORT BE PREPARED WHENEVER 'AN UNPLANNED REACTIVITY INSERTION OF MORE THAN 0.5% DELTA K/K' OCCURS. THE MINIMUM BORON CONCENTRATION AFTER THE DILUTION WAS 1698 PPM, WHICH IS WELL ABOVE THE 600 PPM MINIMUM TO MAINTAIN THE REQUIRED 1% SHUTDOWN MARGIN. THE CAUSE OF THE OCCURRENCE WAS A COMBINATION OF PERSONNEL AND PROCEDURE ERROR. THE OPERATORS INVOLVED WERE COUNSELED AND THE EVENT WILL BE REVIEWED WITH ALL OPERATORS. THE AFFECTED PROCEDURES WILL BE MODIFIED TO STANDARDIZE AND LIMIT THE AVAILABILITY OF THE DEMINERALIZED WATER FLOWPATH AND PROVIDE BETTER GUIDANCE ON MONITORING THE BORON CONCENTRATION.

[86] DIABLO CANYON 1 DOCKET 50-275 LER 82-003
PLANT VENT IODINE MONITOR AND FLOW RECORDER INOPERABLE.
EVENT DATE: 021282 REPORT DATE: 031582 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: GENERATORS
CAUSE: POWER BREAKER TRIPPED FOR UNKNOWN REASON.

(NSIC 172969) OPERATORS RECEIVED A VITAL INSTRUMENT AC PANEL UNDERVOLTAGE ALARM IN THE CONTROL ROOM. WHEN THE FEEDER BREAKER TO INVERTER IY-11 WAS MANUALLY SWITCHED OFF TO CHECK FOR A TRIPPED BREAKER, INVERTER IY-11 TRIPPED. THE OPERATOR IMMEDIATELY PLACED PANEL PY-11 ON BACK-UP POWER AND PROCEEDED TO CHECK THE REMAINDER OF THE BREAKERS AND DISCOVERED THE FEEDER BREAKER TO PY-15 IN THE TRIPPED CONDITION. PY-15 WAS PLACED ON BACK-UP POWER. THE BREAKER WAS RESET AND PY-15 WAS PLACED BACK ON NORMAL POWER. FROM 1137 HOURS, WHEN INVERTER IY-11 TRIPPED UNTIL 1610 HOURS, BOTH CHANNELS OF THE PLANT VENT RADIATION MONITOR (RM 14 A & B) WERE INOPERABLE BECAUSE THE SAMPLE PUMPS DO NOT RESTART WHEN POWER TO THE MONITOR IS RESTORED. FURTHERMORE, FROM 1120 HOURS, WHEN IT IS SUSPECTED THAT PY-15 TRIPPED UNTIL 1210 HOURS WHEN POWER TO THE PANEL WAS RESTORED, THE PLANT VENT IODINE MONITOR (RM-24) AND THE PLANT VENT FLOW RECORDER (FR-12) WERE INOPERABLE.

[87] DIABLO CANYON 1 DOCKET 50-275 LER 82-002
PLANT VENT MONITOR SAMPLE PUMPS TRIP DUE TO LOW FLOW.
EVENT DATE: 022282 REPORT DATE: 032482 NSSS: WE TYPE: PWR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: FILTERS
CAUSE: DEBRIS FROM CONSTRUCTION CLOGGED FILTER PAPER.

(NSIC 172878) PRIOR TO FUEL LOAD, THE AIR SAMPLE PUMPS FOR THE PLANT VENT RADIATION MONITORS (RM 14A & B) WERE FOUND IN THE TRIPPED CONDITION BY A PLANT TECHNICIAN. TECH SPECS 3.3.3.10 ACTION STATEMENTS WERE MET. THE RAD MONITOR FILTER PAPER WAS ADVANCED IN EACH UNIT, THE PUMPS WERE RESTARTED AND THE FLOW RATE WAS ADJUSTED TO THE CORRECT VALUE. SINCE THE PLANT HAS NOT ENTERED MODE 6 OR ATTAINED CRITICALITY, NO RADIOACTIVE EFFLUENTS WERE RELEASED. RAD MONITOR FILTER PAPER WAS CLOGGED WITH EXCESSIVE DEBRIS CAUSED BY INTENSIVE CONSTRUCTION ACTIVITIES IN CONTAINMENT WHICH CAUSED A LOW FLOW ALARM, THUS TRIPPING THE SAMPLE PUMPS. NO FUTURE CORRECTIVE ACTION IS REQUIRED SINCE MAJOR CONSTRUCTION ACTIVITIES WILL CEASE WHEN FUEL IS LOADED.

[88] DRESDEN 2 DOCKET 50-237 LER 82-009
BOTH STANDBY GAS TREATMENT SYSTEM TRAINS FAIL TO AUTO START.
EVENT DATE: 031782 REPORT DATE: 041382 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: BLOWN GASKET ON CONTROLLER AND TEST PROCEDURE ERROR.

(NSIC 173060) DURING NORMAL OPERATION WHILE PERFORMING DIS 1700-7, THE REFUEL FLOOR HI RAD SURVEILLANCE, 'B' SBGTS FAILED WHEN AN AUTO INITIATION SIGNAL WAS GIVEN. THE 'A' SBGTS WAS IN STANDBY BUT DID NOT START UPON FAILURE OF 'B' SBGTS. THE 'A' SBGTS STARTED ON A MANUAL INITIATION. PREVIOUS SIMILAR OCCURRENCE REPORTED BY R.O. 81-72, 80-35, 79-65, 79-62, AND 79-53 ON DOCKET 50-237. THE CAUSE OF 'B' SBGTS FAILURE WAS A BLOWN GASKET ON FOXBORO CONTROLLER, MODEL 130M. THE GASKET WAS REPLACED AND THE 'B' SBGTS TESTED SATISFACTORILY. THE 'A' SBGTS FAILURE WAS DUE TO THE INITIATION SIGNAL NOT BEING MAINTAINED LONG ENOUGH TO COMPLETE TIMER ACTUATION. THE TEST PROCEDURE IS BEING CHANGED TO MAINTAIN THE TRIP SIGNAL FOR 30 SECONDS. IN THE FUTURE, TO DECREASE SYSTEM DOWNTIME, DEFECTIVE CONTROLLERS WILL BE REPLACED WITH SPARES.

[89] DRESDEN 3 DOCKET 50-249 LER 81-025 REV 1
UPDATE ON AUTOMATIC DEPRESSURIZATION SYSTEM RELIEF VALVE FAILUPE.
EVENT DATE: 091481 REPORT DATE: 022582 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
CAUSE: EXCESSIVE LEAKAGE OF THREADED PORTION OF VALVE.

(NSIC 172905) DURING NORMAL OPERATION WHILE PERFORMING ADS VALVE OPERABILITY SURVEILLANCE, THE 'B' ELECTROMATIC RELIEF VALVE FAILED TO OPEN AT RATED PRESSURE. BECAUSES OF HPCI INOPERABILITY, PER TECH SPEC 3.5.C., AN IMMEDIATE SHUTDOWN BEGAN AT 2240 HRS. REMAINING ADS VALVES AND LOW PRESSURE ECCS SYSTEMS WERE OPERABLE, AND REACTOR WAS AT LESS THAN 90 PSIG WITHIN THE REQUIRED 24 HOURS. LAST SIMILAR OCCURRENCE REPORTED BY R.O. 50-249/80-21. THE APPARENT CAUSE OF FAILURE WAS EXCESSIVE LEAKAGE ON THE THREADS BETWEEN THE CAGE AND THE DISC RETAINER PLUG. THE VALVE WAS REPLACED WITH A VALVE THAT HAD THE THREADED AREA WELDED TO PREVENT LEAKAGE. TO PREVENT FUTURE RECURRENCE, THE VALVE THREADS WILL BE SEAL WELDED UNTIL A MORE ACCEPTABLE ALTERNATIVE IS FOUND.

[90] DRESDEN 3 DOCKET 50-249 LER 82-004
CONTAINMENT VENT LINE LEAKAGE EXCEEDS LIMIT.
EVENT DATE: 011782 REPORT DATE: 020982 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: LEAKY VALVE SEAT.

(NSIC 172951) DURING LOCAL LEAK RATE TESTING OF CONTAINMENT VENT LINE, THE MEASURED LEAKAGE WAS 5612 SCFH WHICH EXCEEDS TECH SPEC 4.7.A FOR SINGLE ISOLATION (29.38 SCFH). INVESTIGATION SHOWED LEAKAGE THROUGH AO-3-1601-23. PREVIOUS OCCURRENCE REPORTED FOR UNIT 2 BY R.O. 50-237/81-05. LEAKAGE THROUGH THE VALVE WAS DUE TO DETERIORATION OF THE SEATING SURFACE. THE VALVE WILL BE REPLACED. FOLLOWING REPLACEMENT OF THE A.O. 3-1601-23 VALVE, THE VOLUME WILL BE RETESTED. IF ANY OTHER VALVE LEAKS ABOVE TECH SPEC LIMITS, IT WILL BE REPAIRED AND REPORTED AT THAT TIME. ENGINEERING IS REVIEWING THE SUBJECT VALVE FOR POSSIBLE REDESIGN OR MODIFICATION.

[91] DRESDEN 3 DOCKET 50-249 LER 82-006
STORAGE BATTERY TESTING MISSED.
EVENT DATE: 012282 REPORT DATE: 021782 NSSS: GE TYPE: BWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: BATTERIES & CHARGERS
CAUSE: PERSONNEL ERROR.

(NSIC 172813) THE QUARTERLY STORAGE BATTERY SURVEILLANCES (TECH SPEC 4.9.B.2) WERE NOT PERFORMED FOR THE THIRD QUARTER OF 1981. PREVIOUS OCCURRENCE REPORTED BY R.O. 81-68/03L-0 ON DOCKET 50-237. EVENT DUE TO MISCOORDINATION BETWEEN IMPLEMENTING NEW QUARTERLY BATTERY CHECK PROCEDURE AND REVISING THE SURVEILLANCE COMPUTER PROGRAM. EVENT REVIEWED WITH ALL PERSONNEL INVOLVED. A REVISION TO THE METHOD CHANGES THAT ARE MADE TO THE SURVEILLANCE COMPUTER PROGRAM WILL BE IMPLEMENTED TO PREVENT RECURRENCE.

[92] DRESDEN 3 DOCKET 50-249 LER 82-008
5 HPCI TEMPERATURE SWITCH SET POINTS EXCEED LIMIT.
EVENT DATE: 012682 REPORT DATE: 022382 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: MISALIGNED MICROSWITCH DUE TO LOOSE SCREWS.

(NSIC 172814) WHILE PERFORMING REFUEL SURVEILLANCE DIS 2300-7, CALIBRATION TESTING ON THE HPCI TEMPERATURE SWITCHES, THE FOLLOWING SWITCHES WERE ABOVE TECH SPEC LIMITS OF TABLE 3.2.A: 2371A, 2372A, 2373B, 2370C AND 2370D. PREVIOUS OCCURRENCES REPORTED BY R.O. 050-249/80-8, 80-11, 78-11, AND R.O. 050-237/81-7. THE EVENT WAS CAUSED BY A MISALIGNED MICROSWITCH DUE TO A FEW LOOSE SCREWS WHICH

ENLARGED THE GAP BETWEEN THE ACTUATOR AND SWITCH PLUNGER. THE SWITCHES WERE ALIGNED CORRECTLY, SCREWS TIGHTENED AND SECURED WITH LOC-TITE, AND CALIBRATED ACCORDING TO DIS 2300-7. ALL HPCI AREA TEMPERATURE SWITCHES WILL CONTINUE TO BE TESTED DURING EACH REFUELING OUTAGE.

[93] DRESDEN 3 DOCKET 50-249 LER 82-014
CRACK IN HEAD SEAL LEAK DETECTION PIPING CAUSES LEAK.
EVENT DATE: 031782 REPORT DATE: 033082 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: PIPES,FITTINGS
CAUSE: UNDETERMINED.

(NSIC 172837) DURING REFUELING, DRIPPING WATER WITHIN THE DRYWELL WAS TRACED TO A .25 INCH THROUGH-WALL CRACK IN THE .50 INCH HEAD SEAL LEAK DETECTION PIPING LOCATED APPROXIMATELY 3 FEET FROM VESSEL FLANGE. THIS EVENT WAS OF MINIMAL SAFETY SIGNIFICANCE BECAUSE ALL LEAKAGE WAS CONTAINED IN THE DRYWELL FLOOR DRAIN SYSTEM AND POTENTIAL LEAKAGE IS WITHIN THE CAPABILITY OF THE EMERGENCY CORE COOLING SYSTEMS. THE CAUSE OF THE PIPE CRACK IS UNDETERMINED. LEAKAGE (APPROXIMATELY 1 DROP PER MINUTE) IS LOCATED IN A SECTION OF PIPE WHICH CAN NOT BE ISOLATED. REPAIR AND ANALYSIS WILL BE ACCOMPLISHED FOLLOWING CAVITY DRAIN DOWN AND REACTOR VESSEL HEAD INSTALLATION. A SUPPLEMENTARY REPORT WILL BE ISSUED AFTER THE COMPLETION OF REPAIR AND ANALYSIS.

[94] FARLEY 1 DOCKET 50-348 LER 82-005
CONTROL ROOM VENTILATION SYSTEM TRAIN FAILS.
EVENT DATE: 021782 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: MAINTENANCE ERROR.

(NSIC 172870) AT 2020, WHILE PERFORMING FNP-1-STP-26.0 (CONTROL ROOM TRAIN A (B) VENTILATION OPERABILITY TEST), THE 'B' TRAIN VENTILATION SYSTEM WAS DECLARED INOPERABLE WHEN THE SYSTEM FAILED TO MAINTAIN / 1/8: W.G. POSITIVE PRESSURE IN THE CONTROL ROOM. TECH SPEC 3.7.7.1 REQUIRES TWO INDEPENDENT CONTROL ROOM EMERGENCY VENTILATION SYSTEMS TO BE OPERABLE. TECH SPEC 3.7.7.1 ACTION STATEMENT REQUIREMENTS WERE MET. THE INOPERABILITY OF THE 'B' TRAIN VENTILATION SYSTEM WAS APPARENTLY DUE TO AN INSPECTION PORT BEING IMPROPERLY CLOSED FOLLOWING AN INSPECTION OF THE SYSTEM. THE PORT WAS PROPERLY CLOSED. UPON COMPLETION OF FNP-1-STP-26.0 THE 'B' TRAIN CONTROL ROOM EMERGENCY VENTILATION SYSTEM WAS DECLARED OPERABLE.

[95] FARLEY 1 DOCKET 50-348 LER 82-006
INADVERTENT DELUGE SYSTEM ACTUATION REDUCES FIRE PROTECTION TANK LEVELS.
EVENT DATE: 031082 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: PERSONNEL ERROR.

(NSIC 172890) AT 0800, THE LEVELS IN FIRE PROTECTION TANKS A AND B FELL TO APPROXIMATELY 85,000 GALLONS EACH, AS A RESULT OF AN INADVERTENT ACTUATION OF THE FIRE PROTECTION DELUGE SYSTEM ON COOLING TOWER 1A. TECH SPECS 3.7.11.1, IN PART, REQUIRED A TANK LEVEL OF 250,000 GALLONS. TECH SPEC 3.7.11.1 ACTION STATEMENT REQUIREMENTS WERE MET. THE INADVERTENT ACTUATION WAS CAUSED BY PERSONNEL ERROR. THE AIR COMPRESSOR WHICH NORMALLY SUPPLIES AIR FOR THE FIRE SUPPRESSION SYSTEM WAS INOPERABLE. A BOTTLE OF NITROGEN WAS TEMPORARILY INSTALLED TO PROVIDE THE NECESSARY PRESSURE. WHEN THE BOTTLE WAS ROUTINELY REPLACED THE REGULATOR SETTING WAS NOT PROPERLY ADJUSTED.

[96] FARLEY 1 DOCKET 50-348 LER 82-013
CONTAINMENT ATMOSPHERE MONITORS INOPERABLE.
EVENT DATE: 031782 REPORT DATE: 041682 NSSS: WE TYPE: PWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: PUMPS
CAUSE. VACUUM PUMP FAILURE WHILE OTHER PUMP OUT OF SERVICE.

(NSIC 173088) AT 1550 ON 3/17/82 CONTAINMENT ATMOSPHERE ACTIVITY MONITORS R-11 (PARTICULATE MONITOR) AND R-12 (GASEOUS MONITOR) WERE DECLARED INOPERABLE DUE TO THE FAILURE OF THE VACUUM PUMP. TECH. SPEC. 3.4.6.1 REQUIRES THESE RADIATION MONITORS TO BE OPERABLE. TECH. SPEC. 3.4.6.1 ACTION STATEMENT REQUIREMENTS WERE MET. MONITORS R-11 AND R-12 ARE EQUIPPED WITH TWO VACUUM PUMPS, ONE SERVING AS AN INSTALLED SPARE. WHILE THE INBOARD PUMP WAS OUT OF SERVICE, THE OUTBOARD PUMP FAILED. FOLLOWING REPLACEMENT OF THE FILTER AND GASKET, THE INBOARD PUMP WAS RETURNED TO SERVICE AND R-11 AND R-12 WERE DECLARED OPERABLE AT 0700 ON 3/18/82. SUBSEQUENT TO THIS EVENT, THE OUTBOARD PUMP WAS REPLACED TO PROVIDE AN OPERABLE INSTALLED SPARE PUMP.

[97] FARLEY 1 DOCKET 50-348 LER 82-012
AFWS TURBINE PUMP INOPERABLE DUE TO BROKEN OIL BUBBLE.
EVENT DATE: 032682 REPORT DATE: 042282 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: PUMPS
CAUSE: CONTRACTOR PERSONNEL ERROR.

(NSIC 173019) DURING INSPECTION, THE TURBINE DRIVEN AUXILIARY FEEDWATER PUMP WAS DECLARED INOPERABLE WHEN THE OUTBOARD BEARING OIL BUBBLER WAS FOUND BROKEN AND ITS OIL DRAINED. TECH SPEC 3.7.1.2, IN PART, REQUIRES THE TDAFW PUMP TO BE OPERABLE. TECH SPEC 3.7.1.2 ACTION STATEMENT REQUIREMENTS WERE MET. THE OILER IS SUSPECTED TO HAVE BEEN BROKEN WHILE WORKERS WERE HANDLING SCAFFOLDING IN THE AREA. FOLLOWING REPLACEMENT OF THE OILER AND ADDITION OF OIL, THE TDAFW PUMP WAS DECLARED OPERABLE. APPROPRIATE PERSONNEL WILL BE INFORMED OF THE INCIDENT AND INSTRUCTED TO REPORT SUCH AN INCIDENT TO OPERATIONS PERSONNEL AT THE TIME OF THE OCCURRENCE.

[98] FARLEY 1 DOCKET 50-348 LER 82-014
SET POINT DRIFT IN T AVERAGE CHANNEL.
EVENT DATE: 032882 REPORT DATE: 042282 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 173021) WHILE PERFORMING FNP-1-STP-201. 19B (RCS TE-422B & TE-422D CALIBRATION AND FUNCTIONAL TEST), THE TAVG-LOW-LOW B INSTRUMENTATION LOOP WAS DECLARED INOPERABLE AS A RESULT OF AN OUT OF SPEC. INDICATOR READING. TECH SPEC 3.3.2.1, IN PART, REQUIRES THIS INSTRUMENTATION LOOP TO BE OPERABLE. TECH SPEC 3.3.2.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT IS ATTRIBUTABLE TO SETPOINT DRIFT. THE POWER SUPPLY CARD WAS REPLACED AND FOLLOWING THE PERFORMANCE OF FNP-1-STP-201.19B, THE TE-422D INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE.

[99] FARLEY 2 DOCKET 50-364 LER 82-005
AC POWER TRAIN INOPERABLE DUE TO DENERGIZED EMERGENCY BUS.
EVENT DATE: 022682 REPORT DATE: 032582 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: UNDETERMINED.

(NSIC 173096) AT 1000 ON 2/26/82 THE 4160 VOLT "B" TRAIN A.C. ELECTRICAL POWER CIRCUIT WAS DECLARED INOPERABLE WHEN EMERGENCY BUS 2G WAS DENERGIZED. TECH SPEC 3.8.1.1, IN PART, REQUIRES THE 4160 VOLT "B" TRAIN ELECTRICAL CIRCUIT TO BE OPERABLE. TECH SPEC 3.8.1.1 ACTION STATEMENT REQUIREMENTS WERE MET. THE 2G BUS WAS DENERGIZED WHEN BREAKER 2-DG15 OPENED. ALL EVENTS CONSIDERED AS POSSIBLE

CAUSES WERE INVESTIGATED. INSTRUMENTATION INDICATORS AND RECORDINGS WERE NOT SUFFICIENT TO PROVE CONCLUSIVELY THE ACTUAL CAUSE. ONE OF THE RELAYS WHICH TRIPS THE BREAKER DOES NOT UTILIZE TARGETS IN THE PRESENT DESIGN. THE ADDITION OF TARGETS TO THIS RELAY WILL BE EVALUATED AS PART OF A DESIGN MODIFICATION TO ALLOW A MORE DETAILED ANALYSIS OF THE EVENT SHOULD A SIMILAR INCIDENT OCCUR IN THE FUTURE. FOLLOWING A THOROUGH INSPECTION OF THE BREAKER AND CIRCUITRY, THE 2-DG15 BREAKER WAS CLOSED RESTORING THE "B" TRAIN ELECTRICAL CIRCUIT AT 1509 ON 2/26/82.

[100] FARLEY 2 DOCKET 50-364 LER 82-008
STEAM GENERATOR B LEVEL INDICATION CHANNEL INOPERABLE.
EVENT DATE: 022682 REPORT DATE: 032582 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: FLOW BLOCKAGE IN REFERENCE LEG.

(NSIC 173097) AT 2330 ON 2/26/82 THE INSTRUMENTATION LOOP ASSOCIATED WITH LI-485 (S.G. "B" LEVEL INDICATION) WAS DECLARED INOPERABLE WHEN ITS READING WAS OUT OF TOLERANCE WITH THE OTHER CHANNELS. TECH SPEC 3.3.1, IN PART, REQUIRES THIS INSTRUMENTATION LOOP TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY AN OBSTRUCTION IN THE REFERENCE LEG. THE REFERENCE LEG OBSTRUCTION WAS CLEARED AND THE LEG REFILLED. AT 0215 ON 2/27/82 THE INSTRUMENTATION LOOP ASSOCIATED WITH LI-485 WAS RETURNED TO SERVICE.

[101] FARLEY 2 DOCKET 50-364 LER 82-010
STEAM GENERATOR A LEVEL INDICATION CHANNEL INOPERABLE.
EVENT DATE: 022682 REPORT DATE: 032582 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LOSS OF LEVEL IN REFERENCE LEG.

(NSIC 173099) AT 0440 ON 2/26/82 THE INSTRUMENTATION LOOP ASSOCIATED WITH LI-474 (S.G. "A" LEVEL INDICATOR) WAS DECLARED INOPERABLE WHEN ITS READING WAS OUT OF TOLERANCE WITH THE OTHER TWO LEVEL INDICATOR READINGS. TECH SPEC SECTION 3.3.2, IN PART, REQUIRES THIS INSTRUMENTATION LOOP TO BE OPERABLE. TECH SPEC 3.3.2 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY THE LOSS OF THE NECESSARY LEVEL IN THE REFERENCE LEG WHILE THE STEAM GENERATOR WAS NOT IN SERVICE. THE REFERENCE LEG WAS REFILLED AND UPON SATISFACTORY COMPLETION OF FNP-2-STP-213.1 (STEAM GENERATOR 2A LT-474 LOOP CALIBRATION AND FUNCTIONAL TEST) THE INSTRUMENTATION CHANNEL ASSOCIATED WITH LEVEL INDICATOR LT-474 WAS DECLARED OPERABLE AT 2336 ON 2/26/82.

[102] FARLEY 2 DOCKET 50-364 LER 82-009
STEAM GENERATOR FLOW CHANNEL INOPERABLE.
EVENT DATE: 022882 REPORT DATE: 032582 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: VALVES
CAUSE: LEAKING EQUALIZING VALVE.

(NSIC 173098) AT 0400 THE INSTRUMENTATION LOOP ASSOCIATED WITH FT-474 (S.G. "A" FLOW TRANSMITTER) WAS DECLARED INOPERABLE WHEN ITS READING WAS OUT OF TOLERANCE WITH THE OTHER CHANNELS. TECH SPEC SECTION 3.3.2, IN PART, REQUIRES THIS INSTRUMENTATION LOOP TO BE OPERABLE. TECH SPEC 3.3.2 ACTION STATEMENT REQUIREMENTS WERE MET. THE CAUSE OF THIS EVENT WAS A LEAKING EQUALIZING VALVE. THE VALVE STEM WAS REPAIRED AND UPON SATISFACTORY COMPLETION OF FNP-2-STP-213.19A (STEAM GENERATOR 2A FT-474 LOOP CALIBRATION AND FUNCTIONAL TEST) THE INSTRUMENTATION LOOP ASSOCIATED WITH FT-474 WAS DECLARED OPERABLE AT 1540.

[103] FARLEY 2 DOCKET 50-364 LER 82-013
3 RADIATION MONITORS INOPERABLE DUE TO POWER LOSS.
EVENT DATE: 032582 REPORT DATE: 040682 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: GENERATOR TRIP.

(NSIC 172955) RADIATION MONITORS R-11 (PARTICULATE ACTIVITY - RCS LEAKAGE DETECTION), R-12, (GASEOUS ACTIVITY - RCS LEAKAGE DETECTION) AND R-22 (NOBLE GAS ACTIVITY) WERE DECLARED INOPERABLE WHEN THEIR SUPPLY POWER WAS INTERRUPTED DUE TO A GENERATOR TRIP. TECH SPEC SECTIONS 3.3.3.1 AND 3.3.3.11, IN PART, REQUIRE THESE RADIATION MONITORS TO BE OPERABLE. THE POWER SUPPLY TO RADIATION MONITORS R-11, R-12, AND R-22 WAS DE-ENERGIZED AS A RESULT OF A GENERATOR TRIP WHICH OCCURRED WHILE THE 2A STARTUP TRANSFORMER WAS OUT OF SERVICE FOR MAINTENANCE. THE STARTUP TRANSFORMER WAS RETURNED TO SERVICE AND R-11, R-12 AND R-22 WERE DECLARED OPERABLE.

[104] FARLEY 2 DOCKET 50-364 LER 82-015
STACK EFFLUENT MONITOR READING INACCURATE.
EVENT DATE: 032582 REPORT DATE: 042282 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: ELECTRICAL CONDUCTORS
CAUSE: COMMUNICATION LINK TO COMPUTER FAILED.

(NSIC 173025) DURING SURVEILLANCE, RADIATION MONITOR R29B (PLANT VENT STACK EFFLUENT MONITOR) INSTRUMENTATION CHANNEL WAS DECLARED INOPERABLE WHEN DISPLAYS ON ALL READOUT CONSOLES WERE DETERMINED TO BE INACCURATE. TECH SPEC 3.3.3.1, IN PART, REQUIRES R29B INSTRUMENTATION CHANNEL TO BE OPERABLE. THIS EVENT IS ATTRIBUTABLE TO DIRTY CONTACTS AND A FAULTY COMMUNICATION LINK BETWEEN THE COMPUTER AND THE DETECTOR. THE CONTACTS WERE CLEANED AND FOLLOWING REPAIR OF THE COMMUNICATION LINK, THE RADIATION MONITOR R29B INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE.

[105] FARLEY 2 DOCKET 50-364 LER 82-014
CHLORINE DETECTOR INOPERABLE 3 TIMES DUE TO TAPE DRIVE FAILURE.
EVENT DATE: 032682 REPORT DATE: 042282 NSSS: WE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: SHEARED PIN IN DRIVE MECHANISM.

(NSIC 173023) ON 3/26/82, 3/28/82, AND 4/08/82, THE B TRAIN CHLORINE DETECTOR WAS DECLARED INOPERABLE DUE TO THE DETECTOR TAPE NOT ADVANCING. TECH SPEC 3.3.3.6, IN PART, REQUIRES THE CHLORINE DETECTOR TO BE OPERABLE. THESE EVENTS WERE ATTRIBUTABLE TO THE MOVEMENT INDICATOR BINDING THE DETECTOR TAPE AND A SHEARED PIN IN THE TAPE DRIVE MECHANISM. FOLLOWING ADJUSTMENTS TO THE MOVEMENT INDICATOR AND THE TAKE UP REEL, THE TAPE ADVANCED PROPERLY AND THE B TRAIN CHLORINE DETECTOR WAS DECLARED OPERABLE ON 3/26/82 AND 3/28/82. FOLLOWING RECURRENCE OF THIS EVENT ON 4/08/82, FURTHER INVESTIGATION REVEALED THAT A PIN IN THE TAPE DRIVE MECHANISM HAD SHEARED. THE PIN WAS REPLACED.

[106] FITZPATRICK DOCKET 50-333 LER 82-006
SUPPRESSION POOL LEVEL BELOW TECH SPEC LIMIT.
EVENT DATE: 030682 REPORT DATE: 033082 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: OPERATOR ERROR.

(NSIC 172830) DURING NORMAL STARTUP OPERATIONS, PRESSURE SUPPRESSION POOL WATER LEVEL WAS FOUND 0.4 INCHES BELOW THE LIMIT OF TECH SPEC 3.7.A.1. TECH SPEC TABLE 3.2-6 REQUIRES EITHER NARROW RANGE TORUS WATER LEVEL OR WIDE RANGE TORUS WATER LEVEL TO BE OPERABLE. BOTH OF THESE INSTRUMENT SUBSYSTEMS WERE FULLY OPERABLE. BY DESIGN, AN ADDITIONAL NARROW RANGE TORUS WATER LEVEL INSTRUMENT IS ALSO

PROVIDED. INVESTIGATION REVEALED THAT TORUS WATER LEVEL WAS BEING MONITORED USING INDICATIONS DERIVED FROM THIS THIRD INSTRUMENT SUBSYSTEM WHICH INDICATED THAT TORUS WATER LEVEL WAS WITHIN TECH SPEC LIMITS. PERSONNEL ERROR WAS THE CAUSE. SUPPRESSION POOL WATER LEVEL WAS CORRECTED IMMEDIATELY. TECH SPEC CHANGES TO ELIMINATE THE POSSIBLE ERROR ARE BEING CONSIDERED TO PREVENT RECURRENCE.

[107] FITZPATRICK DOCKET 50-333 LER 82-012
TWO SNUBBERS ON FUEL POOL COOLING TO RHR RETURN LINE FOUND FAILED.
EVENT DATE: 031682 REPORT DATE: 041582 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: UNDETERMINED.

(NSIC 173065) DURING NORMAL OPERATION, PERSONNEL NOTED TWO (2) DAMAGED SNUBBERS ON THE FUEL POOL COOLING TO RHR RETURN LINE. BOTH SNUBBERS ARE REQUIRED TO BE OPERABLE BY TECH SPEC 3.6.I.1 AND WERE REPLACED WITH OPERABLE SPARES WITHIN THE 72 HOURS ALLOWED BY TECH SPEC 3.6.I.2. CAUSE OF THE DAMAGE TO THE SNUBBERS HAS NOT BEEN DETERMINED. INSPECTION OF THE PIPE AND ASSOCIATED HANGERS AND OTHER PIPE SUPPORTS DID NOT REVEAL EVIDENCE OF DAMAGE. INVESTIGATION INTO THE CAUSE AND PREVENTING RECURRENCE CONTINUES.

[108] FITZPATRICK DOCKET 50-333 LER 82-016
RCIC MADE INOPERABLE DURING REPAIR OF SYSTEM LOGIC CIRCUITS.
EVENT DATE: 032982 REPORT DATE: 042082 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: FLOODING OF VALVE PIT.

(NSIC 173131) DURING NORMAL OPERATION, THE REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM WAS INTENTIONALLY MADE INOPERABLE TO ALLOW TROUBLESHOOTING AND REPAIR OF A DC GROUND ON THE SYSTEM LOGIC CIRCUITS WHILE THE SYSTEM WAS REQUIRED TO BE OPERABLE BY TECH SPEC 3.5.E. HIGH PRESSURE COOLANT INJECTION WAS TESTED AND WAS OPERABLE AS REQUIRED BY TECH SPEC 3.5.E.2. GROUNDING OF THE LOGIC SYSTEM WAS DUE TO FAILED SUMP PUMP WHICH ALLOWED FLOODING OF A VALVE PIT. CLEANING AND DRYING OF A VALVE POSITION SWITCH CLEARED THE GROUND. THE SUMP PUMP WAS REPLACED TO PREVENT RECURRENCE.

[109] FT. CALHOUN 1 DOCKET 50-285 LER 82-001
FIRE WATCH FOR BREACHED FIRE BARRIER NOT ESTABLISHED.
EVENT DATE: 011182 REPORT DATE: 020982 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
CAUSE: OPERATOR ERROR.

(NSIC 172939) WHILE PERFORMING ST-FP-0 (F.1), TWO FIRE BARRIER PENETRATIONS WERE FOUND TO BE NON-FUNCTIONAL. THE SHIFT SUPERVISOR WAS IMMEDIATELY NOTIFIED. CONTRARY TO THE REQUIREMENTS OF TECH SPEC 2.19(7), A FIRE WATCH WAS NOT POSTED WITHIN ONE HOUR, NOR WAS AN HOURLY FIRE WATCH PATROL ESTABLISHED. PERSONNEL PERFORMING THE FIRE BARRIER INSPECTION BROUGHT THIS MATTER TO THE ATTENTION OF THE SHIFT SUPERVISOR. DUE TO THE PRESSURE OF OTHER OPERATIONAL MATTERS AT THE TIME, INSPECTION PERSONNEL WERE ADVISED TO CONTACT ANOTHER PLANT MANAGEMENT REPRESENTATIVE. THIS CONTACT WAS MADE; HOWEVER, LACK OF PROPER COMMUNICATION ON THIS OCCASION DID NOT RESULT IN PROPER CORRECTIVE ACTION UNTIL THE FOLLOWING DAY, WHEN THE MATTER WAS AGAIN DISCUSSED WITH THE MANAGEMENT REPRESENTATIVE. REINSTRUCTION WAS PROVIDED TO BOTH SUPERVISORY AND INSPECTION PERSONNEL INVOLVED IN THIS EVENT.

[110] FT. CALHOUN 1 DOCKET 50-285 LER 82-002
CONTAINMENT RADIATION HIGH SIGNAL RELAY FAILS TO ACTUATE.
EVENT DATE: 011482 REPORT DATE: 021282 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: RELAYS
CAUSE: RELAY BURNT OUT.

(NSIC 172940) LOCKOUT RELAY 86B1/CRHS (CONTAINMENT RADIATION HIGH SIGNAL) FAILED TO ACTUATE ON DEMAND BY THE PLANT RADIATION MONITORING SYSTEM. THIS RESULTED IN THE FAILURE OF ONE OF THE ENGINEERED SAFETY FEATURE CHANNELS TO OPERATE. THE COIL OF THE 86B1/CRHS LOCKOUT RELAY WAS NOTICED TO HAVE BURNT AND THEREBY OPEN-CIRCUITED. THE COIL WAS IMMEDIATELY REPLACED PER MAINTENANCE ORDER #13650. IN ADDITION, THE RELAY COIL LATCHING MECHANISM WAS CLEANED, LUBRICATED AND CHECKED FOR PROPER ALIGNMENT.

[111] FT. CALHOUN 1 DOCKET 50-285 LER 82-004
RADIOACTIVITY RELEASED WHEN STACK GAS MONITOR FAILS TO ALARM.
EVENT DATE: 020382 REPORT DATE: 020582 NSSS: CE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: FAULTY ELECTRONIC ALARM MODULE.

(NSIC 173142) A SMALL QUANTITY OF RADIOACTIVE GAS/PARTICULATE WAS RELEASED TO THE AUXILIARY BUILDING. THIS OCCURRED WHILE ATTEMPTING TO DRAW A SAMPLE OF GAS FROM THE PRESSURIZER STEAM SPACE. DURING THE INCIDENT THE STACK GAS MONITOR, RM-062, FAILED TO ALARM AT THE APPROPRIATE SETPOINT. RM-061, THE STACK PARTICULATE MONITOR DID ACTUATE AT THE DESIRED SETPOINT AND INITIATED A VIAS (VENTILATION ISOLATION ACTUATION SIGNAL). THE RELEASE OF RADIOACTIVITY TO THE ATMOSPHERE WAS OF SHORT DURATION AND WAS WITHIN TECH SPEC LIMITS. RADIATION MONITOR, RM-062, (STACK GAS MONITOR), DID NOT ALARM AND/OR INITIATE A VIAS (VENTILATION ISOLATION ACTUATION SIGNAL) AT THE DESIRED SETPOINT DUE TO A FAULTY ELECTRONIC ALARM MODULE. THE MODULE WAS RECALIBRATED PER MAINTENANCE ORDER #13865 AND RM-062 WAS RETURNED TO OPERABILITY FOLLOWING SEVERAL FUNCTIONAL RM-062 ALARM CHECKS.

[112] FT. CALHOUN 1 DOCKET 50-285 LER 82-003
CONTAINMENT ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 020382 REPORT DATE: 030382 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: SOLENOID VALVE PLUNGER STUCK.

(NSIC 173174) THE CONTAINMENT ISOLATION VALVE ASSOCIATED WITH THE GAS VENT HEADER, (HCV-507A), FAILED TO CLOSE UPON DEMAND. EMERGENCY PROCEDURE, EP-25, LOSS OF CONTAINMENT INTEGRITY, WAS IMMEDIATELY ISSUED AND FOLLOWED. EMERGENCY M.O. #13830 WAS WRITTEN TO CORRECT THE VALVE PROBLEM. IT WAS DISCOVERED THAT THE SOLENOID VALVE PLUNGER HAD STUCK IN THE ENERGIZED POSITION. THE SOLENOID PLUNGER WAS FREED AND THE VALVE WAS CYCLED SEVERAL TIMES TO VERIFY OPERABILITY PRIOR TO RETURNING TO AN OPERABLE STATUS.

[113] FT. ST. VRAIN DOCKET 50-267 LER [illegible]005
STEAM GENERATOR RUPTURE DISK LEAK SENSOR ISOLATED.
EVENT DATE: 021582 REPORT DATE: 031782 NSSS: GA TYPE: [illegible]
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 172989) THE LOOP 2 STEAM GENERATOR PENETRATION RUPTURE DISK NO. 1 LEAK ALARM PRESSURE SWITCH WAS FOUND ISOLATED WHICH COULD HAVE ALLOWED PRESSURE BETWEEN THE RUPTURE DISK AND ITS ASSOCIATED RELIEF VALVE TO EXCEED THE 5 PSIG LIMIT SPECIFIED IN LCO 4.2.7(D). THIS REPORTABLE PER TECH SPEC AC 7.5.2(B)3. THE REASON FOR THE PRESSURE SWITCH ISOLATION VALVE BEING CLOSED IS NOT KNOWN. VALVE WAS RE-OPENED, SAFETY SYSTEM PIPING VENTED, AND ALARM CLEARED.

[114] FT. ST. VRAIN DOCKET 50-267 LER 82-006
DEWPOINT MOISTURE LIMIT EXCEEDED.
EVENT DATE: 021882 REPORT DATE: 031982 NSSS: GA TYPE: HTGR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: MAINTENANCE WORK.

(NSIC 172998) THE DEWPOINT MOISTURE LIMIT OF FIGURE 4.2.11-1 WAS EXCEEDED ON FOUR OCCASIONS. THIS IS REPORTABLE AS A DEGRADED MODE OF LCO 4.2.11 PER TECH SPEC AC 7.5.2(B)2. SIMILAR REPORTS: 76-06, 77-02, 77-13, 78-16, 78-39, 79-02, 79-31, 79-43, 80-11, 80-19, 80-33, 80-36, 80-09, 80-20, AND 81-45. DURING A MAINTENANCE/MODIFICATION OUTAGE, THE PRIMARY COOLANT BECAME CONTAMINATED WITH MOISTURE. THE REACTOR WAS SHUTDOWN AND THE COOLANT PURIFICATION TRAINS ARE BEING UTILIZED TO REDUCE THE IMPURITY LEVELS.

[115] FT. ST. VRAIN DOCKET 50-267 LER 82-008
9 HYDRAULIC SHOCK SUPPRESSORS INOPERABLE.
EVENT DATE: 022882 REPORT DATE: 032582 NSSS: GA TYPE: HTGR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: 5 MECHANICAL ADJUSTMENTS, 4 BLOCK VALVE REPAIR.

(NSIC 172993) DURING TESTING OF THE HYDRAULIC SHOCK SUPPRESSORS (SNUBBERS), A TOTAL OF NINE CLASS I SNUBBERS WERE FOUND TO BE INOPERABLE. THE REACTOR HAS OPERATED AT OTHER THAN SHUTDOWN OR REFUELING MODE SINCE THE PREVIOUS SNUBBER SURVEILLANCE WAS PERFORMED. SINCE THE DATE OF INOPERABILITY CANNOT BE ACCURATELY DETERMINED, OPERATION IN A DEGRADED MODE OF LCO 4.3.10(D) AND TECH SPEC AC 7.5.2(B)2 MUST BE ASSUMED. RELATED RO'S: 81-026, 81-038, 81-051, 81-056, 81-059, 81-064, 81-074, AND 82-001. OF THE NINE CLASS I SNUBBERS THAT WERE CLASSIFIED AS INOPERABLE, FIVE REQUIRED MECHANICAL ADJUSTMENTS, FOUR REQUIRED VALVE BLOCK, CYLINDER/RESERVOIR REPAIR. THE SNUBBERS WERE REPAIRED AS REQUIRED, FILLED, PURGED AND TESTED, RE-INSTALLED IN THE SYSTEM, AND CLASSIFIED AS OPERABLE. SURVEILLANCE HAS BEEN ADJUSTED TO 31 DAYS &/- 25% AS PER TECH SPEC.

[116] FT. ST. VRAIN DOCKET 50-267 LER 82-009
UNSAMPLED GASEOUS RELEASE OCCURS.
EVENT DATE: 030682 REPORT DATE: 040582 NSSS: GA TYPE: HTGR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: VALVES
CAUSE: PERSONNEL ERROR.

(NSIC 172849) WITH THE REACTOR SHUTDOWN AND DURING VALVE LINEUP FOR AN AUTHORIZED GAS WASTE RELEASE, A VALVE WAS INADVERTENTLY LEFT OPEN, ALLOWING SOME OF THE SAMPLED GAS TO BE RELEASED THROUGH A VACUUM TANK. SINCE THERE WAS POTENTIALLY A SMALL AMOUNT OF UNSAMPLED GAS RELEASED FROM THE VACUUM TANK, THIS REPRESENTS A DEGRADED MODE OF FORT ST. VRAIN TECH SPECS LCO 4.8.1(A)., AND IS REPORTABLE PER TECH SPECS AC 7.5.2(B)3. SIMILAR OCCURRENCES ARE: RO'S 78-22, 79-33, AND 80-63. A VALVE WAS INADVERTENTLY LEFT OPEN WHILE PREPARING FOR AN AUTHORIZED GAS WASTE RELEASE. UNSAMPLED RELEASE WAS TERMINATED AND VALVE LINEUP WAS CORRECTED. PROCEDURE IS BEING REVISED TO REQUIRE A CHECK OF VALVE LINEUP BY AN INDEPENDENT OBSERVER. A BURST RUPTURE DISK WAS REPLACED.

[117] GINNA DOCKET 50-244 LER 81-021
CONTAINMENT RADIATION MONITORS INOPERABLE DURING CHECK VALVE MAINTENANCE.
EVENT DATE: 122281 REPORT DATE: 012182 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: VALVES
CAUSE: DIRT ON CHECK VALVE SEAT.

(NSIC 172803) A PERIODIC TEST IDENTIFIED THE CONTAINMENT GAS RADIATION MONITOR RETURN LINE CHECK VALVE WAS NOT SEALING TIGHT. THE LINE WAS ISOLATED FOR MAINTENANCE RENDERING THE GAS RADIATION MONITORS INOPERABLE. DIRT POSSIBLY FROM

THE VEINS OF THE MONITOR PUMP DEPOSITED ON THE SEAT OF THE ROCKWELL 1 INCH 1500 PSI VALVE USED IN A LOW PRESSURE APPLICATION. AIR WAS BLOWN THROUGH THE NON-MAINTAINABLE VALVE TO REMOVE THE DIRT. THE VALVE WAS FOUND ACCEPTABLE DURING A FOLLOW-UP PERIODIC TEST.

[118] GINNA DOCKET 50-244 LER 82-001
CONTAINMENT ISOLATION VALVE NOT TESTED FOLLOWING REPAIR.
EVENT DATE: 010782 REPORT DATE: 020682 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: MAINTENANCE PERSONNEL DID NOT TEST VALVE.

(NSIC 172965) A LEAK WAS IDENTIFIED ON THE CONTAINMENT PRIMARY ISOLATION VALVE FOR THE 3/8 INCH PRESSURIZER LIQUID SAMPLE. THE VALVE WAS ISOLATED AND REPAIRED. THE SYSTEM WAS RETURNED TO SERVICE WITHOUT PERFORMING THE NECESSARY LEAK TEST. THIS IS REPORTABLE UNDER 6.9.2.B.3. A GENERIC PROCEDURE FOR THIS TYPE OF VALVE WAS USED FOR MAINTENANCE WHICH REQUIRED LEAK RATE TESTING IF POSSIBLE. THE TEST PROCEDURE THAT EXISTS REQUIRES THAT THE PLANT BE AT COLD SHUTDOWN, THEREFORE THE MAINTENANCE PERSONNEL IDENTIFIED THAT IT WAS NOT POSSIBLE AND REINSTATED THE SYSTEM. UPON DISCOVERY, THE TEST PROCEDURE WAS TEMPORARILY CHANGED TO ALLOW PERFORMANCE AT POWER.

[119] GINNA DOCKET 50-244 LER 82-002
REACTOR COOLANT DRAIN TANK PUMP LINE LEAKS.
EVENT DATE: 011382 REPORT DATE: 021282 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PIPES,FITTINGS
CAUSE: DEFECTIVE WELD.

(NSIC 172968) AN OPERATOR ON ROUTINE TOUR NOTICED A SMALL LEAK FROM A WELD IN THE SUCTION FOR THE REACTOR COOLANT DRAIN TANK PUMP. THE LINE IS A COMMON SUCTION FOR THE RECIRCULATION PHASE OF ECCS. THE LEAK WAS TWO SMALL PINHOLES IN A 3 INCH LONG COLD LAP OF THE ORIGINAL WELD. THIS IS REPORTABLE UNDER 6.9.2.B.4. A 3 INCH LONG COLD LAP IN THE INITIAL WELD HAD TWO PINHOLE LEAKS ADJACENT TO IT. THE DEFECTIVE AREA IN THE WELD ON THE 6 INCH SCHEDULE 1 STAINLESS STEEL PIPE TO AN ELBOW WAS GROUND OUT AND REPAIRED.

[120] GINNA DOCKET 50-244 LER 82-004
8 FIRE DETECTION ZONES NOT WATCH POSTED.
EVENT DATE: 012582 REPORT DATE: 020882 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: PERSONNEL EVACUATED DUE TO SG TUBE RUPTURE.

(NSIC 172971) DUE TO THE EVENTS DESCRIBED IN LER 82-003, FIRE WATCHES POSTED AS A RESULT OF 8 INOPERABLE FIRE DETECTION ZONES WERE EVACUATED FROM SITE. THEREFORE THESE EIGHT ZONES WERE INOPERABLE WITHOUT FIREWATCHES WHICH IS A VIOLATION OF A LCO DEFINED IN TECH SPEC 3.14.1.1A AND REPORTABLE BASED ON TECH SPEC 6.9.2.A.(2). THE FIRE WATCHES WERE EVACUATED AT 1044 HOURS IN ACCORDANCE WITH PROCEDURE SC-1.5. FOLLOWING THE EVENT, FIRE WATCHES WERE RETURNED TO THE 8 INOPERABLE FIRE DETECTION ZONES AT 1600 HOURS.

[121] GINNA DOCKET 50-244 LER 82-003
REACTOR SHUTDOWN DUE TO STEAM GENERATOR TUBE RUPTURE.
EVENT DATE: 012582 REPORT DATE: 020882 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: HEAT EXCHANGERS
CAUSE: NOT YET DETERMINED.

(NSIC 173043) THE GINNA B STEAM GENERATOR EXPERIENCED A TUBE FAILURE. THE RESULTING PLANT TRANSIENT INCLUDED A SIGNIFICANT PRIMARY SYSTEM DEPRESSURIZATION,

ACTUATION OF THE SAFETY INJECTION SYSTEM AND MINOR RELEASES OF RADIOACTIVE MATERIAL FROM THE PLANT. REACTOR WAS BROUGHT TO COLD SHUTDOWN. INSPECTION OF THE RUPTURED TUBE REVEALED AN AXIAL BURST RUPTURE OF TUBE LOCATED AT THE PERIPHERY OF THE B STEAM GENERATOR HOT LEG ROW 42 COLUMN 55, THREE TO EIGHT INCHES ABOVE THE SECONDARY SIDE OF THE TUBE SHEET. IT IS THEORIZED THAT THE AXIAL BURST OF THE TUBE WAS CAUSED BY SOME TYPE OF MECHANICAL LOADING MECHANISM ON THE TUBE BETWEEN THE FIRST SUPPORT PLATE AND THE TUBE SHEET. FLOW INDUCED VIBRATION MAY HAVE BEEN A CONTRIBUTING FACTOR. FURTHER ANALYSIS AND EVALUATION ARE ONGOING TO DETERMINE THE EXACT FAILURE MECHANISM. THE BURST TUBE PLUS THREE TUBES AROUND IT WILL BE PLUGGED AS A PREVENTIVE MEASURE.

[122] GINNA DOCKET 50-244 LER 82-010
FIRE WATCHES EVACUATED DUE TO LOCAL RADIATION EMERGENCY.
EVENT DATE: 032382 REPORT DATE: 040682 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: PERSONNEL SAFETY REQUIREMENTS.

(NSIC 172898) AT 1348 HOURS DUE TO A LOCAL RADIATION EMERGENCY DECLARED FOR THE INTERMEDIATE BUILDING, NORTH, THE FIRE WATCH POSTED, AS A RESULT OF S-15 ISOLATION VALVE BEING CLOSED, WAS EVACUATED FROM THE AREA. THEREFORE THIS FIRE SUPPRESSION SYSTEM WAS INOPERABLE WITHOUT A FIRE WATCH WHICH IS A VIOLATION OF A LCO DEFINED IN TECH SPEC 3.14.3.1 AND REPORTABLE BASED ON TECH SPEC 6.9.2.2A(2). THE FIRE WATCHES WERE EVACUATED AT 1359 HOURS IN ACCORDANCE WITH PROCEDURE SC-1.5. FOLLOWING THE EVENT, FIRE WATCHES WERE RETURNED TO THE INOPERABLE FIRE SUPPRESSION AREAS AT 1525 HOURS.

[123] HATCH 1 DOCKET 50-321 LER 82-012
HPCI AUXILIARY OIL PUMP FAILS.
EVENT DATE: 021182 REPORT DATE: 030482 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: UNDETERMINED.

(NSIC 172958) THE HPCI AUXILIARY OIL PUMP (AOP) FAILED TO PERFORM AS EXPECTED WHILE PERFORMING HNP-1-3318, HPCI "HYDRAULIC OIL PIPING MOISTURE PROTECTION". HPCI WAS DECLARED INOPERABLE PER TECH SPEC 3.5.3.2. RCIC, ADS, CS, & LPCI WERE OPERABLE. THE CAUSE OF THE AOP CYCLING WAS NOT POSITIVELY IDENTIFIED SINCE THE CONDITION COULD NOT BE REPRODUCED. COMPONENTS ASSOCIATED WITH THE LOGIC WERE INSPECTED AND NO PROBLEMS WERE FOUND. THE COMPONENTS SUSPECTED TO BE AT FAULT WERE REPLACED. THE HPCI AOP WAS OPERATED SUCCESSFULLY AND THE SYSTEM WAS PROVEN OPERABLE.

[124] HATCH 1 DOCKET 50-321 LER 82-011
RCIC DECLARED INOPERABLE DUE TO SMOKE.
EVENT DATE: 021282 REPORT DATE: 030482 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: PIPES,FITTINGS
CAUSE: OIL LEAK DUE TO VIBRATION.

(NSIC 172960) FOLLOWING A UNIT 1 SCRAM THE RCIC SYSTEM WAS MANUALLY STARTED TO MAINTAIN RX VESSEL LEVEL. FOLLOWING RCIC INITIATION IT WAS DISCOVERED THAT SMOKE WAS COMING FROM THE RCIC DIAGONAL. THE SYSTEM WAS DECLARED INOPERABLE TO INVESTIGATE THE SOURCE OF THE SMOKE. PER TECH SPEC SECTION 3.5.E.2 HPCI WAS OPERABLE. THE CAUSE OF THE SMOKE WAS DUE TO AN OIL LEAK FROM THE 3/8" THREADED PIPE LEADING TO THE TURBINE GOVERNOR AND BEARING LEAKING OIL ON THE HOT TURBINE CASING. THE LEAK WAS A RESULT OF THE PIPE VIBRATING LOOSE. THE PIPE WAS TIGHTENED. THE SYSTEM WAS CHECKED FOR LEAKS AND PROVEN OPERABLE WHEN THE UNIT STARTED UP.

[125] HATCH 1 DOCKET 50-321 LER 82-013
CORE POWER DISTRIBUTION NOT ADJUSTED IN REQUIRED TIME.
EVENT DATE: 021382 REPORT DATE: 030282 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: PERSONNEL ERROR.

(NSIC 172963) AT 9:25 CST DURING STARTUP, THE APRMS HAD NOT BEEN ADJUSTED PER TECH SPEC 3.1.B WITHIN THE 2 HR. TIME LIMIT. CORRECTIVE ACTION TO REDUCE THE CMFLPD/FRTP RATIO HAD BEEN STARTED WITHIN 15 MINUTES BUT THE ACTIONS HAD BEEN INEFFECTIVE. A POWER REDUCTION TO 25% WAS NOT REQUIRED AS SUBSEQUENT ACTIONS DID HAVE THE PROBLEM CORRECTED BY 11:45 CST. THE INITIAL CORRECTIVE ACTIONS PROVED TO BE INEFFECTIVE DUE TO THE SPATIAL REDISTRIBUTION OF XENON FROM BURNOUT COUPLED WITH AN INEFFECTIVE ROD PATTERN ADJUSTMENT. A REPORT IS BEING PREPARED TO FAMILIARIZE THE SITE ENGINEERS WITH THE EVENT. TO PRECLUDE SCENARIOS OF THIS SORT IN THE FUTURE A TECH SPEC REVISION GIVING A MORE REASONABLE TIME LIMIT IS BEING PREPARED.

[126] HATCH 1 DOCKET 50-321 LER 82-014
SET POINT DRIFT OF REACTOR PRESSURE SWITCH.
EVENT DATE: 021382 REPORT DATE: 030282 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 173015) WHILE PERFORMING HNP-1-3102, REACTOR PRESSURE SHUTDOWN COOLING MODE FUNCTIONAL TEST AND CALIBRATION, REACTOR PRESSURE SWITCH, 1B31-N018A, ACTUATED AT 164.5 PSIG INCREASING. TECH SPECS SECTION 4.2-1, ITEM 2, REQUIRES ACTUATION AT / 157.3 PSIG. SWITCH 1B31-N018B IN THE REDUNDANT CHANNEL WAS OPERABLE AND WITHIN TOLERANCE. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO SETPOINT DRIFT. THE SWITCH WAS RECALIBRATED PER HNP-1-5279, BARKSDALE PRESSURE SWITCH CALIBRATION, AND FUNCTIONALLY TESTED SUCCESSFULLY PER HNP-1-3102, REACTOR HIGH PRESSURE (SHUTDOWN COOLING MODE) FUNCTIONAL TEST AND CALIBRATION.

[127] HATCH 1 DOCKET 50-321 LER 82-016
SAMPLE PUMP FOR FISSION PRODUCT MONITORS FAILS.
EVENT DATE: 021382 REPORT DATE: 030282 NSSS: GE TYPE: BWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: PUMPS
CAUSE: BLOWN FUSE.

(NSIC 173016) WHILE PERFORMING ROUTINE SURVEILLANCE, IT WAS FOUND THAT SAMPLE PUMP FOR FISSION PRODUCT MONITORS WAS INOPERABLE AND HENCE THE MONITORS WERE ALSO INOPERABLE. TECH SPEC SECTION 3.6.G.2 REQUIRES THAT THREE OUT OF FOUR SYSTEMS IN TABLE 3-10 SHALL BE OPERABLE DURING REACTOR OPERATION. THE REASON THAT THE MONITORS WERE INOPERABLE WAS DUE TO A BLOWN FUSE. THE FUSE FOR THE POWER SUPPLY TO THE PUMP MOTOR WAS REPLACED AND THE SYSTEM WAS RETURNED TO SERVICE WITH SATISFACTORY RESULTS.

[128] HATCH 1 DOCKET 50-321 LER 82-018
DRYWELL AND TORUS TEMPERATURE RECORDER FAILS.
EVENT DATE: 021982 REPORT DATE: 031682 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: REED SWITCH FAILURE.

(NSIC 172831) DRYWELL AND TORUS TEMPERATURE RECORDER, WAS FOUND TO BE OPERATING ERRATICALLY. TECH SPECS TABLE 3.2-11, ITEM 5, 6 AND 7 REQUIRES 2 OPERABLE CHANNELS. REDUNDANT RECORDER, 1T47-R611, WAS OPERABLE. PLANT OPERATION WAS PLACED IN A 30 DAY LCO AS A RESULT OF THIS EVENT. THE CAUSE OF THE EVENT HAS BEEN ATTRIBUTED TO COMPONENT FAILURE. THE FAILURE WAS DUE TO MALFUNCTIONING REED SWITCHES. THE SWITCHES WERE REPAIRED AND THE RECORDER WAS RETURNED TO SERVICE.

[129] HATCH 1 DOCKET 50-321 LER 82-000S
SMOKE DETECTION MODIFICATIONS DELAYED.
EVENT DATE: 022682 REPORT DATE: 022682 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: ENGINEERING WORKLOAD.

(NSIC 172871) ON NOVEMBER 21, 1980, A SPECIAL REPORT WAS SENT TO THE NRC WHICH STATED THAT AN ANALYSIS WAS BEING PERFORMED TO DETERMINE WHICH DETECTORS COULD MORE FULLY COMPLY WITH THE INTENT OF NFPA 72, AND THAT THE WORK WAS "EXPECTED" TO BE COMPLETE BY MARCH 1, 1982. AS A RESULT OF UNFORESEEN REGULATORY REQUIREMENTS SUCH AS APPENDIX R, 79-01B, AND TMI, AND THE CORRESPONDING MANPOWER DEMANDS PLACED ON THE A.E.'S, THE COMPLETE DESIGN PACKAGES HAVE NOT BEEN RECEIVED. THE AVAILABLE PARTIAL PACKAGES REVEAL A LARGER SCOPE OF WORK THAN ORIGINALLY ANTICIPATED, AND CONSEQUENTLY, MODIFICATION BY THE EXPECTED DATE IS NOT POSSIBLE. THE LICENSEE NOW INTENDS FOR THE MODIFICATIONS TO SAFETY RELATED AREA DETECTION SYSTEMS TO COINCIDE WITH THE SCHEDULE FOR APPENDIX R SMOKE DETECTION ADDITIONS.

[130] HATCH 1 DOCKET 50-321 LER 82-020
RCIC TURBINE PUMP DECLARED INOPERABLE DUE TO OIL LEAK.
EVENT DATE: 031882 REPORT DATE: 040882 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: TURBINES
CAUSE: CLOGGED DRAIN ORIFICE.

(NSIC 173020) WITH THE REACTOR MODE SWITCH IN THE RUN POSITION AND THE REACTOR AT A STEADY STATE OF POWER, WHILE PERFORMING RCIC PUMP OPERABILITY, AN OIL LEAK WAS FOUND ON THE RCIC TURBINE OUTBOARD BEARING HOUSING. THE RCIC WAS DECLARED INOPERABLE AND A LIMITING CONDITION OF OPERATION WAS ESTABLISHED PER TECH SPECS 3.5.E.2 AND 4.5.E.2. AN INVESTIGATION REVEALED THAT A DRAIN ORIFICE INSIDE THE BEARING HOUSING WAS CLOGGED CAUSING THE OIL LEVEL INSIDE TO RISE ABOVE THE NORMAL LEVEL. THE ORIFICE WAS CLEARED AND THE RCIC WAS TESTED AND RETURNED TO SERVICE.

[131] HATCH 1 DOCKET 50-321 LER 82-021
DRYWELL/TORUS MULTIPOINT RECORDER INOPERABLE ON FOUR OCCASIONS.
EVENT DATE: 032282 REPORT DATE: 042082 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LOOSE COUPLING.

(NSIC 173135) DRYWELL/TORUS MULTIPOINT RECORDER 1T47-4612, WAS FOUND INOPERABLE. TECH SPECS TABLE 3.2-11 REQUIRES TWO OPERABLE CHANNELS. THIS RECORDER FAILED AGAIN ON MARCH 25, 1982, MARCH 29, 1982 AND APRIL 5, 1982. REDUNDANT RECORDER 1T47-R611 WAS IN ALL CASES OPERABLE. PLANT OPERATION WAS PLACED IN A 30 DAY LCO AS A RESULT OF THIS EVENT. THE CAUSE OF THIS EVENT WAS COMPONENT FAILURE. THE FAILURE WAS DUE TO A LOOSE BALANCING UNIT COUPLING. THE INITIAL REPAIR AND SUBSEQUENT REPAIRS PROVED UNRELIABLE SO A DESIGN CHANGE WAS INITIATED TO REPLACE THE 1T47-R612 WITH THE SAME MODEL AS THE 1T47-R611. THE RECORDER WAS INSTALLED AND CALIBRATED AND THE LCO TERMINATED.

[132] HATCH 2 DOCKET 50-366 LER 82-009 REV 1
UPDATE ON TORUS LEVEL INDICATIONS DISAGREE.
EVENT DATE: 012382 REPORT DATE: 022382 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 173084) OPERATORS REPORTED THE A&B TORUS LEVEL INDICATORS WERE DIFFERENT. BOTH LOOP ALARM SETPOINTS WERE FOUND AT 145.7". TECH SPECS SECTION 3.6.2.1 REQUIRES ALARM AT / 146". THE "A" TRANSMITTER WAS FOUND WITH AN ERROR OF 0.4". THE "B" TRANSMITTER WAS FOUND WITH A 0.6" ERROR. THE CAUSE OF THE EVENT

WAS INSTRUMENT DRIFT. THE INSTRUMENTS WERE RECALIBRATED, REFERENCE LEGS BACKFILLED AND RETURNED TO SERVICE.

[133] HATCH 2 DOCKET 50-366 LER 82-012
RCIC TURBINE TRIP AND THROTTLE VALVE FAILS.
EVENT DATE: 012682 REPORT DATE: 022382 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: OXIDIZED CONTACTS ON TRIP COIL.

(NSIC 173069) WITH UNIT 2 IN HOT STANDBY THE RCIC STEAM LINE DP FT&C (HNP-2-3410) WAS BEING PERFORMED. IT WAS FOUND THAT UPON RECEIVING A HI DP SIGNAL THE RCIC TURBINE TRIP & THROTTLE VALVE WOULD NOT ELECTRICALLY TRIP CLOSED. PER TECH SPEC 3.3.2-1 RCIC WAS DECLARED INOP. HPCI WAS OPERABLE DURING THE RCIC LCO PERIOD. THE RCIC TURBINE TRIP & THROTTLE VALVE WOULD NOT TRIP CLOSED DUE TO OXIDIZED CONTACTS ON THE TRIP COIL ASSEMBLY, THEREBY INSULATING THE TRIP SIGNAL TO THE TRIP COIL. THE CONTACTS WERE CLEANED & RCIC WAS PROVEN OPERABLE. THE TRIP MECHANISM IS CHECKED 5 TIMES PER MONTH AND NO CHANGE IN DESIGN IS PLANNED.

[134] HATCH 2 DOCKET 50-366 LER 82-014
DRYWELL AIRLOCK FAILS LEAK RATE TEST.
EVENT DATE: 012882 REPORT DATE: 022382 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN
CAUSE: DAMAGED SHAFT AND SEAL ON OUTER DOOR.

(NSIC 173064) A LOCAL LEAK RATE TEST WAS DONE ON THE DRYWELL PERSONNEL AIRLOCK INNERSPACE (AS PER HNP-2-3952, PRIMARY CONTAINMENT PERIODIC TYPE B AND TYPE C LEAKAGE TESTS) AS REQUIRED BY TECH SPEC 4.6.1.3.B. A REVIEW OF THE TEST RESULTS DETERMINED THAT THE LEAKAGE RATE WAS IN EXCESS OF THE .05 LA LIMIT DICTATED BY TECH SPEC 3.6.1.3.B. AN INVESTIGATION DETERMINED THAT THE CAUSE OF THE INNERSPACE LEAKING WAS DUE TO A DAMAGED SHAFT AND SEAL ASSEMBLY ON THE OUTER AIRLOCK DOOR (THE SHAFT IS USED TO OPERATE INNER DOOR). CORRECTIVE ACTION CONSISTED OF REMOVING THE DAMAGED ASSEMBLY AND TEMPORARILY REPLACING IT WITH A BLIND FLANGE. THE INNERSPACE WAS THEN SUCCESSFULLY RETESTED.

[135] HATCH 2 DOCKET 50-366 LER 82-017
DRYWELL TEMPERATURE RECORDER FAILS.
EVENT DATE: 021182 REPORT DATE: 022382 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INPUT SELECTOR BOARD FAILURE.

(NSIC 173063) OPERATORS REPORTED DRYWELL TEMPERATURE RECORDER, 2T47-R627, WAS INOPERABLE. THE REDUNDANT CHANNEL WAS OPERABLE. TECH SPECS SECTION 3.3.6.4-1 REQUIRES 2 MONITORS OPERABLE. THE CAUSE OF THE EVENT WAS FAILURE OF THE RECORDER INPUT SELECTOR BOARD. THE BOARD WAS REPLACED AND THE RECORDER RECALIBRATED. THE RECORDER WAS PUT BACK IN SERVICE.

[136] HATCH 2 DOCKET 50-366 LER 82-013
CONTAINMENT GASEOUS MONITORING SYSTEM INOPERABLE.
EVENT DATE: 021482 REPORT DATE: 030482 NSSS: GE TYPE: BWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: PUMPS
CAUSE: WEAROUT OF SAMPLE PUMP.

(NSIC 173066) WHILE PERFORMING ROUTINE SURVEILLANCE, THE SAMPLE PUMP FOR PRIMARY CONTAINMENT GASEOUS MONITORING SYSTEM WAS INOPERABLE. THIS IS A FAILURE TO MEET TECH SPEC 3.4.3.1.C. REQUIREMENT OF OPERABILITY OF THIS SYSTEM DURING REACTOR OPERATIONS. THE REASON THAT THE MONITOR WAS INOPERABLE WAS ATTRIBUTED TO BEARING FAILURE ON METAL BELLOWS DRIVE SHAFT FROM NORMAL WEAR DURING CONTINUOUS OPERATION

FOR ABOUT 6 YEARS. THE ENTIRE PUMP WAS REPLACED AND THE UNIT WAS RETURNED TO SERVICE IN THREE DAYS WITH SATISFACTORY RESULTS.

[137] HATCH 2 DOCKET 50-366 LER 82-000S
BATTERY MAINTENANCE CAUSED SCRAM AND HPCI ACTUATION.
EVENT DATE: 021782 REPORT DATE: 040682 NSSS: GE TYPE: BWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: BATTERIES & CHARGERS
CAUSE: MAINTENANCE ERROR.

(NSIC 172876) AN ELECTRICIAN WAS PERFORMING WEEKLY PILOT CELL SURVEILLANCE AND FOUND THE "A" 125/250 VOLTS D.C. STATION SERVICE BATTERIES WITH LOW SPECIFIC GRAVITY. THE ELECTRICIAN NOTIFIED THE SHIFT FOREMAN AND BEGAN CHARGING THE BATTERIES PER PROCEDURE. WHEN THE BATTERIES WERE PLACED ON CHARGE, THE VOLTAGE WENT FROM 130 TO 142 VOLTS D.C. THIS CAUSED THE TOPAZ INVERTER THAT SUPPLIES POWER TO THE "B" REACTOR LEVEL INSTRUMENT TO TRIP ON HIGH VOLTAGE. THE "B" LEVEL INSTRUMENT WENT TO ZERO CAUSING THE LEVEL CONTROLS TO INCREASE REACTOR FEEDPUMP FLOW WHICH RAISED WATER LEVEL. THE MAIN AND RFP TURBINES TRIPPED ON HIGH WATER LEVEL AND THE REACTOR SCRAMMED ON TVS FAST CLOSURE. HPCI WAS MANUALLY STARTED AND INJECTED TO MAINTAIN WATER LEVEL. LEVEL DROPPED TO A MINIMUM OF MINUS 25 INCHES DURING THE TRANSIENT. AS OF THE DATE OF THIS REPORT THERE HAVE BEEN TWENTY-THREE (23) INCIDENTS WITH HPCI INJECTIONS INTO THE REACTOR VESSEL.

[138] HATCH 2 DOCKET 50-366 LER 82-020
ACCUMULATOR FOR STANLBY LIQUID CONTROL SYSTEM TWICE DEPRESSURIZED.
EVENT DATE: 021882 REPORT DATE: 031182 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: ACCUMULATORS
CAUSE: VALVE STEAM LEAK AND RUPTURED BLADDER.

(NSIC 173057) WHILE PERFORMING THE STANDBY LIQUID CONTROL (SBLC) PUMP OPERABILITY AND RELIEF VALVE TEST PROCEDURE, HNP-2-3702, AND HNP-2-6310 MONTHLY SURVEILLANCE, THE ACCUMULATOR IN 2C41-A003B WAS FOUND DEPRESSURIZED. THE REDUNDANT LOOP "A" WAS OPERABLE. THE CAUSE OF THESE EVENTS WAS A LEAKING VALVE STEM AND A RUPTURED BLADDER. THE VALVE STEM AND BLADDER WERE REPLACED AND THE SYSTEM WAS RETURNED TO SERVICE.

[139] HATCH 2 DOCKET 50-366 LER 82-022
VARIOUS ISOLATION VALVES FAIL LEAKAGE TESTS.
EVENT DATE: 022282 REPORT DATE: 032582 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES
CAUSE: UNDETERMINED.

(NSIC 173056) DURING THE PERFORMANCE OF LOCAL LEAK RATE TESTS WHILE SHUTDOWN FOR A REFUELING/TORUS MODIFICATION OUTAGE, VARIOUS CONTAINMENT ISOLATION VALVES HAVE NOT HAD ACCEPTABLE RESULTS DURING THEIR INITIAL TESTS. THIS IS A REPETITIVE EVENT (SEE RO REPORT NUMBER 50-366/1980-021). THE CAUSE FOR THE UNACCEPTABLE LEAKAGE RATES FOR THESE VALVES IS UNDER INVESTIGATION. MAINTENANCE IS NOT COMPLETE AT THIS TIME; CORRECTIVE MAINTENANCE WILL BE PERFORMED SUCH THAT THE ACCEPTANCE CRITERIA OF TECH SPECS AND 10CFR50 APP. J ARE MET PRIOR TO STARTUP. AN UPDATED REPORT WILL BE SUBMITTED WITHIN 30 DAYS AFTER UNIT STARTUP.

[140] HATCH 2 DOCKET 50-366 LER 82-021
LIQUID RADWASTE TANK PARTIALLY DISCHARGED WITHOUT SAMPLING.
EVENT DATE: 022782 REPORT DATE: 031682 NSSS: GE TYPE: BWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: RADIATION PROTECTION TECHNICIAN ERROR.

(NSIC 172888) WHILE UNIT 2 WAS SHUT DOWN FOR A REFUELING OUTAGE, LIQUID RADWASTE

TANK (CHEMICAL WASTES SAMPLE TANK A) WAS DISCHARGED PARTIALLY PRIOR TO ANALYSIS WHICH IS CONTRARY TO E.T.S. SECTION 2.1.2.B. APPROXIMATELY 3968 GALLONS CONTAINING 110 MICROCURIES WERE RELEASED TO THE ALTAMAHA RIVER. NO 10 CFR 20 CONCENTRATION LIMITS WERE EXCEEDED. A LABORATORY TECHNICIAN HAD ERRONEOUSLY USED AN ISOTOPIC ANALYSIS ON ANOTHER TANK WHICH WAS STORED ON THE MCA WHEN HE ISSUED THE DISCHARGE PERMIT FOR CWSTA. ALL TECHNICIANS HAVE BEEN INSTRUCTED TO BE EXTREMELY CAREFUL IN ISSUING PERMITS AND TO ERASE ALL SPECTRA FROM MCA ONCE A PERMIT IS ISSUED.

[141] HATCH 2 DOCKET 50-366 LER 82-010
PROCEDURE FOR TEMPORARY PROCEDURE CHANGES DECLARED INADEQUATE.
EVENT DATE: 030482 REPORT DATE: 031882 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: ADMINISTRATIVE CONTROLS INADEQUATE.

(NSIC 172889) WITH UNIT 2 IN A REFUELING OUTAGE, IT WAS REALIZED THAT THE EXISTING METHOD OF HANDLING TEMPORARY PROCEDURE CHANGES WAS DEFICIENT. THE DEFICIENCY ALLOWED A PROCEDURE TO BE PERFORMED WITHOUT INCORPORATING CHANGES MADE PREVIOUSLY UNDER A TEMPORARY CHANGE, BUT PRIOR TO PERMANENT PROCEDURE REVISION ISSUANCE. THIS WAS DETERMINED REPORTABLE UNDER TECH SPEC 6.9.1.8.F AS A PROMPT NOTIFICATION EVENT. THE CAUSE WAS DUE TO ADMINISTRATIVE CONTROLS NOT ADDRESSING A METHOD OF ASSURING THAT UNTIL PERMANENT PROCEDURE REVISIONS ARE APPROVED, TEMPORARY CHANGES ARE MADE TO THE PROCEDURE. HNP-9 "PROCEDURE WRITING AND CONTROL" WAS REVISED TO HAVE TEMPORARY CHANGES PLACED IN PROCEDURE MANUALS AS A REFERENCE UNTIL THE NORMAL PROCEDURE REVISION IS APPROVED.

[142] HATCH 2 DOCKET 50-366 LER 82-018
MAIN STEAM PIPE HANGER PULLS AWAY FROM CEILING.
EVENT DATE: 030882 REPORT DATE: 041282 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: UNKNOWN.

(NSIC 172953) EVIDENCE WAS DISCOVERED OF THE MAIN STEAM PIPE HANGER 2N11-MS-H13 EMBED PLATE PULLING FROM THE CEILING. THIS HANGER IS DOWNSTREAM OF THE MSIV AND OPERABILITY WAS NOT AFFECTED. THE CAUSE OF THE HANGER FAILURE IS BEING INVESTIGATED BY THE A/E. THE A/E IS SUPPLYING A PACKAGE WHICH REDESIGNS THE PIPE SUPPORT. THIS NEW DESIGN WILL BE IMPLEMENTED PRIOR TO STARTUP FROM THE CURRENT REFUELING OUTAGE. AN UPDATE REPORT WILL BE SUBMITTED WHEN THE INVESTIGATION IS COMPLETE.

[143] HATCH 2 DOCKET 50-366 LER 82-023
MAIN STEAM SAFETY RELIEF VALVE MISSING PILOT SENSING TUBE.
EVENT DATE: 031282 REPORT DATE: 040882 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: VALVES
CAUSE: WELD FAILURES.

(NSIC 173055) WITH UNIT 2 IN REFUELING MODE, BENCH TESTING OF THE MAIN STEAM SAFETY RELIEF VALVES WAS IN PROGRESS PER HNP-2-6020. WYLE PERSONNEL NOTED THAT THE PILOT SENSING TUBE WAS MISSING FROM VALVE S/N 312. ALL OF THE OTHER TEN RELIEF VALVES WERE AVAILABLE AND OPERABLE. THE CAUSE OF THIS EVENT WAS FAILURE OF THE WELDS THAT HOLD THE SENSING TUBE IN PLACE. THE TUBE WILL BE REPLACED BY THE VENDOR PRIOR TO REINSTALLATION OF THE VALVE. THE AFFECTED WELDS ON ALL OTHER UNIT 2 VALVES WILL BE INSPECTED PRIOR TO UNIT STARTUP. THE AFFECTED WELDS ON ALL UNIT 1 VALVES WILL BE INSPECTED DURING THE NEXT REFUELING OUTAGE.

[144] HATCH 2 DOCKET 50-366 LER 82-025
REFUELING FLOOR ISOLATION DAMPER FAILS TO CLOSE.
EVENT DATE: 032282 REPORT DATE: 040882 NSSS: GE TYPE: BWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LIMIT SWITCH FAILURE.

(NSIC 173054) WHILE THE PLANT WAS IN A REFUELING OUTAGE AND PERFORMING SECONDARY CONTAINMENT ISOLATION DAMPER OPERABILITY, HNP-2-3189, THE FUELING FLOOR VENT EXHAUST FAN ISOLATION DAMPER, 2T41-F023B, FAILED TO CLOSE WITHIN 4.2 SECS. AS REQUIRED BY TECH SPECS 3.9.5.2. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO A DEFECTIVE CLOSE INDICATING LIMIT SWITCH. THE SWITCH WAS REPLACED AND RETESTED SATISFACTORILY, THEN RETURNED TO SERVICE.

[145] HATCH 2 DOCKET 50-366 LER 82-027
REACTOR BUILDING RADIATION MONITOR TEST AND CALIBRATION NOT PERFORMED.
EVENT DATE: 032582 REPORT DATE: 041682 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: MAINTENANCE PERSONNEL ERROR.

(NSIC 173052) WHILE THE PLANT WAS IN REFUELING, HNP-2-3553, REACTOR BUILDING EXHAUST VENT RADIATION MONITOR FUNCTIONAL TEST AND CALIBRATION, EXCEEDED THE SURVEILLANCE INTERVAL BY 2 DAYS. TECH SPECS SECTION 4.3.2-1 REQUIRES FUNCTIONAL TEST MONTHLY. THIS IS A REPETITIVE EVENT AS LAST REPORTED ON REPORTABLE OCCURRENCE REPORT NO. 50-366/1981-050. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO PERSONNEL ERROR. PERSONNEL FAILED TO SCHEDULE WORK REQUIRED. UPON DISCOVERY OF THE ERROR, THE MISSED SURVEILLANCE WAS IMMEDIATELY PERFORMED. THE RESPONSIBLE PERSONNEL HAVE BEEN COUNSELED AS TO THE IMPORTANCE OF SCHEDULING ALL REQUIRED SURVEILLANCE.

[146] HATCH 2 DOCKET 50-366 LER 82-026
TEMPORARY PROCEDURAL CHANGES NOT PROPERLY REVIEWED.
EVENT DATE: 032682 REPORT DATE: 042282 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: MAINTENANCE PERSONNEL ERROR.

(NSIC 173130) WITH THE REACTOR IN REFUELING, PERSONNEL FOUND THE TEMPORARY CHANGES MADE TO PROCEDURE HNP-2-3191, CHANNEL LOGIC TIME RESPONSE TESTING, WERE NOT REVIEWED BY THE PLANT REVIEW BOARD WITHIN THE REQUIRED 14 DAYS (TECH SPECS 6.8.3). THIS IS A REPETITIVE EVENT AS LAST REPORTED ON REPORTABLE OCCURRENCE REPORT NO. 50-321/1981-057. THE CAUSE OF THE VENT WAS ATTRIBUTED TO PERSONNEL ERROR. THE PERSONNEL MAKING THE OVERSIGHT WERE REMINDED OF THE IMPORTANCE OF MEETING TECH SPECS REQUIREMENTS. THE PROCEDURE CHANGES WERE EXPEDITED TO THE PRB FOR REVIEW.

[147] HATCH 2 DOCKET 50-366 LER 82-028
STANDBY GAS TREATMENT SYSTEM FAILS TO COMPLY WITH TECH SPECS.
EVENT DATE: 040282 REPORT DATE: 041382 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 173053) THE STANDBY GAS TREATMENT (SBGT) FILTER TRAIN 2T46-D001B WAS FOUND NOT TO BE IN COMPLIANCE WITH TECH SPEC 4.6.6.1.1. THE FILTER TRAIN WAS DECLARED INOPERABLE AND ALL REFUELING OPERATIONS WERE STOPPED. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO AN ERROR IN THE TESTING PROCEDURE FOR SBGT, WHICH CALLS FOR AN ADSORPTION EFFICIENCY OF / 90% FOR METHYL IODIDE. TECH SPEC 4.6.6.1.1 REFERENCES REG. GUIDE 1.52, REV. 1 WHICH SPECIFIES AN ADSORPTION CRITERIA OF / 99%. THE CHARCOAL WAS REPLACED AND TESTED. THE PROCEDURE WAS REVISED.

[148] HUMBOLDT BAY DOCKET 50-133 LER 82-003
FIRE PUMP MOTOR FAILS.
EVENT DATE: 031982 REPORT DATE: 041682 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: MOTORS
CAUSE: DETERIORATION DUE TO AGE.

(NSIC 173062) WITH THE NUCLEAR UNIT SHUTDOWN, A GROUND WAS DETECTED AT FIRE PUMP #3 MOTOR. THE MOTOR BREAKER WAS OPENED AND TAGGED. THIS EVENT IS REPORTABLE UNDER TECH SPEC IX.I.2.B.(2). TECH SPECS ALLOW OPERATION WITH ONLY THE TWO REMAINING FIRE PUMPS. MOTOR IS G.E. MODEL 5K4364A11A1A. THE FIRE PUMP STATOR WAS GROUNDED. THE CAUSE WAS AGE AND DETERIORATION. STATOR IS TO BE REWOUND LOCALLY, TESTED AND RETURNED TO SERVICE. A PREVENTIVE MAINTENANCE SCHEDULE FOR THIS MOTOR IS TO BE ESTABLISHED.

[149] INDIAN POINT 2 DOCKET 50-247 LER 81-033
CONTAINMENT AIR LOCK TEST NOT PERFORMED WHEN REQUIRED.
EVENT DATE: 121781 REPORT DATE: 011882 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN
CAUSE: PERSONNEL ERROR.

(NSIC 172802) CONTAINMENT AIR LOCK TYPE 'B' TEST, PT-SA 10, WAS PERFORMED SEVEN DAYS LATE. THERE WERE NO ADVERSE CONSEQUENCES SINCE BOTH AIR LOCKS TESTED SATISFACTORILY AT THAT TIME. CON EDISON HAS REVISED IT'S FOLLOWUP SYSTEM TO PROVIDE ADDITIONAL ASSURANCE THAT ALL SURVEILLANCE TESTS REQUIRED BY THE TECH SPECS WILL BE COMPLETED WITHIN THE PRESCRIBED SURVEILLANCE INTERVAL. THE FOLLOWUP SYSTEM NOW INCLUDES WRITTEN NOTIFICATION TO STATION MANAGEMENT PRIOR TO THE END OF THE SURVEILLANCE INTERVAL.

[150] INDIAN POINT 2 DOCKET 50-247 LER 82-001
DRIFT IN STEAM GENERATOR LEVEL CHANNEL.
EVENT DATE: 010682 REPORT DATE: 020582 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: BLOCKAGE IN IMPULSE LINES.

(NSIC 172927) IT WAS OBSERVED THAT NO. 23 STEAM GENERATOR LEVEL CHANNEL 437B WAS DRIFTING IN THE HIGH LEVEL DIRECTION. THE AFFECTED CHANNEL WAS PLACED IN THE TRIP CONDITION IN ACCORDANCE WITH TECH SPEC 3.5 THUS FULLY MEETING THE INSTRUMENT'S REQUIRED SAFETY FUNCTION. A BLOCKAGE IN THE IMPULSE LINES TO THE FOXBORO LEVEL TRANSMITTER 437B WAS BLOWN OUT. THE INSTRUMENT WAS RETURNED TO NORMAL SERVICE AND RESPONDED PROPERLY.

[151] INDIAN POINT 2 DOCKET 50-247 LER 82-002
WCPPS AIR CONSUMPTION EXCEEDS LIMIT.
EVENT DATE: 011082 REPORT DATE: 020982 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: VALVES
CAUSE: LEAKY VALVE.

(NSIC 172928) WELD CHANNEL AND PENETRATION PRESSURIZATION SYSTEM (WCPPS) AIR CONSUMPTION WAS IN EXCESS OF THE TECH SPEC (TECH SPEC 3.3.D.2.B) LIMIT OF 0.2% OF CONTAINMENT VOLUME PER DAY. THE EXCESS AIR LEAKAGE WAS IN THE WELD CHANNEL ZONE THAT SUPPLIES THE CONTAINMENT PRESSURE RELIEF VALVES (1 OF 4 SEPARATE ZONES). EXCESSIVE SEAT LEAKAGE WAS FOUND FOR 10" FISCHER BUTTERFLY VALVE NO. 1192. THIS PARTICULAR VALVE IS THE OUTERMOST OF THREE SERIES ISOLATION VALVES IN THE CONTAINMENT PRESSURE RELIEF LINE. THE VALVE WAS REMOVED AND ITS SEAT REPLACED. AFTER A SATISFACTORY BENCH TEST, THE VALVE WAS REINSTALLED.

[152] INDIAN POINT 2 DOCKET 50-247 LER 82-013
SERVICE WATER PUMP VIBRATION EXCEEDS LIMIT.
EVENT DATE: 022182 REPORT DATE: 032382 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PUMPS
CAUSE: GLAND SEAL VIBRATION.

(NSIC 173018) DURING TESTING NO. 23 SERVICE WATER PUMP INDICATED A VIBRATION OF 4.6 MILS. SINCE THIS EXCEEDED THE SECTION XI REQUIRED ACTION RANGE THE PUMP WAS REMOVED FROM SERVICE AND THE ESSENTIAL SERVICE WATER HEADER WAS REALIGNED AS PER TECH SPEC 3.3.F.2. PREVIOUS SIMILAR EVENT: RO 77-2-3B. THE CAUSE OF THE HIGH VIBRATION APPEARED TO BE LOCATED IN THE PUMP GLAND SEAL AREA. THE PACKING AND LANTERN RING WERE REMOVED; COMPONENTS INSPECTED, THE PUMP REPACKED AND RETESTED. VIBRATION FOLLOWING REPAIR WAS ACCEPTABLE (0.9 MILS). PUMP MANUFACTURED BY LAYNE BOWLER PUMP CO. S/N D14861F, VERTILINE CLOSE COUPLED PUMP, MODEL 300 SW 16F3.

[153] INDIAN POINT 2 DOCKET 50-247 LER 82-008
WELD CHANNEL AND CONTAINMENT PENETRATION PRESSURIZATION SYSTEM ISOLATED.
EVENT DATE: 022482 REPORT DATE: 032682 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES
CAUSE: PERSONNEL ERROR.

(NSIC 172835) DURING A ROUTINE INSPECTION, IT WAS DETERMINED THAT THREE LINES IN RACK 15 (A PORTION OF ZONE 2) OF THE WELD CHANNEL & CONTAINMENT PENETRATION PRESSURIZATION SYSTEM WERE ISOLATED (T.S.3.3.D.2.A). RACK 15 SUPPLIES THE STEAM AND FEEDWATER LINE PENETRATIONS. THE DESIGN BASIS OF THE SYSTEM IS TO PREVENT CONTAINMENT OUT-LEAKAGE BY MAINTAINING A HIGHER EXTERNAL PRESSURE ON THE LINER WELDS AND PENETRATIONS. THE AFFECTED LINES WERE PROMPTLY RETURNED TO NORMAL SERVICE AND A COMPLETE CHECK OF THE SYSTEM WAS MADE TO ASSURE PROPER LINE UPS.

[154] INDIAN POINT 2 DOCKET 50-247 LER 82-009
BIT NITROGEN PRESSURE INSUFFICIENT.
EVENT DATE: 030582 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
CAUSE: LOW END OF TECH SPEC PRESSURE RANGE INSUFFICIENT.

(NSIC 172974) BASED ON A REVIEW OF THE RELATIONSHIP BETWEEN THE BORON INJECTION TANK (BIT) NITROGEN PRESSURE AND THE VOLUME OF BORIC ACID SOLUTION, IT WAS DETERMINED THAT A REDUCTION OF NITROGEN PRESSURE REQUIRED CORRECTIVE MEASURES TO PREVENT OPERATION IN A MANNER LESS CONSERVATIVE THAN ASSUMED IN THE SAFETY ANALYSIS IN THE FSAR. THE APPRECIATION OF THE PRESSURE/VOLUME RELATIONSHIP COUPLED WITH THE MALFUNCTION OF THE NITROGEN REGULATOR VALVES PERMITTED OPERATION OF THE BORON INJECTION TANKS AT A PRESSURE LOWER THAN SHOULD HAVE BEEN MAINTAINED.

[155] INDIAN POINT 2 DOCKET 50-247 LER 82-010
ACCIDENT ANALYSIS UNCOVERS DEFICIENT PROCEDURES.
EVENT DATE: 031182 REPORT DATE: 031182 NSSS: WE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: DEFICIENT ADMINISTRATIVE CONTROLS.

(NSIC 172984) THE STEAMLINE BREAK ACCIDENT ANALYSES ARE PRESENTED IN SECTION 14.2.5 OF THE FSAR. CASES ANALYZED ASSUME THAT THE UNIT IS INITIALLY AT HOT SHUTDOWN CONDITIONS SINCE THESE CONDITIONS RESULT IN THE MOST CONSERVATIVE ASSESSMENT OF EFFECTS ON THE REACTOR CORE AND COOLANT SYSTEMS. AS PART OF THE ANALYSES, CERTAIN MINIMUM ENGINEERED SAFEGUARDS EQUIPMENT IS ASSUMED TO OPERATE TO MITIGATE AND TERMINATE THE TRANSIENT. PRESENT PROCEDURES REQUIRE THE NECESSARY SAFEGUARDS EQUIPMENT TO BE OPERABLE PRIOR TO BRINGING THE REACTOR CRITICAL BUT DO NOT ESTABLISH SPECIFIC OPERABILITY REQUIREMENTS FOR THIS EQUIPMENT WHEN THE RCS TEMPERATURE EXCEEDS 350 F AND THE REACTOR IS NOT CRITICAL.

THUS, TO PROVIDE CLEAR DIRECTION FOR THE PLANT OPERATORS, THE LICENSEE WILL REVISE OPERATING PROCEDURES TO EXPLICITLY REQUIRE THE OPERABILITY OF SAFEGUARDS EQUIPMENT NECESSARY TO MITIGATE A STEAMLINE BREAK TRANSIENT PRIOR TO HEATING THE REACTOR COOLANT SYSTEM ABOVE 350 F FROM THE COLD SHUTDOWN CONDITION.

[156] INDIAN POINT 3 DOCKET 50-286 LER 82-002
STEAM GENERATOR LEAKAGE DUE TO SHELL SIDE DEFECT.
EVENT DATE: 032782 REPORT DATE: 040982 NSSS: WE TYPE: PWR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: HEAT EXCHANGERS
CAUSE: UNDETERMINED.

(NSIC 172895) WHILE AT COLD SHUTDOWN DURING A REFUELING OUTAGE, A SMALL LEAK ON THE SHELL SIDE OF STEAM GENERATOR NO. 32 WAS OBSERVED. AN OVAL-SHAPED HOLE WAS DISCOVERED IN THE UPPER GIRTH WELD OF THE GENERATOR. THE HOLE MEASURES APPROXIMATELY 5/8 INCH BY 1/8 INCH. AS THE STEAM GENERATOR SHELL IS CONSIDERED TO BE AN EXTENSION OF THE PRIMARY CONTAINMENT BOUNDARY, THIS EVENT IS REPORTABLE UNDER TECH SPEC 6.9.2.7.C. AS THE LEAK WAS ON THE SECONDARY SIDE OF THE GENERATOR, SECONDARY WATER LEVEL WAS LOWERED TO A POINT BELOW THAT OF THE HOLE, THEREBY TERMINATING THE LEAKAGE. FURTHER ANALYSIS OF THIS EVENT AND REPAIR OF THE STEAM GENERATOR SHELL WILL BE PERFORMED DURING THE PRESENT REFUELING OUTAGE. NO SIMILAR EVENTS HAVE BEEN REPORTED TO DATE.

[157] KEWAUNEE DOCKET 50-305 LER 82-000S
FAILURE OF CONTROL ROOM RADIATION MONITOR REQUIRES TEMPORARY REPLACEMENT.
EVENT DATE: NA REPORT DATE: 041582 NSSS: WE TYPE: PWR
SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: MONITOR FAILURE.

(NSIC 172976) UPON INDICATION OF CHANNEL R-1 CONTROL ROOM AREA MONITOR FAILURE, THE OPERATIONS STAFF PLACED A PORTABLE RADIATION MONITOR IN SERVICE IN THE CONTROL ROOM. A CHECK OF THIS MONITOR WAS PERFORMED DAILY. MONTHLY TESTING WAS NOT PERFORMED AS REQUIRED BY TECH SPECS (TABLE 4.1-1 ITEM 19) SINCE NO ALARMS WERE AVAILABLE ON THE PORTABLE INSTRUMENT TO TEST. REPLACEMENT PARTS FOR R-1 WERE ORDERED AND DELIVERY IS EXPECTED WITHIN SIX TO NINE MONTHS. DUE TO THE LONG DELIVERY TIME, AN OFF-THE-SHELF AREA MONITOR (DOSIMETER CORPORATION AM-2) WITH VISIBLE AND AUDIBLE ALARMS WAS PURCHASED, CALIBRATED, AND PLACED IN THE CONTROL ROOM. THIS MONITOR WILL BE CHECKED DAILY AND TESTED MONTHLY IN ACCORDANCE WITH TECH SPECS TABLE 4.1-1 UNTIL R-1 IS REPAIRED AND PLACED IN SERVICE.

[158] KEWAUNEE DOCKET 50-305 LER 82-004
RHR PUMP SUCTION VALVE FAILS TO CLOSE.
EVENT DATE: 030882 REPORT DATE: 040782 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
CAUSE: UNKNOWN.

(NSIC 173094) DURING RHR PUMP AND VALVE TESTING, VALVE SI 300B (RWST TO RHR PUMP 1B SUCTION) FAILED TO CLOSE. THIS VALVE MAY BE INOPERABLE FOR UP TO 24 HOURS PER TECH SPEC 3.3.A.2.D; THIS IS REPORTABLE PER TECH SPEC 6.9.2.B.(2) AS OPERATION PERMITTED BY AN LCO. THE REDUNDANT TRAIN WAS DEMONSTRATED OPERABLE. VALVE STICKING IN THIS SYSTEM HAS NOT BEEN A RECURRENT PROBLEM. THE CAUSE OF THIS EVENT IS UNKNOWN, SINCE MANUAL OPERATION OF THE VALVE WAS SUCCESSFUL, AND MULTIPLE CYCLING FROM THE CONTROL ROOM REVEALED NO FURTHER DIFFICULTIES. NO FURTHER CORRECTIVE ACTION IS SCHEDULED.

[159] KEWAUNEE DOCKET 50-305 LER 82-005
SERVICE WATER PUMP FAILS TO START.
EVENT DATE: 030982 REPORT DATE: 040782 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: CIRCUIT BREAKER FAILED TO CLOSE.

(NSIC 173095) DURING QUARTERLY SURVEILLANCE TESTING OF SERVICE WATER PUMPS, 1A2 SERVICE WATER PUMP FAILED TO START ON DEMAND. ONE SERVICE WATER PUMP MAY BE OUT OF SERVICE FOR UP TO 48 HOURS PER TECH SPEC 3.3.A.2.D; THIS IS REPORTABLE PER TECH SPEC 6.9.2.B.(2) AS OPERATION PERMITTED BY AN LCO. THE REMAINING SERVICE WATER PUMPS WERE AVAILABLE. THE CIRCUIT BREAKER FAILED TO CLOSE BY REMOTE AUTO OR MANUAL INITIATION, DUE TO A FAILED OPEN CLOSING COIL. THE COIL WAS REPLACED, TESTED SATISFACTORY, AND THE SERVICE WATER PUMP RETURNED TO SERVICE WITHIN TECH SPEC TIME LIMITS. THIS CLOSING COIL FAILURE IS CONSIDERED SPURIOUS (NON-RECURRENT) AND REQUIRES NO FURTHER CORRECTIVE ACTION.

[160] KEWAUNEE DOCKET 50-305 LER 82-006
SAFETY INJECTION RECIRC LINE VALVE INOPERABLE.
EVENT DATE: 031582 REPORT DATE: 041382 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: MAINTENANCE ACTIVITY.

(NSIC 173089) DURING NORMAL OPERATION, VALVE SI-209 (SI RECIRCULATION LINE TO THE REFUELING WATER STORAGE TANK) WAS TAKEN OUT OF SERVICE FOR MAINTENANCE. THIS VALVE MAY BE OUT OF SERVICE FOR UP TO 24 HOURS PER TECH SPEC 3.3.A.2.D; THIS IS REPORTABLE PER TECH SPEC 6.9.2.B.(2) AS OPERATION PERMITTED BY AN LCO. THE REDUNDANT VALVE WAS OPERABLE. THE VALVE WAS DEMONSTRATED OPERABLE, AND TAKEN OUT OF SERVICE FOR MINOR CORRECTIVE MAINTENANCE. THE VALVE WAS RETURNED TO SERVICE WITHIN TECH SPEC TIME LIMITS. NO FURTHER CORRECTIVE ACTION IS NECESSARY.

[161] LACROSSE DOCKET 50-409 LER 81-015 REV 1
UPDATE ON MAIN COOLANT PIPING TEMPERATURE TOO LOW.
EVENT DATE: 122481 REPORT DATE: 042282 NSSS: AC TYPE: BWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PIPES,FITTINGS
CAUSE: INOPERABLE PUMP AND MODE OF OPERATION.

(NSIC 173027) FOLLOWING A REACTOR SCRAM, THE TEMPERATURE OF THE 1B FORCED CIRCULATION LOOP PIPING DECREASED TO A MINIMUM OF 86 DEG F. TECH SPEC 4.2.2.4E REQUIRES TEMPERATURE BE / 130 DEF F WHEN PRESSURE IS / 280 PSIG. PRESSURE VARIED BETWEEN 680 AND 1145 PSIG WHEN TEMPERATURE 130 DEG F. THE TEMPERATURE OF THE LOOP WAS ABOVE NDT AT ALL TIMES. THE CAUSE WAS DUE TO INOPERATION OF FORCED CIRCULATION PUMP 1B DUE TO SEAL PROBLEMS FOLLOWING SCRAM AND COMBINATION OF SEAL INJECTION AND PURIFICATION SYSTEMS MANAGEMENT AND TE.PERATURE MONITORING. OPERATORS HAVE RECEIVED ADDITIONAL TRAINING AND PROCEDURES HAVE BEEN MODIFIED.

[162] LACROSSE DOCKET 50-409 LER 82-004
EMERGENCY SERVICE WATER SUPPLY SYSTEM FAILS HYDROSTATIC TEST.
EVENT DATE: 032982 REPORT DATE: 042282 NSSS: AC TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: OTHER COMPONENTS
CAUSE: FABRICATION ERROR.

(NSIC 173026) EMERGENCY SERVICE WATER SUPPLY SYSTEM SUCTION HOSES LEAKED DURING FIRST POSITIVE PRESSURE HYDROSTATIC SURVEILLANCE TEST. CONSEQUENCES MINIMAL SINCE INTEGRATED SYSTEM TEST HAD PASSED CAPACITY REQUIREMENT IN JUNE 1981 AND PRESSURIZED LEAKAGE ON 3 SUCTION HOSES WAS DUE TO PHYSICAL FEATURE OF HOSE ASSEMBLY, NOT SUBSEQUENT DAMAGE. THE HOSE FITTING CASTINGS WERE FOUND TO HAVE A FLAT SPOT WHICH PROVIDED A LEAKAGE PATH. LEAKAGE AT RIVER END FITTINGS WAS DETERMINED TO BE ACCEPTABLE. THE FLAT SPOT ON ONE SUCTION HOSE PUMP END FITTING

WAS FILED. HOSE WAS RECLAMPED TO FITTING AND TESTED SATISFACTORILY, RESULTING IN 3 OPERABLE SUCTION HOSES. FURTHER INSPECTION TO BE CONDUCTED.

[163] MAINE YANKEE DOCKET 50-309 LER 81-021
STEAM GENERATOR LEVEL CHANNEL FAILS.
EVENT DATE: 092381 REPORT DATE: 092981 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: NOT STATED.

(NSIC 172917) LT-1213A WAS DE-ENERGIZED WHILE REPAIRING A LOCKING DEVICE ON CONNECTOR FOR L1A-1213A, UPON RE-ENERGIZING LT-1213A THE TRANSMITTER FAILED HIGH. THIS RESULTED IN A LOSS OF CHANNEL A LOW STEAM GENERATOR WATER LEVEL TRIP PROTECTION. INVESTIGATION BY THE I&C DEPARTMENT DETERMINED THAT THE TRANSMITTER WOULD HAVE TO BE REPLACED. THE UNIT WAS REPLACED AND CALIBRATION PERFORMED SATISFACTORY.

[164] MAINE YANKEE DOCKET 50-309 LER 81-022
HPSI VALVE STEM TOLERANCE BUILDUP EXCEEDS LIMIT.
EVENT DATE: 092581 REPORT DATE: 093081 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
CAUSE: WEAR.

(NSIC 172923) QUARTERLY SURVEILLANCE MEASURMENT OF HPSI VALVE STEM STOPS WAS IN PROGRESS WHEN ON HPSI VALVE WAS FOUND TO HAVE ADVERSE TOLERANCE BUILDUP. TOLERANCE BUILDUP WAS DUE TO PERIODIC DISASSEMBLY, INSPECTION, REASSEMBLY PLUS NORMAL WEAR SUBSEQUENT TO OPERATION. THE HPSI VALVE WAS READJUSTED TO WITHIN TOLERANCE VIA PROCEDURE AND RETESTED SATISFACTORY.

[165] MAINE YANKEE DOCKET 50-309 LER 82-007
DIESEL GENERATOR AIR START MOTORS FAIL TO DISENGAGE.
EVENT DATE: 030382 REPORT DATE: 031782 NSSS: CE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: VALVES
CAUSE: SOLENOID VALVE FAILURE.

(NSIC 172973) DURING NORMAL OPERATION, WHILE PERFORMING MONTHLY SURVEILLANCE OF 'A' TRAIN DIESEL GENERATOR, BOTH AIR MOTOR DRIVE PINIONS FAILED TO DISENGAGE THE FLYWHEEL RING GEAR AFTER START. THE DIESEL WAS IMMEDIATELY SHUTDOWN USING THE FUEL RACK LEVER. THIS PLACED THE PLANT IN A DEGRADED MODE PERMITTED BY AN LCO. THE CAUSE OF THE MALFUNCTION WAS A DEFECTIVE START SOLENOID VALVE THAT OPENS ON A START SIGNAL TO SUPPLY AIR TO THE AIR MOTORS. THE SOLENOID VALVE FAILED TO CLOSE WHEN THE START SIGNAL TERMINATED. THE SOLENOID VALVE WAS REPLACED IN KIND AND RETESTED SATISFACTORILY.

[166] MAINE YANKEE DOCKET 50-309 LER 82-008
AUXILIARY FEEDWATER FLOW INDICATION FAILS.
EVENT DATE: 030582 REPORT DATE: 031282 NSSS: CE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: POWER SUPPLY FAILURE.

(NSIC 172982) WHILE PERFORMING MONTHLY CHECKS ON AUXILIARY FEEDWATER FLOW CHANNELS THE I & C DEPARTMENT NOTED THAT FIT-1201C AUXILIARY FEEDWATER FLOW INDICATION HAD FAILED. INVESTIGATION BY THE I & C DEPARTMENT DETERMINED THAT THE POWER SUPPLY HAD FAILED. THE POWER SUPPLY WAS REPLACED IN KIND AND RETESTED SATISFACTORILY.

[167] MAINE YANKEE DOCKET 50-309 LER 82-009
CONTROL ROOM VENTILATION MOV FAILS TO CLOSE.
EVENT DATE: 030882 REPORT DATE: 031982 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: MOTORS
CAUSE: DIRT AND OIL IN MOTOR.

(NSIC 172981) DURING CIS SURVEILLANCE TESTING A CONTROL ROOM VENTILATION MOV FAILED TO CLOSE. THE UPSTREAM CIS VALVE DID CLOSE PROPERLY. INVESTIGATION BY THE MAINTENANCE DEPARTMENT DETERMINED THAT THE MOTOR HAD FAILED DUE TO ACCUMULATION OF OIL AND DIRT IN THE MOTOR HOUSING. THE MOTOR WAS REPLACED IN KIND AND TESTED SATISFACTORILY.

[168] MAINE YANKEE DOCKET 50-309 LER 82-010
STACK MONITORS INOPERABLE WHEN FILTERS TAGGED OUT.
EVENT DATE: 030982 REPORT DATE: 032382 NSSS: CE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: FILTERS
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 172978) IT WAS FOUND THAT THE PRIMARY VENT STACK CONTINUOUS HALOGEN AND PARTICULATE SAMPLE FILTERS WERE TAGGED OUT FOR THE PERIOD BETWEEN THIRD SHIFT ON 3/9/82 AND 1500 HOURS ON 3/12/82. CONSEQUENTLY, FOR THE ABOVE PERIOD, GROSS BETA-GAMMA GROSS ALPHA, INDIVIDUAL GAMMA EMITTERS, AND SR-89 AND SI-90 RESULTS ARE NOT AVAILABLE. PRIMARY VENT STACK APD WAS OPERATIONAL DURING THIS PERIOD. THE SAMPLE SYSTEM WAS INADVERTENTLY TAGGED OUT WITHOUT NOTIFYING THE CHEMISTRY SECTION. AS SOON AS THIS CONDITION WAS DISCOVERED, THE TAGS WERE CLEARED AND THE SYSTEM WAS PLACED INTO OPERATION. INSTRUCTION ON THE IMPORTANCE OF THIS SYTEM WILL BE INCORPORATED INTO FUTURE OPERATOR TRAINING/RETRAINING.

[169] MAINE YANKEE DOCKET 50-309 LER 82-005
SIX STEAM GENERATOR MANWAY STUDS BROKEN.
EVENT DATE: 031082 REPORT DATE: 032482 NSSS: CE TYPE: PWR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: HEAT EXCHANGERS
CAUSE: STRESS CORROSION FAILURES.

(NSIC 172913) WITH THE PLANT IN THE COLD SHUTDOWN CONDITION, WHILE REMOVING #2 S/G PRIMARY MANWAYS, SIX (6) TC MANWAY STUDS WERE BROKEN AND AFTER NDE TESTING FOUR (4) TC MANWAY STUDS WERE DETERMINED TO HAVE LINEAR INDICATIONS. PRELIMINARY LABORATORY ANALYSIS INDICATES POSSIBLE STRESS CORROSION FAILURE. ADDITIONAL LABORATORY ANALYSIS IS BEING PERFORMED TO DETERMINE ACTUAL MODE OF FAILURE. PRIOR TO RESTART ALL MANWAY STUDS FROM REMAINING S/G'S HAVE TO BE MAGNETIC PARTICLE AND ULTRASONICALLY TESTED TO VERIFY THAT THE STUD FAILURES ARE LIMITED TO THE #2 S/G TC MANWAY.

[170] MAINE YANKEE DOCKET 50-309 LER 82-013
DIVERSION OF WATER TO RWST CAUSES LOW PRESSURIZER LEVEL.
EVENT DATE: 032482 REPORT DATE: 040182 NSSS: CE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: OPERATOR ERROR.

(NSIC 172866) WITH THE PLANT IN COLD SHUTDOWN CONDITION WHILE MAKING PREPARATIONS FOR PLANT HEATUP PRESSURIZER LIQUID WAS DIVERTED TO THE RWST, LOWERING THE LEVEL TO APPROXIMATELY 800 GALLONS BELOW LOW LEVEL INDICATION. LOSS OF PRESSURIZER LEVEL WAS DUE TO MALPOSITIONING OF AN RHR ISOLATION VALVE AND AN RHR RECIRCULATION VALVE. THE ISOLATION VALVE SHOULD HAVE BEEN CLOSED PRIOR TO OPENING THE RECIRCULATION VALVE. PRESSURIZER LEVEL WAS NORMALIZED USING CHARGING PUMPS TAKING SUCTION FROM RWST. OPERATIONS DEPARTMENT WILL ISSUE A MEMO TO ALL OPERATORS RE-EMPHASIZING THE IMPORTANCE OF ADHERENCE TO PLANT PROCEDURES.

[171] MAINE YANKEE DOCKET 50-309 LER 82-015
CONTAINMENT ISOLATION VALVE LEAK HALTS STARTUP.
EVENT DATE: 032582 REPORT DATE: 041482 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: VALVES
CAUSE: DIRTY RUBBER SEAL.

(NSIC 173085) DURING PLANT HEATUP, WHILE PERFORMING CIS VALVE LEAK RATE TEST, VP-A-5 CONTAINMENT PURGE EXHAUST VALVE WAS FOUND TO BE LEAKING. THE RCS WAS COOLED DOWN TO THE COLD SHUTDOWN CONDITION. THE UPSTREAM CIS VALVE'S LEAK RATE WAS SATISFACTORY. INVESTIGATION BY THE MAINTENANCE DEPARTMENT REVEALED THAT THE RUBBER SEAL OF THE 42-INCH VP-A-5 WAS DIRTY. THE RUBBER SEAL WAS CLEANED AND LUBRICATED. THE VALVE WAS RETESTED SATISFACTORILY.

[172] MAINE YANKEE DOCKET 50-309 LER 82-014
SHIFT TECHNICAL ADVISOR NOT STATIONED DURING STARTUP.
EVENT DATE: 032682 REPORT DATE: 041382 NSSS: CE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: OPERATOR ERROR.

(NSIC 173087) DURING THE START OF PLANT HEAT-UP, THE STA WAS NOT STATIONED FROM 0100 HRS. - 0800 HRS., WHEN HE WAS REQUIRED TO BE, A PERIOD OF SEVEN HOURS. THIS RESULTED FROM A MISCONCEPTION ON THE PART OF THE ASSIGNED STA AND SHIFT OPERATING PERSONNEL. THIS IS CONTRARY TO TECH SPEC 5.2.G. ALL STAS HAVE BEEN SENT A MEMO STATING THE TECH SPEC STA DUTY REQUIREMENTS.

[173] MCGUIRE 1 DOCKET 50-369 LER 81-001 REV 1
UPDATE ON FAILURE OF 400 FIRE DETECTION TEMPERATURE SENSORS.
EVENT DATE: 012981 REPORT DATE: 031682 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: MANUFACTURING ERROR.

(NSIC 172855) VARIOUS PORTIONS OF THE FIRE DETECTION SYSTEM WERE INOPERABLE FOR PERIODS EXCEEDING ONE HOUR FROM 1/29/81 THROUGH 2/12/81. THIS CONSTITUTES A DEGRADED MODE OF OPERATION PER T.S.3.3.3.7 WHICH IS REPORTABLE PURSUANT TO T.S.6.9.1.13(B). FIRE WATCHES AND FIRE PATROLS WERE ESTABLISHED AS REQUIRED WHILE THE INSTRUMENTS WERE INOPERABLE. SEVERAL FIRE DETECTORS WERE TAKEN OUT OF SERVICE DUE TO CONSTRUCTION IN THE AREA. SEVERAL FIRE DETECTION INSTRUMENTS WERE DISCOVERED TO BE INOPERABLE. FIRE WATCHES AND FIRE PATROLS WERE ESTABLISHED AS REQUIRED. THE DEFECTIVE FIXED TEMPERATURE FIRE DETECTORS (DOUGLAS RANDAL CO., KIDDIE E 135C 135F) WERE REPLACED WITH S 135C DETECTORS, AND THE DEFECTIVE DETECTORS EITHER RETURNED TO THE MANUFACTURER FOR REPLACEMENT, OR DISCARDED.

[174] MCGUIRE 1 DOCKET 50-369 LER 81-188 REV 1
UPDATE ON ESF ACTUATION SWITCH FAILURES.
EVENT DATE: 121681 REPORT DATE: 031582 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: CORROSION OF SWITCH CONTACTS.

(NSIC 172901) DURING PERFORMANCE OF THE ENGINEERED SAFETY FEATURES (ESF) ACTUATION PERIODIC TEST, VARIOUS INITIATE AND RESET SWITCHES ON 'A' AND 'B' TRAINS FAILED TO ACTUATE THEIR DESIGNED DEVICES, AND WERE DECLARED INOPERABLE. THIS IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.12(E). NO INCIDENTS HAVE OCCURRED SINCE FUEL LOADING WHICH REQUIRED MANUAL ACTUATION OF THE ESF LOADS. IF THE SWITCHES HAD BEEN NEEDED, ALL OF THE REQUIRED DEVICES COULD HAVE BEEN ACTUATED BY REPEATEDLY CYCLING THE DEFECTIVE SWITCHES. EXAMINATION AND ANALYSIS BY CUTLER HAMMER FOUND THAT A SILVER SULFIDE COATING WAS BUILDING UP ON THE SWITCHES' SILVER PLATED SWITCH CONTACTS, AND THE LOW VOLTAGES INVOLVED WERE UNABLE TO ESTABLISH A CURRENT PATH THROUGH THE COATING. ALL APPROPRIATE ESF MANUAL

SWITCHES WILL BE REPLACED WITH NEW SWITCH BLOCKS HAVING GOLD PLATED SWITCH CONTACTS.

[175] MCGUIRE 1 DOCKET 50-369 LER 81-194
FIRE PUMP FAILS TO START.
EVENT DATE: 123081 REPORT DATE: 012982 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PUMPS
CAUSE: OVERCURRENT TRIP FOR UNKNOWN REASON.

(NSIC 172811) DURING THE FIRE PUMP OPERABILITY TEST, FIRE PUMP 'C' WOULD NOT START, AND WAS DECLARED INOPERABLE. SINCE FIRE PUMP 'A' HAD PREVIOUSLY BEEN DECLARED INOPERABLE, THIS VIOLATED TECH SPEC 3.7.10.1 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.13(B). WHEN THE FIRE PUMP 'C' RECEIVED THE SIGNAL TO START, IT TRIPPED ON OVERCURRENT. FIRE PUMP 'A' WAS SUCCESSFULLY TESTED AND DECLARED OPERABLE ON 12/31/81, THUS SATISFYING THE ACTION STATEMENT OF TECH SPEC 3.7.10.1. ANOTHER ATTEMPT TO START FIRE PUMP 'A' AGAIN RESULTED IN IT TRIPPING ON OVERCURRENT. AS OF YET NOTHING HAS BEEN FOUND WRONG WITH THE PUMP AND MOTOR, AND INVESTIGATION IS CONTINUING. AN UPDATED REPORT WILL BE SUBMITTED BY 2/26/82.

[176] MCGUIRE 1 DOCKET 50-369 LER 81-194 REV 1
UPDATE ON FIRE PUMP FAILURE TO START.
EVENT DATE: 123081 REPORT DATE: 040782 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: BREAKER CONTACTS BURNED OUT.

(NSIC 172992) DURING PERFORMANCE OF THE PERIODIC FIRE PUMP OPERABILITY TEST, IT WAS DISCOVERED THAT FIRE PUMP C WOULD NOT START, AND WAS DECLARED INOPERABLE. SINCE FIRE PUMP A HAD PREVIOUSLY BEEN DECLARED INOPERABLE, THIS VIOLATED TECH SPEC 3.7.10.1 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.13(B). WHEN FIRE PUMP C RECEIVED THE SIGNAL TO START, IT TRIPPED ON OVERCURRENT DUE TO BURNED CONTACTS (GTE SYLVANIA 600V, TYPE TM) IN THE STARTING CONTACTOR. THESE CONTACTS FAILED DUE TO THE NUMBER OF TIMES THEY HAD BEEN CYCLED (WEEKLY, DUE TO INSURANCE REQUIREMENTS). FIRE PUMP A WAS SUCCESSFULLY TESTED AND DECLARED OPERABLE ON 12/31/81. THE CONTACTS WERE REPLACED AND PUMP C FUNCTIONALLY VERIFIED. A PREVENTATIVE MAINTENACE PROGRAM IS BEING DEVELOPED.

[177] MCGUIRE 1 DOCKET 50-369 LER 82-015
CHARGING PUMPS INOPERABLE DUE TO DAMPENER FAILURE.
EVENT DATE: 021282 REPORT DATE: 032482 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: PUMPS
CAUSE: DAMPENER HYDROGEN CONTROL SYSTEM FAILED.

(NSIC 172979) DURING AN ATTEMPT TO FILL AND VENT THE RECIPROCATING CHARGING PUMP (PD) SUCTION PIPING IN PREPARATION FOR RETURNING THE PUMP TO SERVICE, BOTH CENTRIFUGAL CHARGING PUMPS (CCP) WERE DECLARED INOPERABLE WHEN HYDROGEN FROM THE PD PUMP SUCTION DAMPENERS ENTERED THE SUCTION OF THE CCP'S CAUSING CAVITATION. THIS VIOLATES TECH SPEC 3.1.2.4, 3.1.2.2, AND 3.5.2 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.12(E). THIS INCIDENT RESULTED FROM THE FAILURE OF THE HYDROGEN CONTROL SYSTEM ON THE PD PUMP SUCTION DAMPERNER (THE REFERENCE POT AND LEG WERE FOUND EMPTY, CAUSE UNKNOWN). IMMEDIATE CORRECTIVE ACTION WAS TO SECURE THE CCP'S, ISOLATE THE PD PUMP SUCTION VENT THE CCP'S AND SUCTION PIPING, AND RETURN THE CCP'S TO SERVICE. USE OF THE PD SYSTEM WILL BE DISCONTINUED UNTIL CORRECTIVE ACTION TO PREVENT RECURRENCE CAN BE DETERMINED AND TAKEN.

[178] MCGUIRE 1 DOCKET 50-369 LER 82-019
THREE RCS PRESSURE ISOLATION VALVE LEAK RATES EXCEED LIMIT.
EVENT DATE: 022882 REPORT DATE: 033082 NSSS: WE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
CAUSE: CHECK VALVES FAILED TO SEAT.

(NSIC 172972) PERFORMANCE OF THE REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVE LEAK RATE TEST DETERMINED THAT 3 VALVES FAILED THE TEST. THESE VALVES WERE SUBSEQUENTLY DECLARED INOPERABLE PER T.S.3.4.7.2(F) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.13(B). THE THREE SWING CHECK VALVES (ONE 2" KEROTEST AND TWO 10" WALWORTH) FAILED TO SEAT PROPERLY. THE VALVES WERE DISASSEMBLED AND REPAIRED PRIOR TO UNIT STARTUP. THE VALVES PASSED THEIR LEAK TEST.

[179] MCGUIRE 1 DOCKET 50-369 LER 82-020
FIRE DETECTION SYSTEM CPU MEMORY LOST.
EVENT DATE: 030482 REPORT DATE: 040182 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: NONLICENSED OPERATOR ERROR.

(NSIC 173014) AN OPERATOR (IN TRAINING) ATTEMPTING TO ADDRESS THE STATUS OF A FIRE ZONE THROUGH THE HONEYWELL FIRE DETECTION SYSTEM OPERATOR TERMINAL (OPT) MISTAKENLY DUMPED THE CENTRAL PROCESSING UNIT (CPU) MEMORY, RESULTING IN THE FIRE DETECTION SYSTEM BEING DECLARED INOPERABLE SINCE THE SYSTEM WOULD NOT PROVIDE CONTROL ROOM ALARMS. THIS VIOLATES TECH SPEC 3.3.3.7 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.13(B). ACCESS TO THE CPU MEMORY IS LIMITED TO SYSTEM MAINTENANCE PURPOSES. THE OPERATOR DID NOT UNDERSTAND THE LIMITS OF HIS RESPONSIBILITIES CONCERNING THE FIRE DETECTION SYSTEM, AND INADEQUATE WARNING (A NOTE IN THE KEY LOG) EXISTED CONCERNING USE OF THE CPU MEMORY ACCESS ENABLE KEY. THE CPU MEMORY WAS RESTORED AND PROCESSOR OPERATION VERIFIED. APPROPRIATE TRAINING WILL BE GIVEN, AND A WARNING WILL BE POSTED ON THE OPT PANEL CONCERNING ACCESS TO THE CPU MEMORY.

[180] MCGUIRE 1 DOCKET 50-369 LER 82-021
COLD LEG INJECTION ACCUMULATOR VALVES NOT TESTED.
EVENT DATE: 030982 REPORT DATE: 042782 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 173017) A REVIEW OF THE TECH SPEC LIST DISCOVERED THAT THE COLD LEG INJECTION ACCUMULATOR ISOLATION VALVES WERE NOT BEING PERIODICALLY TESTED FOR THE CORRECT RESPONSE TO THE P-11 INTERLOCK SIGNAL. THIS VIOLATES TECH SPEC 4.5.1.1.1(D.1) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.13(C). THE FAILURE TO PERFORM THE P-11 INTERLOCK TEST RESULTED FROM A PROCEDURAL DEFICIENCY. THE PROCEDURE "COLD LEG ACCUMULATOR P-11 OVERLAP TEST" WAS GENERATED FOR THE TESTING OF THE P-11 SETPOINT SIGNAL TO THE COLD LEG INJECTION ACCUMULATOR ISOLATION VALVES. THE TEST WAS PERFORMED DURING COLD SHUTDOWN ON MARCH 12 WITH EACH SLAVE RELAY FOR THE RESPECTIVE COLD LEG ACCUMULATOR ISOLATION VALVE RESPONDING AS REQUIRED.

[181] MCGUIRE 1 DOCKET 50-369 LER 82-022
TIME TEST FOR PRESSURIZER PORV OMITTED.
EVENT DATE: 031082 REPORT DATE: 040882 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVES
CAUSE: PROCEDURE DEFICIENCY.

(NSIC 173050) A PROCEDURE REVIEW DISCOVERED THAT THE PRESSURIZER #1 POWER OPERATED RELIEF VALVE HAD NOT BEEN TIMED AS REQUIRED BY SECTION XI, SUBSECTION IWV OF THE ASME CODE. THIS VIOLATES TECH SPEC 3.4.10.3 WHICH IS REPORTABLE PER

TECH SPEC 6.9.1.13(C). THE VALVE WAS SUCCESSFULLY MOVEMENT TESTED ON 12/8/81, AND MOVEMENT AND TIME TESTED ON 3/10/81, INDICATING THAT THE VALVE (AND REDUNDANT VALVE) WOULD HAVE PROVIDED THE REQUIRED SAFETY MARGIN HAD OVERPRESSURIZATION OCCURRED. THE PERIODIC TESTING PROCEDURE REQUIRED MOVEMENT TESTING FOR THE DUAL PRESSURE PORV, AND MOVEMENT AND TIME RESPONSE FOR A REDUNDANT DUAL PRESSURE PORV AND A HIGH PRESSURE PORV. A PROCEDURE CHANGE ON 9/15/80 INCORPORATED A TIME TEST FOR THE REDUNDANT PORV AND THE HIGH PRESSURE PORV, BUT SHOULD HAVE INCORPORATED THE DUAL PRESSURE PORV INSTEAD OF THE HIGH PRESSURE PORV. THE PROCEDURE WAS CHANGED AND THE VALVE SUCCESSFULLY TESTED.

[182] MILLSTONE 1 DOCKET 50-245 LER 81-042
ISOLATION VALVE IN SHUTDOWN COOLING LINE INOPERABLE.
EVENT DATE: 121581 REPORT DATE: 011582 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
CAUSE: MECHANICAL BINDING OF VALVE.

(NSIC 172804) VALVE 1-SD-1 WAS CYCLED IN AN ATTEMPT TO SEAT THE VALVE TO PREVENT FURTHER LEAKAGE PAST THE VALVE. WHILE CYCLING 1-SD-1 THE VALVE STUCK IN A PARTIALLY OPEN POSITION. TECH SPEC TABLE 3.7.1 REQUIRES ISOLATION VALVE 1-SD-1 TO BE OPERABLE DURING REACTOR POWER. PRESENTLY THE CAUSE CAN NOT BE DETERMINED DUE TO PLANT CONDITIONS WHICH WILL NOT ALLOW AN INSPECTION TO BE MADE. WITH THE SUCCESSFUL ATTEMPT TO CLOSE 1-SD-1 ON DECEMBER 21, 1981, THE VALVE IS SUSPECTED TO HAVE STUCK DUE TO MECHANICAL BINDING. AT THE NEXT SCHEDULED COLD SHUTDOWN THAT PERMITS DRYWELL ENTRY, 1-SD-1 WILL BE INSPECTED AND REWORKED.

[183] MILLSTONE 1 DOCKET 50-245 LER 82-001
SET POINT DRIFT IN MAIN STEAM LINE HIGH FLOW SWITCHES.
EVENT DATE: 011582 REPORT DATE: 021082 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172925) WHILE PERFORMING STEAM LINE HIGH FLOW FUNCTIONAL TEST, SWITCHES 261-2B AND 261-2D FAILED TO TRIP AT THEIR DESIRED SETPOINT. TECH SPEC TABLE 3.2.1, REQUIRES THE MAIN STEAM LINE HIGH FLOW SETTING TO BE LESS THAN OR EQUAL TO 120 PERCENT OF RATED STEAM FLOW. FAILURE OF THE SWITCHES IN QUESTION TO TRIP AT THEIR DESIRED SETPOINTS IS ATTRIBUTABLE TO SETPOINT DRIFT. THE SWITCHES WERE RECALIBRATED TO WITHIN THEIR ACCEPTABLE SETPOINT RANGE AND SATISFACTORILY TESTED.

[184] MILLSTONE 1 DOCKET 50-245 LER 82-002
CONTAINMENT COOLING SUBSYSTEM INOPERABLE DUE TO SW PUMP FAILURE.
EVENT DATE: 011582 REPORT DATE: 021382 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: PUMPS
CAUSE: MARINE FOULING AT PUMP SUCTION.

(NSIC 172926) THE 'B' EMERGENCY SERVICE WATER PUMP WAS DECLARED INOPERABLE AFTER FAILURE TO MEET THE MINIMUM PUMP DISCHARGE PRESSURE AS REQUIRED BY INSERVICE TESTING. TECH SPEC 3.5.B.1 REQUIRES THAT BOTH CONTAINMENT COOLING SUBSYSTEMS SHALL BE OPERABLE WHENEVER IRRADIATED FUEL IS IN THE REACTOR VESSEL. THE APPARENT CAUSE WAS MARINE FOULING AT THE PUMP SUCTION WITH POSSIBLE SLIPPAGE OF THE SECOND STAGE IMPELLER TO THE PUMP SHAFT. PUMP SURFACES WERE PAINTED WITH MARINE ANTI-FOULING PAINT ALONG WITH REPLACEMENT OF THE SECOND STAGE IMPELLER. PUMP WAS TESTED SATISFACTORILY AND RETURNED TO SERVICE.

[185] MILLSTONE 1 DOCKET 50-245 LER 82-006
MSIV CLOSING TIME EXCEEDS LIMIT.
EVENT DATE: 021282 REPORT DATE: 031582 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVE OPERATORS

CAUSE: CONTROL VALVE CYLINDER OUT OF ADJUSTMENT.

(NSIC 172945) WHILE PERFORMING MAIN STEAM ISOLATION VALVE CLOSURE FUNCTIONAL TEST, MAIN STEAM ISOLATION VALVE 1-MS-2C CLOSING TIME WAS FOUND TO BE 5.2 SECONDS. TECH SPEC, TABLE 3.7.1 REQUIRES ALL MAIN STEAM ISOLATION VALVES TO CLOSE WITHIN 3 TO 5 SECONDS OF A PRIMARY CONTAINMENT ISOLATION SIGNAL. INVESTIGATION REVEALED THE CONTROL VALVE HYDRAULIC CYLINDER TO BE SLIGHTLY OUT OF ADJUSTMENT. THE CONTROL VALVE HYDRAULIC CYLINDER SPEED WAS READJUSTED TO WITHIN TECH SPEC TIME CLOSURE LIMIT.

[186] MILLSTONE 1 DOCKET 50-245 LER 82-007
DRIFT OF ISOLATION CONDENSER ISOLATION INSTRUMENT PRESSURE SENSOR.
EVENT DATE: 031582 REPORT DATE: 040282 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172834) AT 1345 HOURS, WHILE PERFORMING ISOLATION CONDENSER ISOLATION INSTRUMENT FUNCTIONAL AND CALIBRATION TEST, SWITCH 1350B TRIPPED AT 147 INCHES OF WATER. TECH SPECS, TABLE 3.2.1 REQUIRES AUTOMATIC ISOLATION OF THE ISOLATION CONDENSER WHEN A LINE BREAK ON THE STEAM SUPPLY REACHES A DIFFERENTIAL PRESSURE MEASURING GREATER THAN 150 INCHES OF WATER BUT LESS THAN 164 INCHES OF WATER. FAILURE OF THE SWITCH TO TRIP AT ITS DESIRED SETPOINT WAS ATTRIBUTABLE TO SETPOINT DRIFT. THE PRESSURE SWITCH WAS RECALIBRATED TO WITHIN ITS ACCEPTABLE SETPOINT RANGE AND SATISFACTORILY TESTED. THE PRESSURE SWITCH IS A BARTON MODEL 288, WITH A RANGE OF 0-250 INCHES OF WATER.

[187] MILLSTONE 1 DOCKET 50-245 LER 82-008
THREE VALVES INOPERABLE DUE TO WATER LEAKAGE.
EVENT DATE: 031882 REPORT DATE: 041682 NSSS: GE TYPE: BWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: SERVICE WATER LEAK PENETRATED MOTOR CONTROL CENTER.

(NSIC 173024) BREAKERS THAT OPERATE A MAIN STEAM LINE DRAIN VALVE, AN INBOARD TORUS SPRAY STOP VALVE AND AN INBOARD DRYWELL SPRAY STOP VALVE WERE FOUND TO BE TRIPPED DUE TO WATER DAMAGE (TECH SPEC 3.7.D.2, TECH SPEC 3.5.B.5). THE BREAKERS WERE DAMAGED BY WATER THAT ENTERED THE MCC AFTER SOAKING THROUGH AN ENVIRONMENTAL ENCLOSURE PENETRATION SEAL. THE BREAKERS WERE REPAIRED. PENETRATION SEALS WILL BE MODIFIED TO PREVENT RECURRENCE.

[188] MILLSTONE 2 DOCKET 50-336 LER 81-033 REV 1
UPDATE ON REACTOR COOLANT LEAK OF UNKNOWN ORIGIN.
EVENT DATE: 092881 REPORT DATE: 040282 NSSS: CE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVES
CAUSE: PORV BLOCK VALVE LEAKAGE.

(NSIC 172912) DURING STEADY STATE POWER OPERATION, A LEAK OF UNKNOWN ORIGIN IN THE REACTOR COOLANT SYSTEM IN EXCESS OF 1 GPM WAS IDENTIFIED IN CONTAINMENT. THE LEAK WAS TRACED TO ISOLATION VALVE 2-RC-403 WHICH IS THE BLOCK VALVE FOR POWER OPERATED PRESSURE RELIEF VALVE 2-RC-402. 2-RC-403 WAS ISOLATED AND THE LEAKAGE REDUCED TO LESS THAN 1 GPM, IN COMPLIANCE WITH TECH SPEC 3.4.5.2.B. 2-RC-402 WAS DECLARED INOPERABLE IN ACCORDANCE TO TECH SPEC 3.4.3.A. THE BLOCK VALVE 2-RC-403 WAS REPAIRED DURING THE 1981 REFUEL. SIMILAR INCIDENTS LER 79-15. THE VALVE 2-RC-403 IS A 2-1/2 INCH PRESSURE SEAL GATE VALVE WITH A MOTOR OPERATOR, RATED AT 2500 PSI, ASME III, CLASS I, SA-182, STAINLESS STEEL. THE LEAK IN 2-RC-403 WAS REPAIRED BY REPLACING THE SEAL RING BETWEEN THE BODY AND BONNET. THE VALVE WAS THEN PUT BACK INTO SERVICE. THE POWER OPERATED RELIEF VALVE 2-RC-402 WAS THEN DECLARED OPERABLE.

[189] MILLSTONE 2 DOCKET 50-336 LER 81-040 REV 1
UPDATE ON INOPERABLE PORV DUE TO BLOCK VALVE FAILURE.
EVENT DATE: 120681 REPORT DATE: 033082 NSSS: CE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVE OPERATORS
CAUSE: TORQUE SWITCH FAILURE.

(NSIC 172903) DURING THE COOLDOWN FOLLOWING A REACTOR SHUTDOWN, VALVE 2-RC-403, BLOCKING VALVE FOR PORV 2-RC-402, COULD NOT BE OPENED. 2-RC-403 HAD BEEN SHUT ON SEPTEMBER 28, 1981 (SEE LER 81-33). 2-RC-402 WAS DECLARED INOPERABLE, AND THE PLANT WAS OPERATED IN ACCORDANCE WITH TECH SPEC ACTION STATEMENT 3.4.9.3.A FOR 95 HOURS. THE VALVE OPERATOR MOTOR WAS FOUND TO HAVE FAILED ELECTRICALLY. THE PROBABLE CAUSE WAS A FAILURE OF THE TORQUE SWITCH ASSEMBLY, RESULTING IN EXCESSIVE CURRENT BEING APPLIED TO THE MOTOR. THE MOTOR TORQUE SWITCH AND GEARED LIMIT SWITCH ASSEMBLIES WERE REPLACED AND FUNCTIONALLY TESTED. THE VALVE OPERATOR IS A LIMITORQUE TYPE SMB 000.

[190] NINE MILE POINT 1 DOCKET 50-220 LER 82-002
ANALYSIS SHOWS CONTAINMENT VENTING NOT POSSIBLE AFTER LOCA.
EVENT DATE: 012982 REPORT DATE: 021282 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 172961) UPON REVIEW BY THE NRC RESIDENT INSPECTOR, IT WAS DISCOVERED THAT THE OPERATING PROCEDURE DESCRIBING THE STEPS TO BE TAKEN TO VENT THE PRIMARY CONTAINMENT FOLLOWING THE DBA LOCA REQUIRED PERSONNEL TO ENTER THE REACTOR BUILDING. SINCE THE REACTOR BUILDING MAY NOT BE ACCESSIBLE AT THAT TIME, THE CONTAINMENT MAY NOT BE ABLE TO BE VENTED USING THIS PROCEDURE. A DETAILED REVIEW OF THE SYSTEM WITH RESPECT TO 10 CFR 50.44 WAS JUST RECENTLY COMPLETED WITH THE FOLLOWING FINDINGS: 1. A REDUNDANT N(SUB 2) SUPPLY EXISTED. 2. A REDUNDANT H(SUB 2)-O(SUB 2) MONITORING SYSTEM EXISTED. 3. A PROCEDURE CHANGE WAS MADE TO ALLOW VENTING WITHOUT REACTOR BUILDING ENTRY. 4. ANOTHER PROCEDURAL CHANGE WAS MADE TO ESTABLISH A REDUNDANT PURGE PATH. AS STATED IN THE JANUARY 29, 1982, LETTER TO MR. DOMINICK B. VASSALLO, CHIEF, OPERATING REACTORS BRANCH #2, U.S. NRC, A SYSTEM MODIFICATION WILL BE INSTALLED DURING THE SPRING 1983 REFUELING OUTAGE. THIS MODIFICATION WILL BE DESIGNED IN COMPLIANCE WITH 10 CFR 50.44.

[191] NINE MILE POINT 1 DOCKET 50-220 LER 82-008
AUTO-ISOLATION OF EMERGENCY CONDENSER SYSTEM NOT POSSIBLE.
EVENT DATE: 031782 REPORT DATE: 033082 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: VALVE OPERATORS
CAUSE: DESIGN ERROR.

(NSIC 172832) IT WAS DISCOVERED THAT A POTENTIAL PATH FOR REACTOR STEAM FROM EMERGENCY CONDENSER STEAM LINE VENTS TO ATMOSPHERE COULD RESULT IF EMERGENCY CONDENSER TUBE LEAKS OCCUR AND OPERATOR ACTION IS NOT TAKEN TO CLOSE THE REMOTE MANUAL EMERGENCY STEAM LINE VENT BLOCKING VALVE, OR THIS SINGLE (PER SYSTEM) VALVE FAILS TO CLOSE OR GROSSLY LEAKS. THIS IS IN VIOLATION OF THE SITE TECH SPECS REQUIREMENT WHICH CONCERNS DISCOVERY DURING PLANT LIFE OF CONDITIONS NOT CONSIDERED IN THE SAR. AS A RESULT OF A MODIFICATION MADE IN 1981, COMPLETE AUTO-ISOLATION OF THE AFFECTED EMERGENCY CONDENSER SYSTEM CANNOT BE ACCOMPLISHED. THIS IS DUE TO THE FACT THAT VENT BLOCKING VALVE #BV-05-01 FOR #11 SYSTEM AND VENT BLOCKING VALVE #BV-05-04 FOR #12 SYSTEM ARE NO LONGER IN THE "AUTO ISOLATION" SCHEME.

[192] NORTH ANNA 1 DOCKET 50-338 LER 82-012
EMERGENCY CONDENSATE STORAGE TANK BELOW REQUIRED VOLUME.
EVENT DATE: 022382 REPORT DATE: 031682 NSSS: WE TYPE: PWR
SYSTEM: CONDENSATE STORAGE FACILITIES COMPONENT: COMPONENT CODE NOT APPLICABLE

CAUSE: USE OF TANK TO FEED STEAM GENERATORS.

(NSIC 172910) AT 0605 AND AGAIN AT 0740 WHILE IN MODE 3 OPERATION, THE CONTENTS OF THE EMERGENCY CONDENSATE STORAGE TANK (ECST) DROPPED BELOW THE MINIMUM REQUIRED VOLUME (110,000 GAL) AS REQUIRED BY TECH SPEC 3.7.1.3. THE LEVEL WAS RESTORED WITHIN 4 HOURS AS REQUIRED BY THE ACTION STATEMENT. THESE EVENTS WERE CAUSED BY ADDING WATER FROM THE EMERGENCY CONDENSATE STORAGE TANK TO THE STEAM GENERATORS VIA THE AUXILIARY FEEDWATER SYSTEM. THIS WAS NECESSARY SINCE THE CONDENSATE SYSTEM HAD TO BE REMOVED FROM SERVICE DUE TO LEAKAGE IN THE GLAND SEAL SYSTEM. THE LEVEL WAS RESTORED WITHIN 4 HOURS BY ADDING WATER FROM THE 300,000 GAL TANK.

[193] NORTH ANNA 1 DOCKET 50-338 LER 82-014
PATH FROM BORIC ACID TANKS TO REACTOR COOLANT SYSTEM BLOCKED.
EVENT DATE: 032182 REPORT DATE: 041282 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVES
CAUSE: MAINTENANCE ACTIVITY.

(NSIC 173078) THE FLOW PATH FROM BORIC ACID TANKS TO THE REACTOR COOLANT SYSTEM WAS REMOVED FROM SERVICE TO REPAIR A VALVE DIAPHRAGM LEAK. THE FLOW PATH FROM RWST TO THE REACTOR COOLANT SYSTEM WAS OPERABLE; THIS EVENT IS WITHIN THE ACTION STATEMENT BUT CONTRARY TO THE LCO FOR TECH SPEC 3.1.2.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE FLOW PATH FROM THE BORIC ACID STORAGE TANKS TO THE UNIT NO. 1 CHARGING PUMPS WAS ISOLATED TO REPLACE THE DIAPHRAGM ON A LEAKING VALVE. THE DIAPHRAGM WAS REPLACED AND THE FLOW PATH WAS RETURNED TO SERVICE WITHIN THE ACTION STATEMENT REQUIREMENTS OF TECH SPEC 3.1.2.2.

[194] NORTH ANNA 1 DOCKET 50-338 LER 82-015
UNIDENTIFIED RCS LEAKAGE EXCEEDS LIMIT.
EVENT DATE: 032582 REPORT DATE: 040782 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVES
CAUSE: VALVE PACKING LEAK.

(NSIC 173081) REACTOR COOLANT SYSTEM UNIDENTIFIED LEAKAGE WAS DETERMINED TO BE 2.01 GPM WHICH IS GREATER THAN THE 1 GPM ALLOWED BY TECH SPEC 3.4.6.2. THE UNIDENTIFIED LEAKAGE WAS REDUCED BELOW 1 GPM WITHIN 4 HOURS. THIS EVENT IS CONTRARY TO TECH SPEC 3.4.6.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE HIGH UNIDENTIFIED LEAKAGE WAS CAUSED BY A PACKING LEAK ON 1-RC-129, A CHANNEL III PRESSURIZER PRESSURE AND LEVEL INSTRUMENT ISOLATION VALVE. 1-RC-129 AND 1-RC-130 WERE CLOSED REDUCING THE UNIDENTIFIED LEAKAGE BELOW 1 GPM AND PT-1457 AND LT-1461 WERE PLACED IN TRIP AS REQUIRED BY TECH SPEC 3.3.1.1 AND 3.3.2.1. VALVE 1-RC-129 WAS REPACKED, AND RETURNED TO SERVICE.

[195] NORTH ANNA 1 DOCKET 50-338 LER 82-008
SIX UNQUALIFIED RELAY LATCHING MECHANISMS IDENTIFIED.
EVENT DATE: 032982 REPORT DATE: 040782 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
CAUSE: DESIGN ERROR.

(NSIC 173100) IT WAS DETERMINED BY WESTINGHOUSE THAT 6 SOLID STATE PROTECTION OUTPUT SLAVE RELAYS DID NOT HAVE QUALIFIED LATCHING MECHANISMS. THE UNQUALIFIED LATCHING MECHANISMS FAILURE WOULD NOT PREVENT THE RELAYS FROM PERFORMING THEIR INTENDED SAFETY FUNCTION. WESTINGHOUSE SUPPLIED THE NON QUALIFIED LATCHING MECHANISMS AS REPLACEMENTS FOR THE ORIGINAL LATCHING MECHANISMS. ADMINISTRATIVE CONTROLS WILL BE USED TO MITIGATE THE CONSEQUENCES OF LATCH FAILURE. THE 6 RELAY LATCHES IN QUESTION ONLY AFFECT 10 VALVES.

[196] NORTH ANNA 1 DOCKET 50-338 LER 82-013
IODINE IN REACTOR COOLANT SYSTEM EXCEEDS LIMIT.
EVENT DATE: 040182 REPORT DATE: 042082 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
CAUSE: KNOWN FUEL ELEMENT DEFECTS.

(NSIC 173076) THE POST REACTOR TRIP SPECIFIC ACTIVITY SAMPLES OF THE REACTOR COOLANT SYSTEM INDICATED A DOSE EQUIVALENT I-131 LEVEL GREATER THAN THE LIMIT SPECIFIED BY TECH SPEC 3.4.8. THE HIGH IODINE LEVEL EXISTED FOR ONLY A SHORT TIME AND THE SPECIFIC ACTIVITY RETURNED TO WITHIN THE LIMIT OF TECH SPEC 3.4.8. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.D AND THE SPECIAL REQUIREMENTS OF TECH SPEC 6.9.2. THIS EVENT WAS CAUSED BY A KNOWN FUEL ELEMENT DEFECT IN THE REACTOR CORE. POST TRIP CONDITIONS IN THE CORE ENHANCED THE RELEASE OF FISSION FRAGMENTS TO THE REACTOR COOLANT SYSTEM WHICH CAUSED THE IODINE SPIKE. THE ACCELERATED SAMPLING FREQUENCY OF TECH SPEC 3.4.8 WAS IMPLEMENTED UNTIL THE RCS SPECIFIC ACTIVITY RETURNED TO LESS THAN THE LIMIT OF TECH SPEC 3.4.8.A.

[197] NORTH ANNA 2 DOCKET 50-339 LER 80-037 REV 1
UPDATE ON HIGH BORON CONCENTRATION IN TWO ACCUMULATORS.
EVENT DATE: 080780 REPORT DATE: 012682 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
CAUSE: INLEAKAGE FROM SPENT FUEL PIT.

(NSIC 172805) SAMPLE ANALYSIS INDICATED A HIGH BORON CONCENTRATION IN BOTH 'A' AND 'C' SI ACCUMULATORS. BOTH SAMPLES CONTAINED 2154 BORON WHICH EXCEEDED THE 2100 PPM LIMIT. WITHIN 7 HOURS, THE UNIT WAS PLACED IN A MODE WHERE THE ACCUMULATORS WERE NOT REQUIRED. THE HIGH BORON CONCENTRATION IN THE ACCUMULATORS WAS DUE TO INLEAKAGE INTO THE MAKE-UP SUPPLY HEADER FROM THE SPENT FUEL PIT. THE ACCUMULATOR BORON CONCENTRATION WAS RESTORED BY PARTIALLY DRAINING THE ACCUMULATOR AND REFILLING WITH BORATED WATER FROM THE RWST.

[198] NORTH ANNA 2 DOCKET 50-339 LER 82-009
PRESSURIZER PORV'S DECLARED INOPERABLE ON 3 OCCASIONS.
EVENT DATE: 030882 REPORT DATE: 033182 NSSS: WE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
CAUSE: LOW NITROGEN SYSTEM PRESSURE.

(NSIC 173082) DURING THE PERIOD FROM MARCH 8 TO 10, 1982, WHILE COOLING DOWN FOR A REFUELING OUTAGE, THE PRESSURIZER PORV'S WERE DECLARED INOPERABLE 3 TIMES DUE TO LOW NITROGEN PRESSURE IN THE GAS SUPPLY TANKS. THE ACTIONS OF TECH SPEC 3.4.9.3 WERE IMPLEMENTED. THIS EVENT IS REPORTABLE TO TECH SPEC 6.9.1.9.B. THESE EVENTS WERE CAUSED BY EXCESSIVE NITROGEN SYSTEM DEMAND DURING COOLDOWN OPERATION, EXCESSIVE SYSTEM LEAKAGE, AND AN INADEQUATE MAKE-UP SUPPLY. IN EACH EVENT, THE GAS SUPPLY TANKS WERE REFILLED WITHIN THE TIME FRAME OF THE ACTION STATEMENT.

[199] NORTH ANNA 2 DOCKET 50-339 LER 82-012
ROD CONTROL ROOM FIRE DOORS FAIL.
EVENT DATE: 031382 REPORT DATE: 033182 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
CAUSE: MISALIGNMENT OF DOOR AND LATCH.

(NSIC 173080) ON MARCH 13, 1982 WITH UNIT 2 IN COLD SHUTDOWN, FIRE DOOR M80-2 BETWEEN THE ROD CONTROL ROOM AND THE OUTSIDE WOULD NOT CLOSE. ON MARCH 26, 1982, WITH UNIT 2 IN MODE 6, FIRE DOOR A80-2 BETWEEN THE RED CONTROL ROOM AND THE AUXILIARY BUILDING WOULD NOT LATCH PROPERLY. A FIRE WATCH WAS POSTED IN EACH EVENT AS REQUIRED BY THE ACTION STATEMENT. THIS IS CONTRARY TO TECH SPEC 3.7.15

AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9B. DOOR M80-2 WAS NOT PROPERLY ALIGNED IN ITS FRAME DUE TO EXCESSIVE USE. THE DOOR WAS ADJUSTED AND VERIFIED TO BE OPERABLE. DOOR A80-2 WOULD NOT LATCH COMPLETELY. THE STRIKER PLATE WAS FILED, THE LATCH VERIFIED TO OPERATE AND THE DOOR RESTORED TO AN OPERABLE STATUS.

[200] NORTH ANNA 2 DOCKET 50-339 LER 82-016
EMERGENCY DIESEL MAIN BEARING DAMAGED.
EVENT DATE: 032382 REPORT DATE: 041482 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
CAUSE: LUBE OIL LINE DISCONNECTED.

(NSIC 173090) WHILE PREVENTATIVE MAINTENANCE WAS BEING PERFORMED ON EMERGENCY DIESEL 2-EE-EG-1J, LOWER MAIN BEARING NO. 14 WAS FOUND TO BE SCORED. THE SCORED BEARING HAD NOT AFFECTED PREVIOUS OPERATION OF THE DIESEL. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.D. THE BEARING WAS DAMAGED BECAUSE IT DID NOT RECEIVE PROPER LUBRICATION UPON STARTING PRIOR TO REACHING OPERATING SPEED. A LUBRICATION OIL LINE WHICH PROVIDES OIL TO THE BEARING WAS DISCONNECTED. THE BEARING WAS REPLACED, THE OIL LINE WAS CONNECTED AND PROPER OPERATION WILL BE VERIFIED PRIOR TO PLACING THE DIESEL IN SERVICE.

[201] NORTH ANNA 2 DOCKET 50-339 LER 82-015
PRESSURIZER SAFETY VALVE OPENS LOW.
EVENT DATE: 032382 REPORT DATE: 041482 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVES
CAUSE: SPRING COMPRESSION OUT OF ADJUSTMENT.

(NSIC 173091) WHILE PERFORMING THE PRESSURIZER CODE SAFETY VALVE SETPOINT VERIFICATION SURVEILLANCE TEST, THE SETPOINT OF CODE SAFETY VALVE SV-2551-B WAS FOUND TO BE 2400 PSIG. THIS IS OUTSIDE THE TOLERANCE BAND SPECIFIED BY TECH SPEC 3.4.31 OF 2485 PSIG &/- 1%. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE LIFT SETTING WAS OUT OF TOLERANCE BECAUSE THE SPRING COMPRESSION WAS OUT OF ADJUSTMENT. SPRING COMPRESSION WAS ADJUSTED USING APPROVED PROCEDURES IN THE PRESENCE OF THE VENDOR FIELD SERVICE REPRESENTATIVE. THE SET PRESSURE WAS VERIFIED WITHIN THE REQUIRED TOLERANCE ON THREE CONSECUTIVE LIFTS AND RETURNED TO SERVICE.

[202] NORTH ANNA 2 DOCKET 50-339 LER 82-014
SIX UNQUALIFIED RELAY LATCHING MECHANISMS IDENTIFIED.
EVENT DATE: 032982 REPORT DATE: 040782 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
CAUSE: DESIGN ERROR.

(NSIC 173070) IT WAS DETERMINED BY WESTINGHOUSE THAT 6 SOLID STATE PROTECTION OUTPUT SLAVE RELAYS DID NOT HAVE QUALIFIED LATCHING MECHANISMS. THE UNQUALIFIED LATCHING MECHANISMS FAILURE WOULD NOT PREVENT THE RELAYS FROM PREFORMING THEIR INTENDED SAFETY FUNCTION. WESTINGHOUSE SUPPLIED THE NON QUALIFIED LATCHING MECHANISMS AS REPLACEMENTS FOR THE ORIGINAL LATCHING MECHANISMS. ADMINISTRATIVE CONTROLS WILL BE USED TO MITIGATE THE CONSEQUENCES OF LATCH FAILURE. THE 6 RELAY LATCHES IN QUESTION ONLY AFFECT 10 VALVES.

[203] OCONEE 1 DOCKET 50-269 LER 82-002
CONTROL RODS MOVED INTO RESTRICTED CORE REGION.
EVENT DATE: 022282 REPORT DATE: 031282 NSSS: BW TYPE: PWR
SYSTEM: SYS REQRD FOR SAFE SHUTDOWN COMPONENT: CONTROL RODS
CAUSE: OPERATOR ERROR.

(NSIC 172885) THE CONTROL OPERATOR MOVED GROUP 8 CONTROL RODS INTO THE TECH SPEC

RESTRICTED REGION TO CLEAR A CORE AXIAL IMBALANCE ALARM. OPERATION WITHIN THE RESTRICTED REGION WAS NOT RECOGNIZED FOR 4 HOURS AND 23 MINUTES, WHICH IS IN EXCESS OF THE TECH SPECS 3.5.2.5 TWO HOUR LIMIT. DUE TO THE CONSERVATISMS IN THE ANALYSIS IT IS CONCLUDED THAT THE UNIT WAS NOT OPERATED OUTSIDE CONDITIONS ANALYZED FOR A LOCA. THE APPARENT CAUSE OF THIS INCIDENT WAS OPERATOR ERROR, IN THAT THE CONTROL OPERATORS DID NOT RECOGNIZE OR VERIFY THAT THE GROUP 8 CONTROL RODS EXCEEDED TECH SPECS LIMITS. THE ROD POSITION WAS CORRECTED, THE PROCEDURE WAS CHANGED TO REQUIRE VERIFICATION OF PROPER ROD POSITION, AND COMPUTER ALARMS AND STATALARMS WILL BE MODIFIED TO INCLUDE GROUP 8 POSITION LIMITS.

[204] OCONEE 1 DOCKET 50-269 LER 82-005
REACTOR BUILDING SPRAY PUMP FAILS.
EVENT DATE: 030282 REPORT DATE: 040182 NSSS: BW TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: PUMPS
CAUSE: OPERATOR ERROR.

(NSIC 172897) THE 1A REACTOR BUILDING SPRAY PUMP WAS DECLARED INOPERABLE DUE TO INABILITY TO ACHIEVE THE FLOW RATE REQUIRED BY THE REACTOR BUILDING SPRAY PUMP OPERABILITY TEST. DURING THIS INCIDENT ALL THREE REACTOR BUILDING COOLING UNITS WERE VERIFIED TO BE OPERATING AND THE REDUNDANT REACTOR BUILDING SPRAY PUMP WAS OPERABLE. THE FAILURE OF THE 1A PUMP WAS THE RESULT OF RUNNING THE PUMP FOR APPROXIMATELY THREE HOURS WITH NO SUCTION FLOW. THE PUMP WAS REPLACED, TESTED, AND DECLARED OPERABLE. THE CONTROL ROOM OPERATOR WAS COUNSELED AND MADE AWARE OF THE RESULTS OF HIS ACTION.

[205] OCONEE 1 DOCKET 50-269 LER 82-006
STEAM GENERATOR TUBE LEAKS.
EVENT DATE: 030682 REPORT DATE: 041682 NSSS: BW TYPE: PWR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: HEAT EXCHANGERS
CAUSE: STEAM GENERATOR TUBE CRACKED.

(NSIC 173176) A STEAM GENERATOR TUBE LEAK OF APPROXIMATELY 0.08 GPM WAS INDICATED BY THE CONDENSATE STEAM AIR EJECTOR OFFGAS RADIATION MONITOR. THIS CONSTITUTES AN ABNORMAL DEGRADATION OF THE REACTOR COOLANT PRESSURE BOUNDARY AND IS REPORTABLE PURSUANT TO TECH SPEC 6.6.2.1.A(3). PERSONNEL AND SYSTEMS ADEQUATELY CONTROLLED THIS EVENT AND THE RELEASES WERE WELL WITHIN REGULATORY REQUIREMENTS. THE APPARENT CAUSE OF THE STEAM GENERATOR TUBE LEAK WAS A CRACK ON TUBE 78-2. THIS UNIT WAS SHUT DOWN AND COOLED DOWN. THE LEAKING TUBE WAS STABILIZED FROM THE TOP AND WAS EXPLOSIVELY PLUGGED FROM THE BOTTOM. EDDY CURRENT TESTING IN THE LANE REGION SHOWED NO TUBES UNACCEPTABLY DEGRADED.

[206] OCONEE 2 DOCKET 50-270 LER 82-002
THREE BROKEN THERMAL SHIELD BOLTS FOUND.
EVENT DATE: 012282 REPORT DATE: 020582 NSSS: BW TYPE: PWR
SYSTEM: REACTOR VESSEL INTERNALS COMPONENT: VESSELS,PRESSURE
CAUSE: STRESS CORROSION CRACKING.

(NSIC 172967) DURING THE VISUAL EXAMINATION OF THE CORE SUPPORT ASSEMBLY, THREE THERMAL SHIELD BOLTS WERE OBSERVED TO HAVE THEIR HEADS BROKEN OFF, AND SHOCK PAD Y-2 ATTACHMENT BOLTS WERE BROKEN. ULTRASONIC INSPECTION SHOWED CRACK INDICATIONS ON 24 OF THE 96 THERMAL SHIELD BOLTS. THE EVALUATION OF A SIMILAR INCIDENT ON OCONEE 1 (RO-269/81-11) IS APPLICABLE TO THIS INCIDENT. THE APPARENT CAUSE OF THE THERMAL SHIELD BOLT FAILURES IS INTERGRANULAR STRESS CORROSION CRACKING. THE SHIELD BOLTS WILL BE REPLACED WITH STUD AND NUT FASTENERS. THE SHOCK PAD HAS BEEN REMOVED AND WILL NOT BE REPLACED.

[207] OCONEE 2 DOCKET 50-270 LER 82-004
THERMAL SLEEVE DISPLACED AND CRACKS FOUND IN HPCI NOZZLE.
EVENT DATE: 030282 REPORT DATE: 041382 NSSS: BW TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PIPES,FITTINGS
CAUSE: DESIGN ERROR.

(NSIC 173011) NON-DESTRUCTIVE TESTING OF THE HPCI NOZZLE AREAS REVEALED THAT 2A2 THERMAL SLEEVE WAS LOOSE AND THAT THERE WERE CRACKS IN THE ID OF THE SAFE END AND PIPING. THE 2B1 THERMAL SLEEVE WAS LOOSE. THE 2B2 THERMAL SLEEVE HAD A 360 DEGREE CRACK IN THE ROLLED AREA. A RUPTURE IN THIS LINE WOULD BE CLASSIFIED AS A SMALL BREAK LOCA, AN ACCIDENT FOR WHICH FSAR ANALYSIS SHOWS THAT THE PLANT COULD BE SAFELY SHUT DOWN. THE APPARENT CAUSE OF THE CRACKING IN THE 2A2 SAFE END AND PIPING APPEARS TO BE THERMAL FATIGUE RESULTING FROM A LOOSE THERMAL SLEEVE. THE 2A2 CRACKED PIPING, SAFE END, AND THERMAL SLEEVE WERE REPLACED. THE 2B2 THERMAL SLEEVE WAS REPLACED. THE 2B1 THERMAL SLEEVE WAS HARD ROLL EXPANDED TO RETURN THEIR THERMAL SLEEVE TO ITS INTENDED CONDITION.

[208] OCONEE 3 DOCKET 50-287 LER 82-001
BWST LEVEL INDICATION IS ERRATIC.
EVENT DATE: 012882 REPORT DATE: 022682 NSSS: BW TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DIRT AND OIL IN BOOSTER RELAY.

(NSIC 172957) THE CHANNEL B BORATED WATER STORAGE TANK (BWST) LEVEL INDICATION WAS DECLARED INOPERABLE DUE TO ERRATIC INDICATION. CHANNEL 'A' LEVEL INDICATION WAS OPERABLE THROUGHOUT THE INCIDENT AND BWST LEVEL REMAINED WITHIN TECH SPEC LIMITS. THE APPARENT CAUSE OF THIS INCIDENT WAS DIRT AND OIL IN THE LEVEL INDICATOR BOOSTER RELAY AND HIGH THERMOSTAT SETTINGS ON THE SYSTEM HEAT TRACE CAUSING BOILING IN THE IMPULSE LINES. THE BOOSTER RELAY WAS CLEARED, THE THERMOSTAT SETTING REDUCED, AND THE LEVEL INDICATION RETURNED TO SERVICE.

[209] OCONEE 3 DOCKET 50-287 LER 82-002
HOT LEG TEMPERATURE CHANNEL ERRATIC.
EVENT DATE: 021082 REPORT DATE: 031282 NSSS: BW TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LINEAR BRIDGE FAILED IN CIRCUIT.

(NSIC 172985) THE RPS CHANNEL B HOT LEG TEMPERATURE INDICATION WAS DECLARED INOPERABLE DUE TO READINGS THAT WERE LOWER THAN CHANNELS A, C, AND D. THE APPARENT CAUSE OF THIS INCIDENT WAS THE FAILURE OF A LINEAR BRIDGE IN THE INPUT CIRCUITRY FOR THE CHANNEL B INDICATION. CHANNEL B OF THE HOT LEG TEMPERATURE INDICATION WAS PLACED IN TRIP/BYPASS CONDITION. THE LINEAR BRIDGE WAS REPLACED AND THE CHANNEL B INDICATION WAS CALIBRATED AND RETURNED TO SERVICE.

[210] OCONEE 3 DOCKET 50-287 LER 82-004
THERMAL SLEEVE DISPLACED AND CRACKS FOUND IN HPI NOZZLE.
EVENT DATE: 022582 REPORT DATE: 040982 NSSS: BW TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PIPES,FITTINGS
CAUSE: DESIGN ERROR.

(NSIC 173009) NON-DESTURCTIVE TESTING OF THE HPI NOZZLE AREAS REVEALED THAT THE 3A2 THERMAL SLEEVE WAS DISPLACED AND THAT THERE WERE CRACKS IN THE ID OF THE PIPING AND SAFE END. THE 3B1 RADIOGRAPHS INDICATED A PARTIAL RADIAL GAP BETWEEN THE THERMAL SLEEVE AND SAFE END. THIS PIPING IS EXPECTED TO LEAK BEFORE BREAKER. A RUPTURE IN THIS LINE WOULD BE CLASSIFIED AS A SMALL BREAK LOCA, AN ACCIDENT FOR WHICH FSAR ANALYSIS SHOWS THAT THE PLANT COULD BE SAFELY SHUT DOWN. THE APPARENT CAUSE OF THE CRACKING IN THE 3A2 SAFE END AND PIPING APPEARS TO BE THERMAL FATIGUE RESULTING FROM A LOOSE THERMAL SLEEVE. THE 3A2 CRACKED PIPING,

SAFE END, AND THERMAL SLEEVE WERE REPLACED. THE 3B1 THERMAL SLEEVE WAS HARD ROLL EXPANDED TO RETURN THE THERMAL SLEEVE TO ITS INTENDED CONDITION.

[211] OCONEE 3 DOCKET 50-287 LER 82-005
SPENT FUEL ASSEMBLIES MOVED WHEN VENTILATION SYSTEM INOPERABLE.
EVENT DATE: 033082 REPORT DATE: 041382 NSSS: BW TYPE: PWR
SYSTEM: FUEL HANDLING SYSTEMS COMPONENT: BLOWERS
CAUSE: MAINTENANCE ERROR.

(NSIC 173008) DURING THE PERIOD BETWEEN MARCH 23 AND MARCH 29, 1982, TEN FUEL ASSEMBLIES WERE MOVED IN THE SPENT FUEL POOL (SFP). ON MARCH 30, 1982, THE SFP FANS WERE FOUND TO BE INOPERABLE DUE TO CONTROL POWER HAVING BEEN TAGGED OUT FOR MAINTENANCE ON MARCH 23, 1982. THIS CONSTITUTES A VIOLATION OF TECH SPEC 3.8.12.B. THE OFFSITE DOSES FOR THE FUEL HANDLING ACCIDENT WITHOUT SFP FANS ARE WITHIN 10 CFR 100 LIMITS. THE APPARENT CAUSE OF THIS OCCURRENCE IS PERSONNEL ERROR IN THAT THE WHITE TAGS FOR THE SFP FANS WERE NOT PLACED OR REMOVED DURING PERFORMANCES OF A PENETRATION LEAK RATE TEST PROCEDURE. THE TAGS WERE PROPERLY REMOVED AND THE PERSONNEL INVOLVED HAVE BEEN COUNSELED ON PERFORMANCE OF PROCEDURAL STEPS AND THE WHITE TAG PROCEDURE.

[212] OYSTER CREEK DOCKET 50-219 LER 82-013
SET POINT DRIFT OF LOW VOLTAGE ALARMS FOR BATTERY SYSTEMS.
EVENT DATE: 012882 REPORT DATE: 032982 NSSS: GE TYPE: BWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: RELAYS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172845) SURVEILLANCE TESTING DISCOVERED LOW VOLTAGE ANNUNCIATION INITIATION AND RESET RELAY SET POINTS FOR THE MAIN STATION AND DIESEL GENERATOR (DG) BATTERIES OUT OF THE RANGE SPECIFIED BY TECH SPEC 4.7.B.3.B. DUE TO THE FACT THAT THE MAIN STATION BATTERIES HAVE REDUNDANT CHARGERS AND THE WEEKLY SURVEILLANCES PERFORMED ON THE MAIN STATION AND DG BATTERIES HAD VERIFIED BATTERY OPERABILITY, THE SAFETY SIGNIFICANCE IS MINIMAL. THE CAUSE IS ATTRIBUTED TO THIS BEING THE FIRST SURVEILLANCE TEST PERFORMED ON THESE DEVICES. ALL ALARM RELAYS WERE RESET TO THE VALUE REQUIRED WITHIN TOLERANCES SPECIFIED IN THE TECH SPECS.

[213] PALISADES DOCKET 50-255 LER 82-002
AUXILIARY FEEDWATER FLOW CONTROL VALVES FAIL.
EVENT DATE: 010682 REPORT DATE: 020382 NSSS: CE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: 2 FLOW CONTROLLERS OUT OF ADJUSTMENT.

(NSIC 172937) DURING MONTHLY TESTING OF THE AUX FEED SYSTEM, THE AUX FEEDWATER FLOW CONTROL VALVES DID NOT FUNCTION PROPERLY; ONE VALVE HAD EXCESSIVE OPENING TIME (15 MIN), AND FLOW THROUGH THE OTHER OSCILLATED BETWEEN 120 AND 170 GPM (150 GPM IS NORMAL FLOW). THIS CONDITION RENDERED AUX FEED AUTO INITIATION INOPERABLE AND IS REPORTABLE PER TECH SPEC 6.9.2.B(2). MANUAL CONTROL WAS OPERABLE. VALVE CONTROLS WERE PLACED IN MANUAL AND VALVES WERE POSITIONED TO DELIVER REQUIRED FLOW. BOTH FLOW CONTROLLERS WERE OUT OF ADJUSTMENT; ADJUSTMENTS HAVE BEEN COMPLETED, AND OPERABILITY RESTORED.

[214] PALISADES DOCKET 50-255 LER 82-003
FIRE SUPPRESSION SYSTEM PARTIALLY ISOLATED.
EVENT DATE: 011882 REPORT DATE: 021582 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
CAUSE: VALVE FAILED DUE TO FREEZING.

(NSIC 172939) AS A RESULT OF THE FAILURE OF A MANUAL VALVE IN FIRE SUPPRESSION

SYSTEM PIPING, ISOLATION OF A PORTION OF THE SYSTEM WAS REQUIRED. THE ISOLATED PIPING INCLUDED THREE HOSE STATIONS REQUIRED TO BE OPERABLE PER TECH SPEC 3.22.4. BECAUSE THE FAILED VALVE RESULTED IN A LIMITED AMOUNT OF LEAKAGE, RESTORATION OF THE ISOLATED HEADER WOULD HAVE BEEN POSSIBLE IF OPERATION OF THE HOSE STATIONS WERE REQUIRED. REPORTABLE PER TECH SPEC 6.9.2.B2. FREEZING CAUSED FAILURE OF THE VALVE; ISOLATION WAS REQUIRED TO PERMIT REPAIRS. A BLANK FLANGE HAS BEEN INSTALLED ON THE VALVE AS A TEMPORARY REPAIR; THE VALVE WILL BE REPAIRED OR REPLACED. THE NEED FOR FREEZE PROTECTION WILL BE EVALUATED.

[215] PEACH BOTTOM 2 DOCKET 50-277 LER 82-003
DIESEL GENERATOR CARDOX TANK LEVEL FALLS BELOW LIMIT.
EVENT DATE: 012982 REPORT DATE: 022682 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: STUCK LEVEL INDICATOR FLOAT.

(NSIC 172966) OPERATOR NOTED THAT THE DIESEL GENERATOR CARDOX TANK LEVEL HAD DROPPED SIGNIFICANTLY FROM THE PREVIOUS DAY, TO A LEVEL BELOW THE LIMIT OF TECH SPEC 3.14.6.3.A. INVESTIGATION REVEALED THAT THE LEVEL INDICATOR FLOAT MECHANISM (CARDOX P/N 124109) WAS STUCK. CAUSE OF STICKING SUSPECTED TO BE ICE. AFTER REPLACING THE DEVICE, SYSTEM WAS BLOWN DOWN TO REMOVE MOISTURE AND THE TANK WAS REFILLED.

[216] PEACH BOTTOM 2 DOCKET 50-277 LER 82-002
OXYGEN ANALYZER SOLENOID VALVE FAILS TO CLOSE.
EVENT DATE: 020482 REPORT DATE: 030282 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: VALVES
CAUSE: CRUD ON SEATING SURFACE.

(NSIC 172913) A LOCAL LEAK RATE TEST WAS PERFORMED ON THE OXYGEN ANALYZER. SOLENOID VALVE SV-2980 FAILED TO SEAT PROPERLY AND WAS DECLARED INOPERABLE. THE VALVE IS AN ISOLATION VALVE IN THE RETURN LINE TO THE DRYWELL FROM THE ANALYZER. THE APPARENT CAUSE OF FAILURE WAS A BUILD UP OF DIRT ON THE SEATING SURFACE WHICH PREVENTED PROPER VALVE DISC SEATING. THE DYMO TYPE SOLENOID VALVE ATKOMATIC PART NO 15-644 WAS DISASSEMBLED, CLEANED, SATISFACTORILY LEAK TESTED, AND RETURNED TO SERVICE.

[217] PEACH BOTTOM 2 DOCKET 50-277 LER 82-004
SBGT FILTER DAMPER FAILS TO CLOSE.
EVENT DATE: 020682 REPORT DATE: 030682 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DEFECTIVE DAMPER CONTROL SWITCH.

(NSIC 172916) DURING TESTING OF THE PRIMARY CONTAINMENT ISOLATION SYSTEM, IT WAS NOTED THAT THE 'A' SBGT FILTER INLET DAMPER FAILED TO AUTOMATICALLY OPEN. INVESTIGATION REVEALED A DEFECTIVE DAMPER CONTROL SWITCH. THE DEFECTIVE CONTACTS WERE DISABLED TO ALLOW AUTOMATIC OPERATION AND THE DAMPER WAS ELECTRICALLY DEMONSTPATED TO BE OPERABLE. THE SWITCH WILL BE REPLACED DURING THE REFUELING OUTAGE.

[218] PEACH BOTTOM 2 DOCKET 50-277 LER 82-006
DIESEL FIRE PUMP TRIPS ON OVERSPEED.
EVENT DATE: 031382 REPORT DATE: 041282 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: DEFECTIVE OVERSPEED CONTROL SWITCH.

(NSIC 172896) DURING SURVEILLANCE TESTING OF THE FIRE PROTECTION SYSTEM, THE DIESEL FIRE PUMP TRIPPED OFF ON OVERSPEED CONDITION. THE REDUNDANT FIRE PUMP WAS

VERIFIED OPERABLE. GOVERNING TECH SPEC IS 3.14.A.2. INVESTIGATION REVEALED A DEFECTIVE OVERSPEED CONTROL SWITCH. THE DEFECTIVE SWITCH WAS REPLACED, SURVEILLANCE TEST CONDUCTED AND PUMP RETURNED TO SERVICE ON 3/16/82.

[219] PEACH BOTTOM 3 DOCKET 50-278 LER 81-019 REV 1
UPDATE ON INOPERABLE DRYWELL WIDE RANGE PRESSURE RECORDER.
EVENT DATE: 112181 REPORT DATE: 122181 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: GROUND IN PRINTED CIRCUIT BOARD.

(NSIC 172789) THE DRYWELL WIDE RANGE PRESSURE RECORDER PR-3508 DID NOT RECEIVE A SIGNAL AND WAS DECLARED INOPERABLE. THE PRESSURE TRANSMITTERS (PT-3508A & PT-3508B) WERE BLOWING FUSES. A TEMPORARY POWER SUPPLY WAS INSTALLED TO PROVIDE POWER TO THE TRANSMITTER WHILE THE PROBLEM WAS EVALUATED AND CORRECTED. APPLICABLE TECH SPEC IS 3.2.F. PROBLEM WAS TRACED TO AN INTENTIONAL INTERNAL GROUND IN THE PRINTED CIRCUIT ASSEMBLY ON PRESSURE TRANSMITTERS PT-3508A AND PT-3508B. DISCUSSIONS WITH VENDOR RESULTED IN A PRINTED CIRCUIT BOARD CHANGE TO THE TRANSMITTERS REMOVING THE INTERNAL GROUND AND PROVIDING A FLOATING DC SYSTEM. THE SYSTEM WAS TESTED AND DECLARED OPERABLE.

[220] PILGRIM 1 DOCKET 50-293 LER 82-001
SLIDING FIRE DOOR FOUND INOPERABLE.
EVENT DATE: 010582 REPORT DATE: 020482 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
CAUSE: CONSTRUCTION PERSONNEL ERROR.

(NSIC 172943) A SLIDING FIRE DOOR WAS FOUND TO BE NOT FUNCTIONAL. TECH SPEC SECTION 3.12.F REQUIRES ALL FIRE BARRIERS TO BE FUNCTIONAL AT ALL TIMES. THE TECH SPEC REQUIRED ACTION OF POSTING A FIRE WATCH ON ONE SIDE OF THE BARRIER HAD ALREADY BEEN INSTITUTED DUE TO THE CO(SUB 2) SYSTEM BEING DECLARED INOPERATIVE. (REF. LER 81-058). THIS IS DUE TO THE AREA BEING COMMON TO BOTH THE PROTECTION OF THE CO(SUB 2) SYSTEM AND THE FIRE DOOR (23' ELEVATION SWITCHGEAR ROOM). THE FIRE DOOR CONDITION WAS DETECTED DURING A FIRE INSPECTION TOUR AND CORRECTED IMMEDIATELY. DURING RECENT STATION MODIFICATIONS, A METAL CHANNEL, USED AS PART OF A SECURITY BARRIER, WAS MOVED SLIGHTLY WHICH HINDERED THE DOOR'S MOVEMENT. CURRENT STATION PROCEDURES ARE ADEQUATE TO DETECT PROBLEMS OF THIS NATURE. TO PRECLUDE OCCURRENCES OF THIS TYPE, A MEMO WILL BE ISSUED TO ALL APPROPRIATE STATION AND CONTRACTOR PERSONNEL TO REAPPRISE THEM OF THESE PROCEDURAL RESPONSIBILITIES.

[221] PILGRIM 1 DOCKET 50-293 LER 82-003
MANAGEMENT STRUCTURE CHANGED.
EVENT DATE: 020182 REPORT DATE: 030282 NSSS: GE TYPE: BWR
SYSTEM: OTHER SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: ADDITIONAL CORPORATE OVERSIGHT.

(NSIC 173141) BOSTON EDISON'S NUCLEAR CORPORATE ORGANIZATION HAS CHANGED. IN ADDITION TO ELECTION OF A SENIOR VICE PRESIDENT - NUCLEAR, THE POSITIONS OF VICE PRESIDENT - NUCLEAR OPERATIONS AND DIRECTOR OF OPERATIONS REVIEW AT PILGRIM STATION HAVE BEEN CREATED. THE NEED TO INCREASE CORPORATE OVERSIGHT OF SAFETY-RELATED ACTIVITIES HAS PROMPTED THIS REORGANIZATION. A TECH SPEC CHANGE WILL BE ISSUED AFTER THE VICE PRESIDENT - OPERATIONS POSITION IS FILLED.

[222] PILGRIM 1 DOCKET 50-293 LER 82-005
CRD LINE SUPPORTS INSTALLED INCORRECTLY.
EVENT DATE: 022682 REPORT DATE: 031282 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS

CAUSE: INSTALLATION ERROR.

(NSIC 172983) PNPS WAS NOTIFIED OF DEFICIENCIES EXISTING IN THE PIPE SUPPORTS IN THE CRD INSERT AND WITHDRAW LINES. ANALYSIS HAS CONCLUDED THAT THESE RESULT IN MAXIMUM STRESSES BEING ABOVE FSAR ACCEPTABLE LIMITS, BUT THAT THE SITUATION DOES NOT CONSTITUTE A SIGNIFICANT SAFETY HAZARD. FOUR SUPPORTS APPEAR TO BE NOT COMPLETELY INSTALLED. SEVERAL CLAMPS WERE MISSING OR LOOSE ON OTHER SUPPORTS. RESTORATION PRIOR TO STARTUP WILL ENSURE MAXIMUM STRESSES WILL BE BELOW THAT REQUIRED FOR SAFE SHUTDOWN FOR CYCLE VI. RESTORATION TO FULL FSAR ACCEPTABLE LIMITS WILL BE COMPLETED BEFORE THE END OF CYCLE VI.

[223] PILGRIM 1 DOCKET 50-293 LER 82-007
HIGH FLOW ISOLATION SET POINTS DISCOVERED IN ERROR.
EVENT DATE: 032482 REPORT DATE: 040582 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: INSTALLATION ERROR.

(NSIC 172894) FOLLOWING NOTIFICATION FROM AN OUTSIDE AGENCY A REVIEW OF THE ORIGINAL HIGH FLOW ISOLATION SETPOINTS FOR HPCI, RCIC AND RWCU WERE FOUND TO BE LESS CONSERVATIVE THAN THE TECH SPEC REQUIREMENT OF THREE HUNDRED PERCENT (300%) OF RATED FLOW. THIS WOULD RESULT IN AN ISOLATION SIGNAL ABOVE THAT ASSUMED IN THE ACCIDENT ANALYSIS. A SITUATION REQUIRING HIGH FLOW ISOLATION HAS NEVER OCCURRED. A REVIEW OF HISTORICAL DATA AND RECENT FLOW TESTING DETERMINED THE ERROR IN THE EXISTING SETPOINTS. THESE SETPOINTS HAVE BEEN RESET TO CONCUR WITH CALCULATED VALUES. PROCEDURE REVISIONS HAVE BEEN MADE TO REFLECT THESE SETPOINTS. VERIFICATION WILL BE MADE FOLLOWING STARTUP.

[224] POINT BEACH 1 DOCKET 50-266 LER 82-005
FUEL ASSEMBLIES PLACED NEXT TO SPENT FUEL POOL WALL.
EVENT DATE: 022282 REPORT DATE: 030882 NSSS: WE TYPE: PWR
SYSTEM: SPENT FUEL STORAGE FACILITIES COMPONENT: FUEL ELEMENTS
CAUSE: OPERATOR ERROR.

(NSIC 173136) ON 02/22/82 THE FACT THAT TWO FUEL ASSEMBLIES, WITH LESS THAN A ONE-YEAR COOLING PERIOD, WERE PLACED NEXT TO THE NORTH/SOUTH PIT DIVIDER WALL WAS BROUGHT TO THE ATTENTION OF THE SUPT.-EQ&R. WHEN THE FUEL WAS PLACED NEXT TO THE WALL, THE DCS DID NOT CONSIDER THE DIVIDER WALL AS A STRUCTURAL WALL AND CONSIDERED IT ACCEPTABLE TO PUT THE SPENT FUEL INTO THE RACKS WHICH CONTAINED THE DESIGNATED POISON TEST CHAMBERS IN THE SOUTH PIT. ON 02/23/82 IT WAS DETERMINED THAT THIS EVENT VIOLATED TECH SPEC 15.5.4.4. THE EVENT WAS CAUSED BY THE FACT THAT THE DESIGNATED SPENT FUEL RACK POISON TEST CHAMBERS IN THE SOUTH PIT ARE LOCATED NEXT TO A WALL. THIS LED TO A MISINTERPRETATION OF TECH SPEC. IMMEDIATE CORRECTIVE ACTION WAS TO MOVE THE SPENT FUEL ASSEMBLIES; REFER TO ATTACHMENT FOR FUTURE CORRECTIVE ACTION. THIS EVENT IS REPORTABLE ACCORDING TO TECH SPEC 15.6.9.1.6.

[225] POINT BEACH 1 DOCKET 50-266 LER 82-006
TWO CONTAINMENT ISOLATION CHECK VALVES LEAK.
EVENT DATE: 031182 REPORT DATE: 032582 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: SEALING SURFACE DEGRADATION.

(NSIC 172975) REVIEW OF UNIT 1 TYPE B & C LEAKAGE TESTS ON 03/11/82 REVEALED THAT ON TWO OCCASIONS ONE VALVE HAD LEAKAGE SUCH THAT THE LIMIT IN TECH SPEC 15.4.4.III.B WAS EXCEEDED. DURING THE 1979 REFUELING, THE CHECK VALVE (2-C) IN THE SERVICE AIR LINE TO CONTAINMENT LEAKED 160 L/MIN. DURING THE 1980 REFUELING, THE CHECK VALVE (755B) IN THE CCW LINE TO "B" RCP LEAKED 194 L/IN. THESE EVENTS ARE REPORTABLE PER TECH SPEC 15.6.9.2.A.3. BOTH CHECK VALVES LEAKED THROUGH

BECAUSE OF DEGRADATION OF THE SEALING SURFACES. IT IS BELIEVED THAT THE VALVE DEGRADATION WAS CAUSED BY CORROSION. THE SERVICE AIR CHECK VALVE'S DISC WAS REPLACED AND VALVE COVER REMACHINED. THE VALVE SEAT AND CLAPPER OF THE CCW CHECK VALVE WERE RELAPPED. BOTH VALVES WERE REASSEMBLED AND SUCCESSFULLY RETESTED.

[226] POINT BEACH 2 DOCKET 50-301 LER 82-001
BORIC ACID HEAT TRACING CIRCUIT INOPERABLE.
EVENT DATE: 020382 REPORT DATE: 022382 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: FAILED CIRCUIT CONTROLLER.

(NSIC 172816) A UNIT 2 BORIC ACID HEAT TRACING CIRCUIT, P042, WAS FOUND INOPERABLE. CIRCUIT P-42 IS ONE OF TWO HEAT TRACING CIRCUITS ON THE DISCHARGE LINE OF THE 'B' BORIC ACID TRANSFER PUMP. LOSS OF ONE OF THE TWO HEAT TRACING CIRCUITS IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 15.6.9.2.B.2. THE LOSS OF BORIC ACID HEAT TRACING CIRCUIT P-42 WAS DUE TO A FAILED THERMON TYPE 4 CIRCUIT CONTROLLER. THE CIRCUIT CONTROLLER WAS REPLACED AND THE CIRCUIT TESTED AND RETURNED TO SERVICE ON 02-04-82.

[227] PRAIRIE ISLAND 1 DOCKET 50-282 LER 82-003
STEAM EXCLUSION CONTROL DAMPER FAILS.
EVENT DATE: 020982 REPORT DATE: 031282 NSSS: WE TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: MECHANICAL FUNCTION UNITS
CAUSE: DRIVE GEAR FAILED.

(NSIC 172922) DURING THE ANNUAL VISUAL INSPECTION, ONE STEAM EXCLUSION CONTROL DAMPER WAS FOUND INOPERABLE. TECH SPEC 3.4.A.3 APPLIES. FAILURE OF A DRIVE GEAR IN A PACIFIC AIR PRODUCTS DAMPER MODEL R-35-FS. GEAR WAS REPLACED. RETEST WAS SATISFACTORY.

[228] PRAIRIE ISLAND 2 DOCKET 50-306 LER 82-004
AUXILIARY FEEDWATER PUMP INOPERABLE.
EVENT DATE: 022682 REPORT DATE: 032482 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: MAINTENANCE WORKER TRIPPED OVERSPEED MECHANISM.

(NSIC 172899) WHILE PERFORMING MAINTENANCE WORK IN THE AREA OF NO. 22 AUXILIARY FEEDWATER PUMP, A WORKMAN ACCIDENTALLY BUMPED THE OVERSPEED TRIP MECHANISM, TRIPPING THE VALVE AND MAKING THE PUMP INOPERABLE FOR ABOUT 9 MINUTES. THE EVENT WAS ANNUNCIATED IN THE CONTROL ROOM. RECENT SIMILAR EVENT WAS RO 81-1. TECH SPEC 3.4.A.2.B. APPLIES. THE CAUSE WAS PERSONNEL ERROR. THE VALVE OPERATOR WAS RESET.

[229] QUAD CITIES 1 DOCKET 50-254 LER 82-001
ECCS LEVEL SWITCH DAMAGED.
EVENT DATE: 011382 REPORT DATE: 021082 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PERSONNEL ERROR.

(NSIC 172935) DURING PERFORMANCE OF ROUTINE CALIBRATION OF ECCS LEVEL SWITCHES, LIS-1-263-72A WAS DAMAGED AND THUS MADE INOPERABLE. THE INSTRUMENT PERSONNEL WERE NOT AWARE OF THE TECH SPEC TABLE 3.2-1 OPERABILITY REQUIREMENTS FOR THIS SWITCH. THUS, OPERATING PERSONNEL WERE NOT IMMEDIATELY INFORMED OF ITS INOPERABILITY. OPERATING PERSONNEL WERE INFORMED TWO HOURS LATER, BUT REPAIRS HAD BEEN COMPLETED AND LIS-1-263-72A RETURNED TO SERVICE BEFORE ASSOCIATED CHANNEL COULD BE TRIPPED. THE CAUSE WAS THAT INSTRUMENT PERSONNEL WERE NOT FAMILIAR WITH TECH SPEC REQUIREMENTS FOR THESE SWITCHES. THE REPAIR OF LIS-1-263-72A WAS STARTED IMMEDIATELY AND COMPLETED ABOUT TWO AND ONE-HALF HOURS

AFTER IT WAS DAMAGED. TRAINING HAS BEEN GIVEN TO INSTRUMENT DEPARTMENT SUPERVISORS ON TECH SPEC INSTRUMENT OPERABILITY REQUIREMENTS.

[230] QUAD CITIES 1 DOCKET 50-254 LER 82-004
DRIFT OF RCIC DIFFERENTIAL PRESSURE SWITCHES CAUSES ISOLATION.
EVENT DATE: 030782 REPORT DATE: 032582 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172839) AT 1 A.M., THE HIGH STEAM LINE DIFFERENTIAL PRESSURE ALARM WAS RECEIVED AND CORRESPONDINGLY THE RCIC STEAM LINE ISOLATED. ATTEMPTS TO RESET THE ISOLATION WERE UNSUCCESSFUL, AND THEREFORE, THE RCIC SYSTEM WAS DECLARED INOPERABLE. AS PER TECH SPECS 3.5.E.2, HPCI WAS IMMEDIATELY PROVEN OPERABLE. THE CAUSE OF THIS OCCURRENCE WAS INSTRUMENT DRIFT OF THE HIGH STEAM LINE FLOW DIFFERENTIAL PRESSURE SWITCH, DPIS-1-1360-1A, WHICH CAUSED THE ERRONEOUS GROUP V ISOLATION. THE SWITCH WAS RECALIBRATED, FUNCTIONALLY TESTED, AND RETURNED TO SERVICE. BECAUSE OF A RECENT INCREASED DRIFTING OF THESE RCIC HIGH FLOW SWITCHES, SWITCHES NOT RECENTLY REPLACED WILL BE REPLACED AND ALL SWITCHES WILL BE CLOSELY MONITORED TO VERIFY STABLE CALIBRATION.

[231] QUAD CITIES 2 DOCKET 50-265 LER 82-002
SET POINT DRIFT IN MAIN STEAM LINE PRESSURE SWITCH.
EVENT DATE: 012682 REPORT DATE: 021082 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172964) WHILE PERFORMING SURVEILLANCE QIS 20-1, MAIN STEAM LINE LOW PRESSURE CALIBRATION, PRESSURE SWITCH PS-2-261-30D WAS FOUND TO TRIP AT 794 PSIG. THIS WAS BELOW THE 825 PSIG LIMIT REQUIRED BY TECH SPEC TABLE 3.2-1. THIS OCCURRENCE WAS CAUSED BY INSTRUMENT DRIFT. THE PS-2-261-30D SWITCH WAS RECALIBRATED TO TRIP AT 856 PSIG.

[232] QUAD CITIES 2 DOCKET 50-265 LER 82-004
SET POINT DRIFT OF RCIC STEAM LINE HIGH FLOW SWITCHES.
EVENT DATE: 022482 REPORT DATE: 033182 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172836) WHILE PERFORMING THE QUARTERLY RCIC STEAM LINE HIGH FLOW CALIBRATION AND FUNCTIONAL TEST, QIS 18, DPIS 2-1360-1B& FAILED TO OPERATE. THIS SWITCH IS ASSOCIATED WITH THE DPIS 2-1360-1B DIFFERENTIAL PRESSURE CELL WHICH ISOLATES THE RCIC STEAM LINE ON HIGH FLOW. THE REDUNDANT DIFFERENTIAL PRESSURE CELL DPIS 2-1360-1A WAS FOUND OPERABLE AND WOULD HAVE ISOLATED THE RCIC STEAM LINE ON HIGH FLOW. AT THE TIME OF THE CALIBRATION, UNIT TWO HAD BEEN SHUTDOWN SINCE JANUARY 18, 1982, AND PRIMARY CONTAINMENT WAS NOT IN EFFECT. THE CAUSE OF THIS OCCURRENCE WAS INSTRUMENT DRIFT OF THE DPIS 2-1360-1B& DIFFERENTIAL PRESSURE SWITCH. THE SWITCH WAS RECALIBRATED AND TESTED SATISFACTORILY. AS A RESULT OF A RECENT INCREASE IN THE TENDENCY FOR THESE SWITCHES TO DRIFT, ALL UNIT ONE AND UNIT TWO HIGH STEAM FLOW DIFFERENTIAL PRESSURE SWITCHES WILL BE REPLACED LIKE-FOR-LIKE.

[233] RANCHO SECO DOCKET 50-312 LER 81-056
RPS CHANNEL INOPERABLE DUE TO TESTING ERROR.
EVENT DATE: 121181 REPORT DATE: 122181 NSSS: BW TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: MAINTENANCE PERSONNEL INCORRECTLY TRIPPED BREAKER.

(NSIC 172867) WHILE PERFORMING INSTRUMENT SURVEILLANCE I-108B WITH CHANNEL C OF THE RPS DECLARED ADMINISTRATIVELY INOPERABLE, THE INSTRUMENT TECHNICIAN INCORRECTLY PERFORMED THE TEST SUCH THAT THE TRIP SYSTEM WAS NOT SET UP TO RETAIN THE MINIMUM DEGREE OF REDUNDANCY AS REQUIRED BY TECH SPEC SECTIONS 3.5.1.1 AND 3.5.1.2. THE INSTRUMENT TECHNICIAN DID NOT PROPERLY FOLLOW PROCEDURES. ALL INSTRUMENT TECHNICIANS WERE RE-INSTRUCTED ON THE EFFECTS OF TRIPPING AN RPS CHANNEL VERSUS TRIPPING ITS ASSOCIATED BREAKER.

[234] RANCHO SECO DOCKET 50-312 LER 82-008
PLANT EFFLUENT PH RECORDED AS TOO HIGH.
EVENT DATE: 012182 REPORT DATE: 032282 NSSS: BW TYPE: PWR
SYSTEM: OTHER AUX WATER SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT ERROR.

(NSIC 172842) PLANT EFFLUENT PH WAS FOUND TO BE HIGH (8.6 - 8.7) FOR A TIME PERIOD OF APPROXIMATELY FIVE MINUTES ON JANUARY 21, 1982. THERE WERE NO TRANSIENTS NOR WAS PLANT OR PUBLIC SAFETY AFFECTED. APPARENT CAUSE WAS INSTRUMENT ERROR. THE PH AND DELTA TC PROBES WERE REPLACED.

[235] ROBINSON 2 DOCKET 50-261 LER 79-034 REV 1
UPDATE ON AFW SYSTEM ISOLATION VALVE FAILURE.
EVENT DATE: 091879 REPORT DATE: 032682 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: WORN GEAR IN VALVE OPERATOR.

(NSIC 172857) WHILE PERFORMING THE MONTHLY PERIODIC TEST OF THE AFW SYSTEM, THE MOTOR OPERATED ISOLATION VALVE IN THE AFW LINE TO "A" S/G, AFW-V2-16A, FAILED TO OPEN. THE VALVE WAS DECLARED INOPERABLE AT 1900 HOURS. THIS RESULTED IN OPERATION IN A DEGRADED MODE PERMITTED BY TECH SPEC 3.4.3 AND CONSTITUTES A REPORTABLE OCCURRENCE PER TECH SPEC 6.9.2.B.2. THROUGHOUT THE EVENT BOTH MAIN FEED PUMPS AND THREE AUXILIARY FEEDWATER PUMPS WERE AVAILABLE. ALSO, V2-16A WAS MANUALLY OPERABLE IF REQUIRED. (LER 79-32) (LER 79-33). THE OPERATOR ON V2-16A FAILED TO OPEN DUE TO THE OPERATOR POWER SUPPLY BREAKER HAVING TRIPPED ON THE PREVIOUS CLOSURE. THE BREAKER WAS RESET, AND THE VALVE DECLARED OPERABLE AT 2032 HOURS AFTER HAVING BEEN STROKED SEVERAL TIMES WITH NO PROBLEMS. THE ROOT CAUSE OF THE FAILURE WAS SUBSEQUENTLY DETERMINED TO BE A WORN GEAR IN THE VALVE OPERATOR. THE VALVE HAS BEEN REPLACED.

[236] ROBINSON 2 DOCKET 50-261 LER 81-033
TECH SPEC ERROR IN HEATUP/COOLDOWN RATES REPORTED.
EVENT DATE: 122881 REPORT DATE: 011182 NSSS: WE TYPE: PWR
SYSTEM: REACTOR VES. & APPURTENANCES COMPONENT: VESSELS,PRESSURE
CAUSE: ADMINISTRATIVE ERROR.

(NSIC 172798) IT WAS DETERMINED THAT AN ERROR IN THE TECH SPEC HEATUP AND COOLDOWN CURVES WHICH HAD NOT BEEN REPORTED TO THE NRC WAS REPORTABLE PURSUANT TO TECH SPEC 6.9.2.A.9. THIS ERROR WAS MADE IN 1977 AND, DUE TO AN ADMINISTRATIVE ERROR, WAS NOT REPORTED TO THE NRC. THE HEATUP AND COOLDOWN CURVES WERE IN ERROR DUE TO CALCULATIONAL MISTAKES AND WERE NOT REVISED DUE TO AN ADMINISTRATIVE ERROR. THE CORRECTED CURVES AND CALCULATIONS WILL BE SUBMITTED TO THE NRC AS A TECH SPEC CHANGE BY JANUARY 31, 1982. THE ADMINISTRATIVE ERROR IS CONSIDERED A UNIQUE AND ISOLATED EVENT.

[237] SALEM 1 DOCKET 50-272 LER 81-116 REV 1
UPDATE ON CONTAINMENT AIRLOCK LEAKS.
EVENT DATE: 112481 REPORT DATE: 040182 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN

CAUSE: WORN SEALS.

(NSIC 172881) ON THREE SEPARATE OCCASIONS, NOVEMBER 24 AND 28, AND DECEMBER 8, 1982, DURING THE PERFORMANCE OF SURVEILLANCE PROCEDURE SP(O) 4.6.1.3, THE 100' ELEVATION CONTAINMENT AIR LOCK EXCEEDED THE LEAKAGE RATE LIMIT OF 0.05 LA AT THE DESIGN PRESSURE OF 47.0 PSIG AS REQUIRED BY TECH SPEC 3.6.1.3.B. AT 1600, 1935, AND 1500 HOURS, RESPECTIVELY, THE AIR LOCK WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.6.1.3 WAS ENTERED. ON NOVEMBER 24 A SEAL ON THE OUTER DOOR WAS REPLACED. ON NOVEMBER 28 A SEAL ON THE INNER DOOR WAS REMOVED, TURNED AROUND, AND REINSTALLED. ON DECEMBER 8 THE OPERATING HANDWHEEL SETSCREW WAS REINSTALLED. ON ALL THREE OCCASIONS SURVEILLANCE PROCEDURES SP(O) 4.6.1.3 WAS SATISFACTORILY PERFORMED, AND AT 1925, 2220, AND 2000 HOURS, RESPECTIVELY, ACTION STATEMENT 3.6.1.3 WAS TERMINATED. (81-49, 81-57, 81-89.)

[238] SALEM 1 DOCKET 50-272 LER 82-001 REV 1
UPDATE ON 2 POPS VALVE FAILURE.
EVENT DATE: 010682 REPORT DATE: 020582 NSSS: WE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
CAUSE: GENERIC VALVE PROBLEM.

(NSIC 172970) ON JANUARY 5, 1982, PRESSURIZER OVERPRESSURE PROTECTION SYSTEM VALVE 1PR1 WAS ISOLATED, DUE TO LEAKING THROUGH, BUT ACTION STATEMENT 3.4.9.3.A WAS ERRONEOUSLY NOT ENTERED. AT 0800 HOURS, JANUARY 6, 1982 THE OVERSIGHT WAS CORRECTED AND ACTION STATEMENT 3.4.9.3.A WAS TERMINATED. ON JANUARY 7, 1982, WHILE DRAINING THE REACTOR COOLANT SYSTEM, POPS RELIEF VALVE 1PR2 WOULD NOT OPEN IN MANUAL AND WAS DECLARED INOPERABLE. AT 1310 HOURS ACTION STATEMENT 3.4.9.3.A WAS ENTERED. FAILURE OF COPES-VULCAN D100-160 RELIEF VALVES HAS BEEN PREVIOUSLY IDENTIFIED AS A GENERIC PROBLEM. AT 1700 HOURS, JANUARY 22, 1982, THE REACTOR VESSEL HEAD WAS REMOVED, AND SINCE THE LIMITING CONDITION FOR OPERATION IS NOT APPLICABLE UNDER THIS CONDITION, ACTION STATEMENT 3.4.9.3.A WAS TERMINATED.

[239] SALEM 1 DOCKET 50-272 LER 82-006
3 PARTICULATE DETECTORS INOPERABLE.
EVENT DATE: 011382 REPORT DATE: 021082 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PUMP FAILURE.

(NSIC 172932) AN OPERATOR DISCOVERED THAT THE AIR PARTICULATE DETECTOR (APD) PUMP HAD FAILED. AN ATTEMPT TO RESTART IT WAS UNSUCCESSFUL. THE APD PUMP WAS DECLARED INOPERABLE, RENDERING RADIATION MONITOR 1R11A, 1R12A, AND 1R12B INOPERABLE, AND ACTION STATEMENTS 3.3.3.1.B ACTION 22 AND 3.9.9. WERE ENTERED. ALL OF THE REQUIRED CONTAINMENT PURGE AND PRESSURE-VACUUM RELIEF PENETRATIONS WERE ISOLATED. THE HIGH SPEED AND LOW SPEED FILTER PAPER DRIVES WERE REPLACED AND THE APD WAS TESTED SATISFACTORILY.

[240] SALEM 1 DOCKET 50-272 LER 82-005
FUEL ASSEMBLY CLADDING RUPTURE FOUND.
EVENT DATE: 013182 REPORT DATE: 021082 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
CAUSE: CLADDING DEGRADATION.

(NSIC 172930) THE WESTINGHOUSE FUEL INSPECTION TEAM, WHILE CONDUCTING THEIR FUEL ASSEMBLY TV VISUAL AND DIMENSIONAL SURVEY, IN ACCORDANCE WITH THE PLANNED FUEL INSPECTION (FP-PSE-FE4) OF TWO OPTIMIZED ASSEMBLIES AND FOUR ADDITIONAL ASSEMBLIES, DISCOVERED DEGRADATION OF THE FUEL CLADDING ON FUEL ASSEMBLY C-04. THE INSPECTION TEAM REPORTED THAT FUEL PELLETS WERE VISIBLE DURING THE FUEL ELEMENT SCAN. FUEL ASSEMBLY C-04 WAS PLACED IN THE SPENT FUEL PIT. AS A RESULT OF THE C-04 INSPECTION RESULTS, ALL C ASSEMBLIES SCHEDULED TO BE REUSED IN THE

CORE, WERE INSPECTED. NO ADDITIONAL CLADDING RUPTURES WERE DISCOVERED. AN INVESTIGATION IS IN PROGRESS, AND A SUPPLEMENTAL REPORT WILL BE SUBMITTED UPON COMPLETION.

[241] SALEM 1 DOCKET 50-272 LER 82-007 REV 1
UPDATE ON SEISMICALLY UNQUALIFIED CHECK VALVES.
EVENT DATE: 021182 REPORT DATE: 022482 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES
CAUSE: DESIGN ERROR.

(NSIC 172959) IN RESPONSE TO THE NRC REQUEST FOR ADDITIONAL INFORMATION ON SEISMIC QUALIFICATION OF THE AUXILIARY FEEDWATER SYSTEM, IT WAS DISCOVERED THAT THE CHECK VALVES 1AF71 AND 1AF72 AND ASSOCIATED PIPING WERE NOT SEISMICALLY PROTECTED. AS PER TECH SPEC 6.9.1.8.I THE NRC RESIDENT INSPECTOR WAS NOTIFIED IMMEDIATELY, WITH WRITTEN NOTIFICATION SUBMITTED WITHIN 24 HOURS. A PROTECTIVE STEEL STRUCTURE WILL BE PROVIDED OFF THE SEISMIC WALL. THESE NEW STRUCTURES WILL ALSO INCORPORATE SEISMIC GUIDES FOR ADDITIONAL PROTECTION OF THESE VALVES. DCR 1EC-1404 HAS BEEN INITIATED AND ISSUED TO THE STATION TO MAKE THESE IMPROVEMENTS/ENHANCEMENTS. A SUPPLEMENTAL REPORT WILL BE SUBMITTED UPON COMPLETION.

[242] SALEM 1 DOCKET 50-272 LER 82-011
AUDIBLE FIRE PROTECTION ALARM FAILS.
EVENT DATE: 021582 REPORT DATE: 030982 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: ANNUNCIATOR MODULES
CAUSE: LOOSE RELAY.

(NSIC 172880) AT 1100 HOURS, THE CONTROL OPERATOR NOTICED THAT THE FIRE ALARM FOR THE 84' ELEVATION, CHARGING PUMP AREA HAD ANNUNCIATED ON THE 1RP5 FIRE ZONE PANEL, BUT THE CODED AUDIBLE ALARM DID NOT SOUND. THE FIRE ALARM WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.3.3.6 WAS ENTERED. THE CONTROL CIRCUIT RELAY FROM THE 24 HOUR TIMER IN THE MISCELLANEOUS SIGNAL CABINET WAS STICKING. THE AUDIO/TEST SWITCH ON THE TIMER WAS CYCLED, THE RELAY CLEARED, AND THE CODED AUDIBLE ALARM FUNCTIONED PROPERLY. AT 1420 HOURS, FEBRUARY 15, 1982 ACTION STATEMENT 3.3.3.6 WAS TERMINATED. SUBSEQUENTLY, A RELAY WAS DISCOVERED LOOSE IN ITS SOCKET AND RESEATED.

[243] SALEM 1 DOCKET 50-272 LER 82-012
DIESEL GENERATOR INOPERABLE DUE TO JACKET WATER HEATER LEAK.
EVENT DATE: 022382 REPORT DATE: 032482 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: HEATERS,ELECTRIC
CAUSE: CORROSION OF HEATER SHEATH.

(NSIC 172860) WHILE PERFORMING HIS ROUNDS, AN OPERATOR DISCOVERED THAT NO. 1B DIESEL GENERATOR CUBICLE CONTAINED A SIGNIFICANT AMOUNT OF CHPOMATED WATER ON THE FLOOR. AN ELECTRICAL CONDUIT CONTAINING LEADS TO THE PRE-LUBRICATION PUMP AND HEATER WAS FILLED WITH WATER. INVESTIGATION REVEALED THAT THE RIGHT SIDE JACKED WATER HEATER WAS LEAKING AT IT'S CONNECTION TO THE DIESEL. AT 0225 HOURS NO. 1B DIESEL WAS DECLARED INOPERABLE, AND SINCE NO. 1C DIESEL WAS ALREADY TAGGED OUT, ACTION STATEMENTS 3.8.1.2 AND 3.8.2.2 WERE ENTERED. ALL OPERATIONS INVOLVING CORE ALTERATIONS OR POSITIVE REACTIVITY CHANGES WERE SUSPENDED IMMEDIATELY. CONTAINMENT INTEGRITY WAS ESTABLISHED AT 1020 HOURS, FEBRUARY 23. BOTH JACKET WATER HEATERS WERE REPLACED AS PER DCR 1SC-0086. THE PRELUBRICATION PUMP AND MOTOR WERE REPLACED. AT 0125 HOURS, FEBRUARY 24, 1982 ACTION STATEMENTS 3.8.1.2 AND 3.8.2.2 WERE TERMINATED.

[244] SALEM 1 DOCKET 50-272 LER 82-013
REACTOR COOLANT SYSTEM ISOLATED FROM PRESSURIZER RELIEF VALVES.
EVENT DATE: 030182 REPORT DATE: 032982 NSSS: WE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
CAUSE: OPERATOR ERROR.

(NSIC 172861) THE CONTROL ROOM OPERATOR CLOSED PRESSURIZER RELIEF VALVE 1PR1, WITH VALVE 1PR2 STILL IN THE CLOSED POSITION. OPERATION PROCEEDED WITH BOTH VALVES CLOSED UNTIL 1203 HOURS WHEN THE OPERATOR NOTICED THAT NO REACTOR COOLANT SYSTEM (RCS) VENT PATH EXISTED. ACTION STATEMENT 3.4.9.3.B WAS ENTERED RETROACTIVE TO 0856 HOURS, WHEN VALVE 1PR1 WAS CLOSED. THE CAUSE OF THE LOSS OF RCS VENT PATH WAS THE OPERATOR INADVERTENTLY CLOSED VALVE 1PR1 WITHOUT OPENING VALVE 1PR2. AT 1203 HOURS, VALVE 1PR1 WAS OPENED AND ACTION STATEMENT 3.4.9.3.B WAS TERMINATED. THE OPERATOR INVOLVED WAS COUNSELED BY THE SENIOR SHIFT SUPERVISOR.

[245] SALEM 1 DOCKET 50-272 LER 82-015
LOSS OF VITAL BUS DISABLES ALL OPERABLE COMPONENT COOLING AND SERVICE WATER.
EVENT DATE: 031682 REPORT DATE: 040782 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: RELAYS
CAUSE: VITAL BUS RELAY SHORTED.

(NSIC 173048) NO. 1A VITAL BUS TRIPPED RESULTING IN A LOSS OF COMPONENT COOLING WATER (CCW) AND SERVICE WATER (SW) FLOWS; THE REDUNDANT CCW AND SW PUMPS WERE TAGGED OUT FOR MAINTENANCE. ALL CHARGING PUMPS, BORON INJECTION FLOW PATHS, RESIDUAL HEAT REMOVAL (RHR) LOOPS AND DIESEL GENERATORS WERE DECLARED INOPERABLE DUE TO NO CCW OR SW FLOW. AT 1055 HOURS ACTION STATEMENTS 3.1.2.1, 3.1.2.3, 3.4.1.4, 3.8.1.2 AND 3.8.2.2 WERE ENTERED. A WIRE TO THE TD5 UNDERVOLTAGE RELAY HAD SHORTED TO THE FEEDER CUBICLE DOOR, CAUSING THE 1A VITAL BUS INFEED BREAKER TO TRIP WITHOUT AUTOMATIC TRANSFER. CCW AND SW FLOWS WERE RESTORED. ALL CHARGING PUMPS, A BORON INJECTION FLOW PATH, BOTH RHR LOOPS AND ALL DIESELS WERE DECLARED OPERABLE; ONE RHR LOOP WAS PLACED IN OPERATION. BY 1140 HOURS, ACTION STATEMENTS 3.1.2.1, 3.1.2.3, 3.4.1.4, 3.8.1.2 AND 3.8.2.2 HAD BEEN TERMINATED.

[246] SALEM 2 DOCKET 50-311 LER 81-091 REV 1
UPDATE ON FAILURE TO CONDUCT TURBINE OVERSPEED SURVEILLANCE.
EVENT DATE: 081781 REPORT DATE: 012282 NSSS: WE TYPE: PWR
SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: TURBINES
CAUSE: OPERATOR ERROR.

(NSIC 172796) AT APPROXIMATELY 1200 HOURS, AUGUST 13, 1981, THE UNIT ATTAINED 85% RATED THERMAL POWER. THE TURBINE OVERSPEED PROTECTION SURVEILLANCE SP(O) 4.3.4.2 WAS REQUIRED TO BE PERFORMED WITHIN 24 HOURS OF ATTAINING 85% POWER. THE SURVEILLANCE WAS INADVERTENTLY OVERLOOKED, BUT WAS PERFORMED AS SOON AS THE OMISSION WAS REALIZED. AS SOON AS THE OMISSION WAS REALIZED, SP(O) 4.3.4.1 WAS PERFORMED. AT 2030 HOURS, AUGUST 17, 1981, IT WAS SATISFACTORILY COMPLETED AND ACTION STATEMENT 3.3.4.B WAS TERMINATED. ALL PERSONNEL IN OPERATIONS SUPERVISION WERE COUNSELED, AND MADE AWARE OF THE 24 HOUR REQUIREMENT.

[247] SALEM 2 DOCKET 50-311 LER 82-012
STEAM GENERATOR LEVEL CHANNEL DRIFTS.
EVENT DATE: 020982 REPORT DATE: 030982 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: GROUNDED CABLE.

(NSIC 172988) NO. 21 STEAM GENERATOR LEVEL CHANNEL 2 DISPLAYED ERRATIC BEHAVIOR, RAPIDLY DRIFTING HIGH TO 65%, CAUSING FEED FLOW TO DROP, DROPPING ACTUAL LEVEL TO 30%. THE OPERATOR IMMEDIATELY SWITCHED THE FEED REGULATOR VALVE TO MANUAL

CONTROL AND REGAINED PROPER STEAM GENERATOR LEVEL. CHANNEL 2 DRIFTED BACK TO NORMAL. AT 2310 HOURS THE DECISION WAS MADE THAT THE FAILURE WAS IN THE TRANSMITTER, SO THE CHANNEL WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.3.1 ACTION 7 WAS ENTERED. THE SHIELD AROUND THE SIGNAL CABLE TO THE LEVEL TRANSMITTER WAS DOUBLE GROUNDED. THE CHANNEL BISTABLE WAS PLACED IN THE TRIPPED CONDITION WITHIN ONE HOUR. THE DOUBLE GROUNDED SHIELD WAS LIFTED FROM ITS TERMINAL. THE CHANNEL WAS TESTED SATISFACTORILY AND DECLARED OPERABLE.

[248] SALEM 2 DOCKET 50-311 LER 82-007 REV 1
UPDATE ON SEISMICALLY UNQUALIFIED CHECK VALVES.
EVENT DATE: 021182 REPORT DATE: 030882 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES
CAUSE: DESIGN ERROR.

(NSIC 172994) IN RESPONSE TO THE NRC REQUEST FOR ADDITIONAL INFORMATION ON SEISMIC QUALIFICATION OF THE AUXILIARY FEEDWATER SYSTEM, IT WAS DISCOVERED THAT THE CHECK VALVES 1AF71 AND 1AF72 AND ASSOCIATED PIPING WERE NOT SEISMICALLY ANALYZED AND PROTECTED. AS PER TECH SPEC 6.9.1.8.I THE NRC RESIDENT INSPECTOR WAS NOTIFIED IMMEDIATELY, WITH WRITTEN NOTIFICATION SUBMITTED WITHIN 24 HOURS. A PROTECTIVE STEEL STRUCTURE WILL BE PROVIDED OFF THE SEISMIC WALL. THESE NEW STRUCTURES WILL ALSO INCORPORATE SEISMIC GUIDES FOR ADDITIONAL PROTECTION OF THESE VALVES. DCR 1EC-1404 HAS BEEN INITIATED AND ISSUED TO THE STATION TO MAKE THESE IMPROVEMENTS/ENHANCEMENTS. A SUPPLEMENTAL REPORT WILL BE SUBMITTED UPON COMPLETION.

[249] SALEM 2 DOCKET 50-311 LER 82-015
REACTOR COOLANT LEAK RATE SURVEILLANCE NOT PERFORMED AS REQUIRED.
EVENT DATE: 022182 REPORT DATE: 032382 NSSS: WE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: NON STEADY STATE CONDITIONS.

(NSIC 172851) THE REACTOR COOLANT LEAK RATE SURVEILLANCE 4.4.7.2.D, WHICH WAS DUE AT 0415 HOURS, FEBRUARY 20, 1982, HAD NOT BEEN PERFORMED BECAUSE THE PLANT HAD NOT BEEN IN A STEADY STATE CONDITION. A REACTOR TRIP HAD OCCURRED AT 1623 HOURS, FEBRUARY 19. CRITICALITY WAS ATTAINED AT 2030 HOURS, FEBRUARY 19. DUE TO CHANGING XENON CONCENTRATIONS, THE SURVEILLANCE COULD NOT BE PERFORMED AT ITS 72 HOUR REQUIREMENT, OR BY THE ALLOWED 25% EXTENSION AT 2215 HOURS, FEBRUARY 20, THEREFORE, ACTION STATEMENT 3.4.7.2 WAS ENTERED. OPERATING CONDITIONS STABILIZED, AND THE LEAK RATE SURVEILLANCE WAS STARTED IMMEDIATELY. IT WAS COMPLETED AT 0326 HOURS, FEBRUARY 21, 1982 AND ACTION STATEMENT 3.4.7.2. WAS TERMINATED. THE MEASURED LEAK RATE WAS SATISFACTORY. A LICENSE CHANGE REQUEST WILL BE SUBMITTED TO STIPULATE STEADY STATE OPERATING CONDITIONS AS IN THE UNIT NO. 1 LICENSE REQUIREMENT.

[250] SALEM 2 DOCKET 50-311 LER 82-016
AXIAL POWER DISTRIBUTION OUT OF RANGE FOLLOWING POWER REDUCTION.
EVENT DATE: 022682 REPORT DATE: 032682 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: CIRCULATING WATER SCREENS CLOGGED.

(NSIC 172848) ON THREE OCCASIONS THE AXIAL POWER DISTRIBUTION (DELTA I) DRIFTED OUT OF THE &5% TARGET BAND DUE TO A POWER REDUCTION CAUSED BY CLOGGED SCREENS TRIPPING THE CIRCULATOR. AT 0454 HOURS, FEBRUARY 26, AND 0243 AND 1516 HOURS, FEBRUARY 27, 1982, THE CIRCULATOR TRIPPED, REQUIRING A POWER REDUCTION TO MINIMIZE CONDENSER VACUUM LOSS. AT 0457, 0308 AND 1518 HOURS, RESPECTIVELY, DELTA I WENT OUT OF THE TARGET BAND, AND ACTION STATEMENT 3.2.1.A WAS ENTERED. THE DELTA I WAS RESTORED TO WITHIN THE &/- 5% TARGET BAND AT 0509, 0313, AND 1533 HOURS, RESPECTIVELY, AND ACTION STATEMENT 3.2.1.A WAS TERMINATED. THE TIME

DURATIONS OUT OF THE TARGET BAND WERE 12 MINUTES, 5 MINUTES, AND 15 MINUTES, WITH A TOTAL TIME OUT OF THE BAND ON FEBRUARY 26, 12 MINUTES, AND FEBRUARY 27, 20 MINUTES. ON FEBRUARY 27 BOTH CIRCULATORS WERE RETURNED TO SERVICE, AND POWER WAS STABILIZED AT 70%.

[251] SALEM 2 DOCKET 50-311 LER 82-017
TWO CONTAINMENT FAN COIL UNITS FAIL.
EVENT DATE: 022882 REPORT DATE: 032982 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES
CAUSE: VALVE FAILED CLOSED AND TRANSMITTER CLOGGED.

(NSIC 172844) THE CONTROL ROOM OPERATOR DISCOVERED ZERO SERVICE WATER FLOW INDICATION UPON STARTING NO. 22 CONTAINMENT FAN COIL UNIT (CFCU). ACTION STATEMENT 3.6.2.3.A WAS ENTERED AT 0612 HOURS. ON MARCH 1, 1982 DURING PERFORMANCE OF SURVEILLANCE 4.0.5V-SW, THE OPERATOR NOTICED SERVICE WATER FLOW TO NO. 23 CFCU WAS LESS THAN THE 2500 GPM REQUIRED IN LOW SPEED. WITH TWO CFCU GROUPS INOPERABLE, ACTION STATEMENT 3.6.2.3.B WAS ENTERED AT 0540 HOURS. THE CAUSE OF ZERO SERVICE WATER FLOW TO NO. 22 CFCU WAS VALVE 22SW223 WAS STUCK CLOSED. THE CAUSE OF LOW SERVICE WATER FLOW TO NO. 23 CFCU WAS THE TRANSMITTER WAS PLUGGED WITH SILT. NO. 23 CFCU TRANSMITTER WAS BLOWN DOWN; ACTION STATEMENT 3.6.2.3.B WAS TERMINATED AT 1910 HOURS, MARCH 1, 1982. VALVE 22SW223 WAS EXERCISED AND ACTION STATEMENT 3.6.2.3.A WAS TERMINATED AT 0130 HOURS, MARCH 5, 1982.

[252] SALEM 2 DOCKET 50-311 LER 82-021
CONTAINMENT AIR LOCK LEAKAGE EXCEEDS LIMIT.
EVENT DATE: 032082 REPORT DATE: 040782 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS,PRIMARY CONTAIN
CAUSE: LOOSE HANDWELL CHAIN.

(NSIC 173083) WHILE PERFORMING SURVEILLANCE PROCEDURE SP(O)4.6.1.3 ON THE 100' ELEVATION CONTAINMENT AIR LOCK, IT WAS DETERMINED THAT THE LEAKAGE RATE EXCEEDED THE LIMIT OF 0.05 LA AT THE DESIGN PRESSURE OF 47.0 PSIG, AS REQUIRED BY TECH SPEC 3.6.1.3.B. THE AIR LOCK WAS DECLARED INOPERABLE, AND AT 1810 HOURS ACTION STATEMENT 3.6.1.3.A WAS ENTERED. THE CAUSE OF THE CONTAINMENT AIR LOCK LEAKAGE WAS A LOOSE CHAIN ON THE INNER DOOR HANDWHEEL MECHANISM. THE HANDWHEEL CHAIN WAS PROPERLY ADJUSTED AND SURVEILLANCE PROCEDURE SP(O) 4.6.1.3 SATISFACTORILY PERFORMED. AT 2115 HOURS, MARCH 20, 1982 THE AIR LOCK WAS DECLARED OPERABLE, AND ACTION STATEMENT 3.6.1.3.A WAS TERMINATED. (81-12, 81-112, 81-122.)

[253] SALEM 2 DOCKET 50-311 LER 82-024
2 BAST'S AND 1 BIT INOPERABLE DUE TO LOW BORON CONCENTRATION.
EVENT DATE: 032882 REPORT DATE: 042182 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: ACCUMULATORS
CAUSE: UNKNOWN.

(NSIC 173003) SAMPLE RESULTS FROM NOS. 21 AND 22 BORIC ACID STORAGE TANKS (BAST'S) AND THE BORON INJECTION TANK (BIT) INDICATED THE BORIC ACID CONCENTRATIONS WERE BELOW THE SPECIFICATION LIMIT OF 20,000 PPM BORON. NOS. 21 AND 22 BAST'S WERE DECLARED INOPERABLE AND ACTION STATEMENT 3.1.2.6.A WAS ENTERED. THE BIT WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.5.4.1 WAS ENTERED. NO APPARENT REASON FOR THE DECREASE IN BORIC ACID CONCENTRATION COULD BE DETERMINED. BORIC ACID WAS ADDED AND RECIRCULATED. SAMPLE RESULTS SHOWED THE BIT BORIC ACID CONCENTRATION WAS WITHIN SPECIFICATION, AND ACTION STATEMENT 3.5.4.1 WAS TERMINATED. SAMPLE RESULTS INDICATED THAT THE BAST BORIC ACID CONCENTRATIONS WERE WITHIN SPECIFICATION LIMITS AND ACTION STATEMENT 3.1.2.6.1 WAS TERMINATED.

[254] SAN ONOFRE 1 DOCKET 50-206 LER 82-005
CONTAINMENT ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 022282 REPORT DATE: 032582 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: UNDETERMINED.

(NSIC 172847) DURING NORMAL POWER OPERATION CONTAINMENT ISOLATION VALVE SV-702C FAILED TO CLOSE ON DEMAND. TECH SPEC SECTION 3.6.2.A REQUIRES THE SUBJECT VALVE TO BE OPERABLE. IN ACCORDANCE WITH TECH SPECS 3.6.2.B(3) THE AFFECTED CONTAINMENT PENETRATION WAS VERIFIED ISOLATED BY CHECKING A CLOSED DOWNSTREAM BLOCK VALVE. INVESTIGATION FAILED TO DETERMINE WHY THE VALVE FAILED. THE VALVE FUNCTIONED PROPERLY ON ALL TESTS CONDUCTED AFTER THE INITIAL FAILURE. THE MANUFACTURER STATED THAT THE MOST LIKELY CAUSE OF FAILURE IS CONTAMINANTS IN THE VALVE SEAL MATERIALS (O-RINGS, SEATS, ETC.). A NEW SOLENOID VALVE WILL BE PROCURED OR THE SEALS WILL BE REPLACED.

[255] SAN ONOFRE 1 DOCKET 50-206 LER 82-008
SAFEGUARD LOAD SEQUENCER FAILS DURING SAFETY INJECTION TEST.
EVENT DATE: 022782 REPORT DATE: 032982 NSSS: WE TYPE: PWR
SYSTEM: SYS REQRD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PRINTED CIRCUIT FAILURE.

(NSIC 172846) DURING THE EXECUTION OF NORMAL PLANT SHUTDOWN PROCEDURES, A SPECIAL ENGINEERING SAFETY INJECTION TEST WAS PERFORMED. THE SAFEGUARD LOAD SEQUENCER ON UNIT 1 FAILED TO ACTIVATE THE X SUB-CHANNEL SYSTEM RELAYS AND WAS DECLARED INOPERABLE AFTER ATTEMPTS TO PLACE IT IN SERVICE FAILED. THIS EVENT IS REPORTABLE PER TECH SPEC 6.9.2.B. THE FAILED TRAIN IS ONE OF TWO REDUNDANT TRAINS. THE EVENT WAS CAUSED BY A FAILURE OF A POWER TRANSISTOR IN SERIES WITH AN OUTPUT RELAY. THIS PRINTED CIRCUIT CARD WAS REPLACED WITH A SPARE, THE SYSTEM TESTED, AND RETURNED TO SERVICE. THE TRANSISTOR IS A TEXAS INSTRUMENT, MODEL 2N5872.

[256] SAN ONOFRE 1 DOCKET 50-206 LER 82-009
ATTACHMENT WELDS FOR FOUR FEEDWATER SYSTEM PIPE SUPPORTS FAIL.
EVENT DATE: 040582 REPORT DATE: 041682 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: UNDETERMINED.

(NSIC 173061) DURING SCHEDULED ISI INSPECTION, VISUAL EXAMINATION REVEALED FAILED ATTACHMENT WELDS ON TWO FEEDWATER SYSTEM PIPE SUPPORTS. AN EXPANDED INSPECTION OF THE SYSTEM DISCOVERED A TOTAL OF FOUR SUPPORT WELD FAILURES. INITIAL SEISMIC ANALYSIS INDICATES SYSTEM STRUCTURAL INTEGRITY WOULD BE MAINTAINED UNDER ORIGINAL STATION DESIGN CRITERIA. A SPECIFIC CAUSE OF FAILURE HAS NOT BEEN DETERMINED. A METALLURGICAL AND DESIGN ANALYSIS OF THESE SUPPORTS IS IN PROGRESS TO DETERMINE THE CAUSE OF FAILURE. ALL FAILED SUPPORTS ARE BEING REPLACED IN ACCORDANCE WITH ASME BOILER AND PRESSURE VESSEL CODE SECTION XI.

[257] SAN ONOFRE 2 DOCKET 50-361 LER 82-006
BORON CONCENTRATION STRATIFICATION OCCURS IN RWST.
EVENT DATE: 031682 REPORT DATE: 041682 NSSS: CE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: DESIGN DEFICIENCY.

(NSIC 173086) REFUELING WATER STORAGE TANK, T006, WAS FOUND TO HAVE A STRATIFIED BORON CONCENTRATION WHICH RESULTED IN ACTUAL AVERAGE TANK CONCENTRATION BEING LOWER THAN TANK SAMPLES INDICATED. THE RWST WAS NOT PROVIDED WITH A MEANS TO CIRCULATE ITS CONTENTS FROM TOP TO BOTTOM ALLOWING BORON STRATIFICATION TO

DEVELOP AS IT WAS FILLED. A TEMPORARY LINE WAS INSTALLED TO ALLOW RECIRCULATION. A PERMANENT LINE INSTALLATION IS PLANNED.

[258] SEQUOYAH 1 DOCKET 50-327 LER 81-159
AFWS PRESSURE CONTROL VALVE FAILS.
EVENT DATE: 122181 REPORT DATE: 011982 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES
CAUSE: HYDRAULIC PUMP ON VALVE OPERATOR FAILED.

(NSIC 172788) AUXILIARY FEEDWATER PRESSURE CONTROL VALVE 1-PCV-3-132 FAILED TO RESPOND DURING THE PERFORMANCE OF SI-166.1. INVESTIGATION REVEALED THAT THE HYDRAULIC PUMP ON THE VALVE OPERATOR WAS NOT DELIVERING ANY DISCHARGE PRESSURE TO THE HYDRAULIC CYLINDER. THE HYDRAULIC PUMP WAS REPLACED, THE VALVE WAS RETESTED AND RETURNED TO SERVICE.

[259] SEQUOYAH 1 DOCKET 50-327 LER 81-157
PRESSURIZER LEVEL TRANSMITTERS FAIL.
EVENT DATE: 122281 REPORT DATE: 012082 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: GASES IN SENSOR BELLOWS.

(NSIC 172790) ON 12/22/81, THE PRESSURIZER LEVEL TRANSMITTER 1-LT-68-335 WAS DECLARED INOPERABLE DUE TO FAILURE TO MEET THE CHANNEL CHECK REQUIREMENTS. A SIMILAR EVENT OCCURRED ON 12/28/81 FOR PRESSURIZER TRANSMITTER 1-LT-68-320, AND THE TRANSMITTER WAS DECLARED INOPERABLE. THE UNIT ENTERED ACTION STATEMENT 7 OF LCO 3.3.1.1 UPON EACH EVENT DISCOVERY. IN BOTH EVENTS THE TRANSMITTERS WERE FOUND TO BE READING HIGHER THAN THEIR REDUNDANT CHANNELS, CAUSED BY THE ACCUMULATION OF NON-CONDENSIBLE GASES IN THE CONDENSATE RESERVOIRS AND SENSOR BELLOWS. THESE GASES WERE VENTED. THIS ACTION RETURNED THE LOOP LEVEL INDICATION TO WITHIN TOLERANCE.

[260] SEQUOYAH 1 DOCKET 50-327 LER 82-025
SET POINT DRIFT OF PRESSURIZER LEVEL CHANNEL.
EVENT DATE: 021282 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172859) PRESSURIZER LEVEL CHANNEL 1-LT-68-335 WAS DECLARED INOPERABLE DUE TO FAILURE TO MEET THE SURVEILLANCE REQUIREMENTS. THE UNIT OPERATED IN MODE 1 PRIOR TO THE PERFORMANCE OF SI-94 ON 02/03/82 WHEN THE UNIT WAS IN MODE 5. THIS EVENT PLACED THE UNIT IN ACTION STATEMENT 7 OF LIMITING CONDITION FOR OPERATION 3.3.1.1. PREVIOUS OCCURRENCE: ONE (SQRO-50-327/81127). DURING THE REVIEW OF SI-94, IT WAS FOUND THAT THE LIMITING SAFETY SYSTEM SETPOINT FOR THE PRESSURIZER LEVEL CHANNEL WAS LESS CONSERVATIVE THAN THE TECH SPECS ALLOWED VALUE. THIS WAS CAUSED BY THE TRANSMITTER BEING OUT OF CALIBRATION DUE TO INSTRUMENT DRIFT. THE BARTON MODEL 764 TRANSMITTER WAS RECALIBRATED. A RECALIBRATION WILL BE MADE IN SIX WEEKS TO EVALUATE THE NEED FOR TRANSMITTER REPLACEMENT.

[261] SEQUOYAH 1 DOCKET 50-327 LER 82-024
EFFLUENT RADIATION MONITORS FOUND INOPERABLE.
EVENT DATE: 021882 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: CRUD ACCUMULATION IN FLOW SWITCHES.

(NSIC 172818) THE TURBINE BUILDING SUMP AND CONDENSATE DEMINERALIZER RADIOACTIVE EFFLUENT LINE MONITORS WERE DECLARED INOPERABLE DUE TO FAILURE TO MEET SURVEILLANCE REQUIREMENTS. THIS EVENT PLACED THE UNIT IN ACTION STATEMENTS 30 AND

32 OF LCO 3.3.3.9. PREVIOUS OCCURRENCES: SQRO-50-327/80053, 80004, 80021, 80167, 80148, 80043, 80030, 80050, AND 80024. DURING THE PERFORMANCE OF SI-476, THE GEMS, INC. FLOW SWITCHES FOR MONITORS 2-RM-90-212 AND 225 WERE FOUND TO BE INOPERABLE DUE TO A BUILDUP OF CRUD AND DEBRIS IN THE SWITCH. THE FLOW SWITCHES WERE CLEANED AND THE MONITORS RETURNED TO SERVICE ON 02/18/82. A STUDY IS BEING MADE TO EVALUATE DIFFERENT DESIGNED FLOW SWITCHES TO PREVENT RECURRENCE OF INOPERABILITY FROM CRUD BUILDUP.

[262] SEQUOYAH 1 DOCKET 50-327 LER 82-034
CONTAINMENT SPRAY HEAT EXCHANGER OUTLET VALVE FOUND CLOSED.
EVENT DATE: 030382 REPORT DATE: 040182 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 173110) WHILE VERIFYING ERCW THROTTLE VALVE POSITIONS, ERCW VALVE 1-HCV-67-537B, CONTAINMENT SPRAY HEAT EXCHANGER 1B OUTLET FLOW BALANCING VALVE, WAS DISCOVERED CLOSED AND TAGGED WITH A HOLD ORDER TAG. INVESTIGATION REVEALED THE HOLD ORDER TAG WAS PREVIOUSLY SIGNED OFF AS COMPLETE. THIS EVENT REQUIRED ENTRY INTO LCO 3.6.2.1 AND 3.0.4. THE VALVE WAS CLOSED AND TAGGED ON 1/22/82 FOR CONTAINMENT SPRAY HEAT EXCHANGER 1B EDDY CURRENT TESTING. EDDY CURRENT TESTING WAS COMPLETE ON 1/29/82. THE ASSISTANT SHIFT ENGINEER (ASE) HAD DIRECTED THE SYSTEM TO BE REALIGNED IN ACCORDANCE WITH THE TEST PROCEDURE. THE ASE LATER SIGNED OFF THE HOLD ORDER WITHOUT PROPERLY VERIFYING THF SYSTEM REALIGNMENT HAD BEEN PERFORMED. THE VALVE WAS OPENED AND TAG REMOVED.

[263] SEQUOYAH 1 DOCKET 50-327 LER 82-033
2 CONTAINMENT PROCESS RADIATION MONITORS INOPERABLE.
EVENT DATE: 030482 REPORT DATE: 040282 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: VALVES CLOSED DUE TO MAINTENANCE ERROR.

(NSIC 173109) CONTAINMENT PROCESS RADIATION MONITORS 1-RM-90-106 AND 112 WERE DECLARED INOPERABLE DUE TO THE CLOSING OF THE CONTAINMENT ISOLATION VALVES. THIS EVENT PLACED THE UNIT IN ACTION STATEMENT 27 OF LCO 3.3.3.1. PREVIOUS OCCURRENCE - ONE (SQRO-50-237/81118). INVESTIGATION REVEALED THAT MONITOR 1-RM-90-106 WAS REMOVED FROM SERVICE BY WORKPLAN 9504 TO REPLACE THE SOLENOID VALVES ON THE CONTAINMENT ISOLATION VALVES. WITH MONITOR 1-RM-90-112 LINED UP TO LOWER CONTAINMENT, A LOSS OF FLOW PATH TO THE MONITOR OCCURRED DUE TO THE CLOSING OF VALVE 1-FCV-90-107.

[264] SEQUOYAH 1 DOCKET 50-327 LER 82-027
CONTAINMENT SPRAY HEAT EXCHANGER INOPERABLE DUE TO LOW ERCW FLOW.
EVENT DATE: 030782 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: HEAT EXCHANGERS
CAUSE: FRESH WATER CLAMS ON INLET SCREEN.

(NSIC 172863) AT 0200 (C), WHILE PREPARING TO PERFORM SI-566, ERCW FLOW VERIFICATION TEST, CONTAINMENT SPRAY HEAT EXCHANGER 1A WAS DISCOVERED AS HAVING LOW ERCW FLOW. INSPECTION OF THE HEAT EXCHANGER REVEALED A LARGE QUANTITY (APPROXIMATELY 15 GALLONS) OF FRESH WATER CLAMS IN THE ERCW PIPING WHICH HAD BEEN WASHED AGAINST THE HEAT EXCHANGER INLET SCREEN. THE CLAMS WERE REMOVED AND THE HEAT EXCHANGER RETURNED TO SERVICE AT 0225 (C) ON 03/08/82. CONTAINMENT SPRAY HEAT EXCHANGERS 1B, 2A, AND 2B ALL WERE FOUND TO HAVE THEIR NORMAL FLOWS. ADDITIONAL INSPECTIONS FOUND 1B HEAT EXCHANGER SATISFACTORY AND 2B HEAT EXCHANGER TO HAVE APPROXIMATELY 1-1/2 QUARTS OF CLAMS. THE 2A HEAT EXCHANGER WILL BE INSPECTED WHEN CONDITIONS PERMIT.

[265] SEQUOYAH 2 DOCKET 50-328 LER 81-007S
SAFETY INJECTION ACTUATION OCCURS.
EVENT DATE: 110481 REPORT DATE: 012582 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DEFECTIVE WIRE IN LOGIC BOARD.

(NSIC 172795) WHILE PERFORMING SURVEILLANCE INSTRUCTION (SI) 90.12, A SAFETY INJECTION ACTUATION OCCURRED. PRESSURIZER PRESSURE SWITCH 1-PS-68-340D/B (PROTECTION SET I) WAS PLACED IN THE TRIPPED CONDITION TO PERFORM THE SI ON THE LOW PRESSURIZER PRESSURE BISTABLE. SUBSEQUENT TESTING SHOWED THAT WHEN 1-PS-68-340D/B WAS PLACED IN THE TRIPPED CONDITION, INDICATION WAS RECEIVED THAT PROTECTION SET III PRESSURIZER LOW PRESSURE BISTABLE (1-PS-68-323D/E) WAS ALSO TRIPPED. THIS GAVE A TWO OUT OF FOUR LOGIC OF LOW PRESSURIZER PRESSURE WHICH ACTUATED THE SAFETY INJECTION. TROUBLESHOOTING THE TRAIN B SSPS REVEALED A SHORTED CONNECTOR WIRE BETWEEN PRESSURIZER LOW PRESSURE LOGIC BOARD PINS. THIS IS THE SECOND SUCH EVENT FOR UNIT 2. THE DEFECTIVE WIRE TO THE LOGIC BOARD PINS WAS CLIPPED AND RECONNECTED AND THE SSPS RETURNED TO NORMAL.

[266] SEQUOYAH 2 DOCKET 50-328 LER 82-026
CONTAINMENT SUMP LEVEL TRANSMITTER FAILS HIGH.
EVENT DATE: 022182 REPORT DATE: 032382 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LEAKY SENSOR BELLOWS.

(NSIC 172862) AT 0537, ONE CONTAINMENT SUMP LEVEL TRANSMITTER (2-LT-65-176) WAS DECLARED INOPERABLE DUE TO HIGH READINGS. THIS EVENT PLACED THE UNIT IN ACTION STATEMENT 18 OF LCO 3.3.2.1. PREVIOUS OCCURRENCES: SIX (SQRO-50-327/80091, 81009, 81040, 81116, 81135, 81151). UPON INVESTIGATION, IT WAS FOUND THAT THE BARTON MODEL 351 SENSOR BELLOWS WAS LEAKING. THIS RESULTED IN THE LOSS OF THE SAME LINE WATER LEG WHICH CAUSED THE TRANSMITTER TO READ HIGH. THE SENSOR BELLOWS WAS REPLACED AND THE TRANSMITTER RECALIBRATED. THE LOOP WAS RETURNED TO SERVICE AT 0700 CST ON 02/28/82. A DESIGN CHANGE REQUEST HAS BEEN PREPARED TO REQUEST A STUDY TO EVALUATE DIFFERENT SYSTEMS FOR BETTER RELIABILITY.

[267] ST. LUCIE 1 DOCKET 50-335 LER 82-007
SHIELD BUILDING VENTILATION SYSTEM HEATER FAILS.
EVENT DATE: 021882 REPORT DATE: 032482 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DEFECTIVE THERMOCOUPLE AMPLIFIER.

(NSIC 172833) THE SHIELD BLDG. VENTILATION SYSTEM HEATER 6B2 WAS FOUND TO BE INOPERABLE. THE 1.5 KW 6B2 HEATER PROVIDES HUMIDITY CONTROL IN THE 'A' SBVS WHILE THE 'B' SBVS IS OPERATING. THE 30 KW 6A1 HEATER WAS AVAILABLE FOR HUMIDITY CONTROL WITH 'A' TRAIN RUNNING. THIS IS SECOND EVENT OF TYPE. SEE LER 80-014. A DEFECTIVE THERMOCOUPLE AMPLIFIER (FENWAL MODEL NO. 543) IN THE 6B2 HEATER CONTROL CIRCUITRY CAUSED THE HEATER TO REMAIN DEENERGIZED. THE AMPLIFIER WAS REPAIRED AND THE HEATER WAS RETESTED.

[268] ST. LUCIE 1 DOCKET 50-335 LER 82-008
BLOCK VALVE FOR POWER OPERATED RELIEF VALVE FAILS TO CLOSE.
EVENT DATE: 022682 REPORT DATE: 032582 NSSS: CE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
CAUSE: UNDETERMINED.

(NSIC 172879) WHILE PERFORMING SURVEILLANCE TESTING AT 98% POWER, IT WAS FOUND THAT MV1403 (BLOCK VALVE FOR POWER OPERATED RELIEF VALVE) WOULD NOT SHUT. ACTION WAS TAKEN IN ACCORDANCE WITH TECH SPEC 3.4.12 AND MV1403 WAS CLOSED MANUALLY WITHIN 57 MINUTES. THIS IS THE SECOND LER OF THIS TYPE (SEE LER 81-018). DUE TO

INACCESSIBILITY OF THE VALVE THE PROBLEM WILL BE INVESTIGATED DURING THE NEXT SHUTDOWN. IF A SIGNIFICANT CAUSE FOR THE FAILURE IS DETERMINED, AN UPDATED LER WILL BE GENERATED. THIS VALVE IS A VELAN-2 1/2" MOTOR-OPERATED VALVE (MODEL P35036-2).

[269] SURRY 1 DOCKET 50-280 LER 82-004
FOUR FIRE HYDRANTS FAIL TO OPEN.
EVENT DATE: 011282 REPORT DATE: 020882 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
CAUSE: WATER FROZEN IN HYDRANT BODY.

(NSIC 173030) WHILE PERFORMING PT-24.7, IT WAS DISCOVERED THAT FIRE HYDRANTS 1-FP-89, 1-FP-63, 1-FP-73, AND 1-FP-98 WOULD NOT OPEN. THIS EVENT IS CONTRARY TO TECH SPEC 3.21.B.1.C AND REPORTABLE PER TECH SPEC 6.6.2.B.(2). UNUSUALLY LOW SEASONAL TEMPERATURES CAUSED STAGNANT WATER IN THE BODY OF THE HYDRANT TO FREEZE, THUS PREVENTING VALVE OPERATION. THE FREQUENCY OF HYDRANT INSPECTION FOR THESE VALVES WILL BE INCREASED DURING THE COLDER WEATHER. INSPECTION WILL BE IMPLEMENTED DURING THE SPRING MONTHS.

[270] SURRY 1 DOCKET 50-280 LER 82-005
SET POINT DRIFT IN RADIATION MONITOR.
EVENT DATE: 011982 REPORT DATE: 020882 NSSS: WE TYPE: PWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 173031) DURING THE PERFORMANCE OF PT-26.1, IT WAS FOUND THAT THE ALARM SETPOINT FOR RADIATION MONITOR, RM-LW-108, HAD EXCEEDED THE ALLOWABLE LIMITS STATED IN TECH SPEC 3.7, TABLE 3.7-5. THIS EVENT IS REPORTABLE PER TECH SPEC 6.6.2.B.(4). THE CAUSE OF THIS EVENT WAS INSTRUMENT DRIFT. THE INSTRUMENT TECHNICIANS WERE PRESENT AT THE TIME THE PT WAS PERFORMED AND WERE IMMEDIATELY AVAILABLE TO RECALIBRATE THE MONITOR.

[271] SURRY 1 DOCKET 50-280 LER 82-006
SET POINT DRIFT IN RADIATION MONITOR.
EVENT DATE: 011982 REPORT DATE: 020882 NSSS: WE TYPE: PWR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 173032) DURING THE PERFORMANCE OF PT 26.1, IT WAS FOUND THAT THE ALARM SETPOINT FOR RAD. MONITOR, RM-GW-102, HAD EXCEEDED THE ALLOWABLE LIMIT STATED IN TECH SPEC 3.7, TABLE 3.7-5. THIS EVENT IS REPORTABLE PER TECH SPEC 6.6.2.B.(4). THE CAUSE OF THIS EVENT WAS INSTRUMENT DRIFT. THE INSTRUMENT TECHNICIANS WERE PRESENT AT THE TIME THE PT WAS PERFORMED AND WERE IMMEDIATELY AVAILABLE TO RECALIBRATE THE MONITOR.

[272] SURRY 1 DOCKET 50-280 LER 82-011
3 UNSAMPLED RELEASES FROM SUBSURFACE DRAINS.
EVENT DATE: 012682 REPORT DATE: 022582 NSSS: WE TYPE: PWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: PIPES,FITTINGS
CAUSE: NONLICENSED OPERATOR ERROR.

(NSIC 173036) OPERATIONS NOTIFIED HEALTH PHYSICS OF THREE INCIDENTS OF UNSAMPLED RELEASES FROM UNIT NO. 1 AND UNIT NO. 2 SUBSURFACE DRAINS. THIS IS CONTRARY TO TECH SPEC 3.11.A.4 AND IS REPORTABLE PER TECH SPEC 6.6.2.B(2). TOTAL RELEASE WAS ESTIMATED TO BE 0.205 PERCENT OF THE LIMIT. THE CAUSE IS DETERMINED TO BE OPERATOR ERROR. HEALTH PHYSICS WAS NOT NOTIFIED PRIOR TO COMMENCING THE RELEASE.

ADMINISTRATIVE CONTROLS HAVE BEEN ESTABLISHED TO NOTIFY HP PRIOR TO PUMPING THE SUBSURFACE DRAINS TO THE DISCHARGE CANAL.

[273] SURRY 1 DOCKET 50-280 LER 82-012
PORV BLOCK VALVE FAILS TO SHUT.
EVENT DATE: 012682 REPORT DATE: 022582 NSSS: WE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
CAUSE: UNKNOWN.

(NSIC 173037) BLOCK VALVE MOV-1536 WAS ISOLATED ELECTRICALLY. THIS IS CONTRARY TO TECH SPEC 3.1.A.6.A, BUT IS PERMITTED BY TECH SPEC 3.1.A.6.C. PROVIDING THE VALVE IS CLOSED. THIS EVENT IS REPORTABLE AS PER TECH SPEC 6.6.2.B.(2). DURING THE JANUARY 26TH PERFORMANCE OF PT-2.26 A DECISION WAS REACHED TO TAKE THE VALVE OUT OF SERVICE. THIS DECISION WAS BASED ON THE LEAKING PORV AND THE FAILURE OF THE BLOCK TO CLOSE COMPLETELY WITHOUT MANUAL ASSISTANCE. WITH THE UNIT AT COLD SHUTDOWN, THE VALVE WAS CYCLED SATISFACTORILY.

[274] SURRY 1 DOCKET 50-280 LER 82-013
CONTROL ROD DROPIN OCCURS.
EVENT DATE: 012682 REPORT DATE: 022582 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: ELECTRICAL CONDUCTORS
CAUSE: OPEN CIRCUIT IN POWER SUPPLY.

(NSIC 173038) UNIT NO. 1 EXPERIENCED A DROPPED CONTROL ROD AND A SUBSEQUENT QUADRANT TO AVERAGE POWER TILT OF 2%. THESE EVENTS ARE CONTRARY TO TECH SPEC - 3.12.C AND TECH SPEC 3.12.B.5 RESPECTIVELY AND REPORTABLE PER TECH SPEC - 6.6.2.B(2). THE CAUSE WAS AN OPEN CIRCUIT IN THE POWER SUPPLY FOR THE STATIONARY COIL. A NICK IN THE POWER CABLE HAD ALLOWED MOISTURE TO ENTER THE CABLE AND CORRODE THE CONDUCTORS. THE CABLE WAS REPAIRED AND THE CONTROL ROD REALIGNED WITH ITS CONTROL BANK.

[275] SURRY 1 DOCKET 50-280 LER 82-017
HEAT TRACING FAILS.
EVENT DATE: 013182 REPORT DATE: 030182 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: HEATERS,ELECTRIC
CAUSE: EXCESSIVE HEAT.

(NSIC 173002) PT-27 REVEALED THAT AMP READINGS FOR HEAT TRACING PANELS 8 & 9, CIRCUITS 24A & C, WERE BELOW THE ACCEPTANCE CRITERIA STIPULATED. THIS EVENT IS CONTRARY TO TECH SPEC 3.2.B.5 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE LOSS OF HEAT TRACING WAS DUE TO EXCESSIVE HEAT. THE DEFECTIVE HEAT TRACING WAS REPLACED AND TESTED. A DESIGN CHANGE HAS BEEN INITIATED TO CHANGE THE MANNER BY WHICH THESE BORATED LINES ARE HEAT TRACED.

[276] SURRY 1 DOCKET 50-280 LER 82-016
BORIC ACID FLOW TO VCT LOST.
EVENT DATE: 013182 REPORT DATE: 030182 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: HEATERS,ELECTRIC
CAUSE: FLOW BLOCKAGE DUE TO ACID SOLIDIFICATION.

(NSIC 173005) A LOSS OF BORIC ACID FLOW TO THE BLENDER WAS OBSERVED WHILE TRYING TO BLEND TO THE VCT. THIS EVENT IS CONTRARY TO TECH SPEC 3.2.C.4 AND IS REPORTABLE AS PER TECH SPEC 6.6.2.B.(2). INVESTIGATION HAS DETERMINED THIS EVENT TO HAVE BEEN CAUSED BY A LOSS OF HEAT TRACING AND DAMAGED INSULATION UPSTREAM OF THE FLOW TRANSMITTER. THE DEFECTIVE HEAT TRACING HAS BEEN REPLACED AND TESTED. A DESIGN CHANGE HAS BEEN INITIATED TO CHANGE THE MANNER BY WHICH THESE BORATED LINES ARE HEAT TRACED. THE DAMAGED INSULATION HAS BEEN REPAIRED OR REPLACED.

[277] SURRY 1 DOCKET 50-280 LER 82-019
BIT RECIRCULATION LINE HEAT TRACING FAILS.
EVENT DATE: 020282 REPORT DATE: 030182 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: HEATERS,ELECTRIC
CAUSE: EXCESSIVE HEAT.

(NSIC 173001) PT-27 REVEALED THAT THE AMP READINGS FOR HEAT TRACING CIRCUITS 24C AND 25A, PANEL 2 AND CIRCUIT 24D, PANELS 1 & 2 (BIT RECIRC. LINE) WERE BELOW THE ACCEPTANCE CRITERIA STIPULATED IN THE PT. THIS EVENT IS CONTRARY TO TECH SPEC 3.2.C.5, AND IS REPORTABLE PER TECH SPEC 6.6.2.B(2). THE LOSS OF HEAT TRACING WAS DUE TO EXCESSIVE HEAT. THE DEFECTIVE HEAT TRACING WAS REPLACED AND TESTED. A DESIGN CHANGE HAS BEEN INITIATED TO CHANGE THE MANNER BY WHICH THESE BORATED LINES ARE HEAT TRACED.

[278] SURRY 1 DOCKET 50-280 LER 82-020
BIT RECIRCULATION FLOW LOST.
EVENT DATE: 020582 REPORT DATE: 030582 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: VALVE OPERATORS
CAUSE: VALVE FAILED TO OPEN.

(NSIC 173093) A LOSS OF BORIC ACID FLOW TO THE BLENDER WAS OBSERVED. FURTHER INVESTIGATION REVEALED A LOSS OF BIT RECIRC. FLOW ALSO. THIS EVENT IS CONTRARY TO TECH SPEC 3.2.C.4 AND TECH SPEC 3.3.A.3 AND IS REPORTABLE AS PER TECH SPEC 6.6.2.B.(2). A CHANGE OF BORIC ACID TRANSFER PUMP LINE UP WAS COMMENCED, BUT NOT COMPLETED DUE TO AN OPERATING MECHANISM FAILURE ON VALVE 1-CH-88 (A/B PUMP SUCTION CROSS-CONNECT). THE VALVE INDICATED OPEN, BUT WAS WITHIN 2 TURNS OF THE CLOSED POSITION, THUS BORIC ACID PUMP 1-CH-P-2B WAS LEFT RUNNING WITH INADEQUATE SUCTION. UPON DISCOVERY OF THE LACK OF FLOW, BORIC ACID FLOW WAS RE-ESTABLISHED AND VALVE 1-CH-88 WAS REPAIRED.

[279] SURRY 1 DOCKET 50-280 LER 82-027
COMPONENT COOLING WATER TRIP VALVE FAILS TO CLOSE.
EVENT DATE: 020882 REPORT DATE: 031082 NSSS: WE TYPE: PWR
SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: VALVE OPERATORS
CAUSE: UNKNOWN.

(NSIC 173047) A SPURIOUS SI SIGNAL WAS GENERATED. TRIP VALVE, TV-CC-109B, FAILED TO CLOSE AS DESIGNED. THIS EVENT IS CONTRARY TO TECH SPEC 3.8.A.1 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE COMPONENT COOLING (CC) SYSTEM IS A CLOSED SYSTEM AND ITS INTEGRITY WAS MAINTAINED DURING THE EVENT; THEREFORE, AN ISOLATION BARRIER EXISTED BETWEEN THE CONTAINMENT AND THE ENVIRONMENT. NO SPECIFIC MECHANICAL OR ELECTRICAL MALFUNCTIONS HAVE BEEN IDENTIFIED. EFFORTS ARE CONTINUING TO FURTHER INVESTIGATE THIS EVENT BUT NO DEFINITIVE ANSWERS ARE AVAILABLE AT THIS TIME.

[280] SURRY 1 DOCKET 50-280 LER 82-022
PROCESS VENT FLOW TRANSMITTER DAMAGED BY PRESSURE TRANSIENT.
EVENT DATE: 020982 REPORT DATE: 031082 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: VALVES
CAUSE: PRESSURE RELIEF VALVE OPENED.

(NSIC 173042) RELIEF VALVE, RV-GW-103 OPENED CAUSING A PRESSURE TRANSIENT IN THE PROCESS VENT SYSTEM AND DAMAGING THE PROCESS VENT FLOW TRANSMITTER. THIS EVENT IS CONTRARY TO TECH SPEC 3.11.B.4 AND IS REPORTABLE PURSUANT TO TECH SPEC 6.6.2.B.(2). A MOMENTARY PRESSURE SPIKE OVERRANGED THE FLOW TRANSMITTER AND RESULTED IN SUBSEQUENT ERRATIC INDICATION. AP 5.1 WAS INITIATED IMMEDIATELY AND THE FAILED FLOW TRANSMITTER, FT-GW-100, WAS REPLACED.

[281] SURRY 1 DOCKET 50-280 LER 82-000S
CONDENSER COOLING WATER OUTLET TEMPERATURE RISE EXCEEDS ALLOWABLE RATE.
EVENT DATE: 021282 REPORT DATE: 032682 NSSS: WE TYPE: PWR
SYSTEM: CIRCULATING WATER SYS & CON COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: VACUUM PRIMING SYSTEM FAILURE.

(NSIC 172794) DURING THE PERIOD OF 1345 TO 1420 HRS., THE AVERAGE RATE OF CHANGE OF THE CONDENSER COOLING WATER OUTLET TEMPERATURE WAS 12 F/HR WHICH EXCEEDS THE 3 F/HR RATE OF CHANGE PERMITTED. THE FAILURE OF THE VACUUM PRIMING SYSTEM AT THE RIVER INTAKE SUBSTANTIALLY REDUCED THE CIRCULATING WATER FLOW INTO THE INTAKE CANAL. THROTTLING OF THE FLOW THROUGH THE CONDENSER WATER BOXES TO PRESERVE CANAL WATER LEVEL RESULTED IN THE TEMPERATURE LIMITS BEING EXCEEDED. THE VACUUM PRIMING SYSTEM HAS BEEN REPAIRED AND RETURNED TO SERVICE. A SEARCH WAS CONDUCTED TO DETERMINE IF THE CANAL TEMPERATURE EXCURSION HAD ADVERSELY AFFECTED THE RIVER ENVIRONMENT. NO DETRIMENTAL EVIDENCE WAS FOUND.

[282] SURRY 1 DOCKET 50-280 LER 82-023
3 SNUBBERS INOPERABLE DUE TO LOW OIL LEVEL.
EVENT DATE: 021282 REPORT DATE: 031282 NSSS: WE TYPE: PWR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: SEAL LEAKAGE.

(NSIC 173046) PT-39B.2 AND PT-39B.1 REVEALED THAT SNUBBERS 1-RC-HSS-131, 1-WFPD-HSS-15, AND 1-SHP-HSS-35B WERE INOPERABLE DUE TO LOW OIL RESERVOIR LEVEL. THIS IS CONTRARY TO TECH SPEC 3.20.A AND IS REPORTABLE PURSUANT TO TECH SPEC 6.6.2.B.(2). THE LOW RESERVOIR LEVEL WAS DUE TO SEAL LEAKAGE. THE INOPERABLE SNUBBERS WERE REPAIRED OR REPLACED IN ACCORDANCE WITH THE APPROPRIATE MAINTENANCE PROCEDURES.

[283] SURRY 1 DOCKET 50-280 LER 82-026
UNSAMPLED CONTAMINATED WATER RELEASED.
EVENT DATE: 021882 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: VALVES
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 173035) WITH A RELEASE OF THE LIQUID WASTE TEST TANK IN PROGRESS, APPROXIMATELY 135 GALLONS OF UNSAMPLED CONTAMINATED WATER WAS DISCHARGED FROM THE CONTAMINATED DRAINS TANK. THIS EVENT IS CONTRARY TO TECH SPEC 3.11.A.4 AND REPORTABLE PURSUANT TO TECH SPEC 6.6.2.B.(2). UPON TERMINATION OF THE UNPLANNED RELEASE, THE CDT WAS SAMPLED. BASED ON THIS ANALYSIS, THE COMBINED RELEASE OF THE CDT AND THE LWTT WAS LESS THAN 4% OF THE TECH SPEC LIMIT. THE CAUSE OF THIS EVENT IS FAILURE TO FOLLOW THE APPROVED PROCEDURE. THE CORRECTIVE ACTION WAS TO CLOSE FCV-LW-160 AND TERMINATE THE RELEASE.

[284] SURRY 1 DOCKET 50-280 LER 82-028
CCW RADIATION ALARM SET POINTS BELOW LIMIT.
EVENT DATE: 021982 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PROCEDURES DID NOT ACCOUNT FOR REDUCED BACKGROUND.

(NSIC 173039) DURING THE PERFORMANCE OF PT-26.1, RADIATION MONITORING EQUIPMENT TEST, WITH THE UNIT AT COLD SHUTDOWN, THE RADIATION ALARM SETPOINTS FOR THE COMPONENT COOLING SYSTEM WAS FOUND TO BE GREATER THAN TWICE BACKGROUND AS LISTED IN TECH SPEC 3.7, TABLE 3.7-5. THIS IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.6.2.B(2). THE IMPROPER SETPOINTS WERE ATTRIBUTED TO REDUCED BACKGROUND DUE TO THE PLANT BEING SHUTDOWN. THE ACTIVITY LEVELS IN THE COMPONENT COOLING SYSTEM WERE VERIFIED TO BE WITHIN ALLOWABLE LIMITS AND THE SETPOINTS FOR MONITORS, RM-CC-105 AND RM-CC-106, WERE RESET.

[285] SURRY 1 DOCKET 50-280 LER 82-029
THREE STEAM LINE FLOW CHANNELS INOPERABLE.
EVENT DATE: 022282 REPORT DATE: 030882 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: POWER FUSES MISSING.

(NSIC 173006) INSTRUMENT TECHNICIANS REPORTED THAT STEAM-LINE FLOW INSTRUMENTS FOR A MS LINE, CHANNEL 3 AND CHANNEL 4, AND B MS LINE, CHANNEL 3 WERE INOPERABLE. THIS EVENT IS CONTRARY TO TECH SPEC 3.7.B, TABLE 3.7-2 AND IS REPORTABLE PER TECH SPEC 6.6.2.A.(6), INOPERABILITY OF THE MS LINE FLOW INSTRUMENTS WAS DUE TO LACK OF POWER SUPPLY FUSES TO THE TRANSMITTERS. THE FUSES WERE REPLACED FOLLOWING THE DISCOVERY THAT THEY WERE NOT INSTALLED.

[286] SURRY 1 DOCKET 50-280 LER 82-030
SET POINT DRIFT IN CCW RADIATION MONITOR.
EVENT DATE: 022282 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 173040) THE ALARM SETPOINT FOR THE COMPONENT COOLING WATER RADIATION MONITOR (RM-CC-105) WAS FOUND TO BE GREATER THAN TWICE BACKGROUND. THIS EVENT IS CONTRARY TO TECH SPEC 3.7 TABLE 3.7-5 AND IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.6.2.B(2). THE IMPROPER SETPOINT WAS ATTRIBUTED TO INSTRUMENT DRIFT. RM-CC-105 WAS RESET TO THE PROPER SETPOINT AND RETURNED TO SERVICE.

[287] SURRY 1 DOCKET 50-280 LER 82-031
RHR CONTAINMENT ISOLATION VALVE OPENS SPURIOUSLY.
EVENT DATE: 022282 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: UNKNOWN.

(NSIC 173041) R.H.R. SAMPLE SYSTEM CONTAINMENT ISOLATION TRIP VALVE, TV-SS-103A, OPENED WITHOUT OPERATOR ACTION AND COULD NOT BE CLOSED FROM THE CONTROL ROOM. THIS IS CONTRARY TO TECH SPEC 3.8.A.1. AND IS REPORTABLE AS PER TECH SPEC 6.6.2.B.(2). THE ACTUAL CAUSE MAY NOT BE IDENTIFIED UNTIL THE VALVE IS REPAIRED DURING THE NEXT MAINTENANCE OUTAGE OF SUFFICIENT DURATION. THE IMMEDIATE CORRECTIVE ACTIONS WERE TO VERIFY THAT THE REDUNDANT TRIP VALVE (TV-SS-103B) WAS CLOSED AND TO CLOSE THE MANUAL ISOLATION VALVE (1-SS-100). SUBSEQUENTLY, THE VALVE WAS CLOSED FROM THE CONTROL ROOM.

[288] SURRY 1 DOCKET 50-280 LER 82-021
BORIC ACID FLOW TO BLENDER LOST.
EVENT DATE: 022482 REPORT DATE: 031982 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DAMAGED INSULATION ON FLOW TRANSMITTER.

(NSIC 173034) A LOSS OF BORIC ACID FLOW TO THE BLENDER WAS OBSERVED WHILE TRYING TO BLEND TO THE VCT. THIS EVENT IS CONTRARY TO TECH SPEC 3.2.C.4 AND IS REPORTABLE AS PER TECH SPEC - 6.6.2.B.(2). INVESTIGATION HAS DETERMINED THIS EVENT TO HAVE BEEN CAUSED BY DAMAGED INSULATION ON FLOW TRANSMITTER 1113. THE BLOCKAGE WAS REMOVED AND NEW INSULATION WAS INSTALLED. TO REDUCE THE PROBABILITY OF BLOCKAGE RECURRENCE, THE HEATING STRIP WAS AUGMENTED WITH ADDITIONAL HEAT TRACING TAPE.

[289] SURRY 2 DOCKET 50-281 LER 82-001
BORIC ACID CONCENTRATIONS ERRATIC IN BIT AND BAST.
EVENT DATE: 010582 REPORT DATE: 020482 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
CAUSE: 2 LEAKY INLET VALVES.

(NSIC 172934) A LOSS OF ACCURATE CONTROL OF THE BORIC ACID CONCENTRATIONS OF THE UNIT 2 BIT AND 'C' BAST OCCURRED ON THE 5TH, 8TH, 15TH & 18TH OF JANUARY, 1982. THIS EVENT IS CONTRARY TO TECH SPEC 3.3.A.3 AND IS REPORTABLE AS PER TECH SPEC 6.6.2.B.(2). THE CAUSE OF THIS EVENT HAS BEEN DETERMINED TO BE INLEAKAGE TO THE BIT VIA MOV-2867 'A' AND 'B'. CORRECTIVE ACTION HAS CONSISTED OF RETURNING BORON CONCENTRATION TO TECH SPEC LIMIT AND TESTING DAILY TO PREVENT DILUTIONS BELOW TECH SPEC LIMIT. LONG RANGE PLANS CALL REPAIRING THESE VALVES DURING THE NEXT OUTAGE.

[290] SURRY 2 DOCKET 50-281 LER 82-002
SW PUMP DISCHARGE CHECK VALVE STICKS OPEN.
EVENT DATE: 010982 REPORT DATE: 020882 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: VALVES
CAUSE: DISK DID NOT RESEAT.

(NSIC 173033) DURING THE PERFORMANCE OF PT 18.8, THE DISCHARGE CHECK VALVE OF CHARGING PUMP SERVICE WATER PUMP, 2-SW-P-10A, WAS FOUND TO BE STUCK OPEN. IN THIS CONDITION, ON A LOSS OF POWER, THE PUMP WOULD NOT AUTOMATICALLY BE ISOLATED FROM THE SYSTEM. THIS EVENT IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE EVENT WAS CAUSED BY A FAILURE OF THE VALVE DISK TO PROPERLY RESEAT. AN OPERATOR WAS ASSIGNED ADMINISTRATIVE CONTROL OF THE VALVE UNTIL IT WAS REPLACED.

[291] SURRY 2 DOCKET 50-281 LER 82-004
BIT RECIRCULATION LOST DUE TO PUMP FAILURE.
EVENT DATE: 011282 REPORT DATE: 021182 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PUMPS
CAUSE: MECHANICAL SEAL FAILURE.

(NSIC 172936) BIT RECIRC. WAS LOST DUE TO THE FAILURE OF 1-CH-P-2D. SINCE 1-CH-P-2C WAS ALREADY OUT OF SERVICE, ONLY TWO BORIC ACID TRANSFER PUMPS (BATP) WERE AVAILABLE FOR SERVICE VICE THE THREE REQUIRED. THIS IS CONTRARY TO TECH SPEC 3.3.A.3 AND TECH SPEC 3.2.B.1. BIT RECIRC. WAS RETURNED WITHIN 48 MINUTES AND A THIRD BATP WAS DECLARED OPERABLE WITHIN 24 HOURS. THIS EVENT IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE PUMP FAILURE WAS CAUSED BY A FAILURE OF THE MECHANICAL SEAL. TRANSFER PUMP 1-CH-P-2B WAS PLACED IN SERVICE WITHIN 48 MINUTES. 1-CH-P-2C REPAIRS WERE COMPLETED WITHIN 24 HOURS AND RETURNED TO SERVICE. PUMP 1-CH-P-2D WAS REPAIRED AND RETURNED TO SERVICE ON THE 14TH OF JANUARY.

[292] SURRY 2 DOCKET 50-281 LER 82-013
REACTOR COOLANT SAMPLING NOT PERFORMED IN TIME.
EVENT DATE: 012482 REPORT DATE: 022482 NSSS: WE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: CHEMISTRY PERSONNEL ERROR.

(NSIC 172920) A RAMP WAS INITIATED THAT INCREASED THERMAL POWER GREATER THAN 15% IN 1 HOUR. CONTRARY TO TECH SPEC 4.1.C, TABLE 4.1-2B, A RADIO-IODINE SAMPLE WAS NOT TAKEN WITHIN 2 TO 6 HOURS FOLLOWING THE POWER CHANGE. THIS IS REPORTABLE PER TECH SPEC 6.9.2.B.(3). THE SAMPLE THAT WAS TAKEN 6 HOURS AND 28 MINUTES FOLLOWING THE POWER CHANGE SHOWED NEGLIGIBLE CHANGE IN RADIO-IODINE LEVELS AND THE VALUES REMAINED WELL BELOW THE TECH SPEC LIMITS. THE REQUIRED SAMPLE WAS TO HAVE BEEN TAKEN BY ON-COMING CHEMISTRY PERSONNEL. HOWEVER, DUE TO TRAFFIC PROBLEMS, THESE PERSONNEL WERE DELAYED ENROUTE. THE RADIO-IODINE SAMPLE WAS

TAKEN AS SOON AS POSSIBLE. POLICY CHANGES FOR OBTAINING NECESSARY CHEMISTRY SAMPLES DURING OFF-NORMAL HOURS HAVE BEEN MADE.

[293] SURRY 2 DOCKET 50-281 LER 82-005
CONTAINMENT ISOLATION TRIP VALVE FAILS TO CLOSE.
EVENT DATE: 020782 REPORT DATE: 030582 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: MISALIGNMENT OF DISK TO LIMIT SWITCH.

(NSIC 173092) THE CONTROL ROOM OPERATOR DISCOVERED THAT TRIP VALVE TV-SS-204B WAS IN THE OPEN POSITION AND WOULD NOT REMAIN CLOSED WITHOUT OPERATOR INTERVENTION. THIS EVENT IS CONTRARY TO TECH SPEC 3.8.A.1 AND TECH SPEC 1.0.H.5 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE VALVE MALFUNCTION WAS DUE TO MISALIGNMENT OF THE ACTUATION DISK TO THE LIMIT SWITCH. THE INITIAL CORRECTIVE ACTION WAS TO MANUALLY ISOLATE THE VALVE. AFTER ADJUSTING THE ACTUATING DISK AND THE SWITCH, THE VALVE WAS RETURNED TO SERVICE.

[294] SURRY 2 DOCKET 50-281 LER 82-006
HEAT TRACING PANEL FAILS.
EVENT DATE: 021182 REPORT DATE: 031282 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: HEATERS,ELECTRIC
CAUSE: EXCESSIVE HEAT.

(NSIC 173044) PT-27 REVEALED THAT AMP READINGS FOR HEAT TRACING PANEL 11, CIRCUIT 6A WAS BELOW THE ACCEPTANCE CRITERIA STIPULATED IN THE PT. THIS EVENT IS CONTRARY TO TECH SPEC 3.2.B.5 AND IS REPORTABLE PER TECH SPEC 6.6.2.B(2). THE LOSS OF HEAT TRACING WAS DUE TO EXCESSIVE HEAT. THE DEFECTIVE HEAT TRACING WAS REPLACED AND TESTED. A DESIGN CHANGE HAS BEEN INITIATED TO CHANGE THE MANNER BY WHICH THESE BORATED LINES ARE HEAT TRACED.

[295] SURRY 2 DOCKET 50-281 LER 82-014
NUCLEAR POWER RANGE INSTRUMENT FAILS.
EVENT DATE: 021182 REPORT DATE: 031782 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: SHORTED HIGH VOLTAGE CONNECTOR.

(NSIC 173045) NUCLEAR POWER RANGE INSTRUMENT 41 (N-41) FAILED. THIS CAUSED A TURBINE RUNBACK, AS DESIGNED, TO APPROXIMATELY 70% POWER. PLANT OPERATION WAS CONTINUED AS PER TECH SPEC TABLE 3.7-1. THIS EVENT IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). N-41 FAILED DUE TO A SHORTED (WETTED) HIGH VOLTAGE CONNECTOR. THE SHORTED CONNECTOR HAS BEEN REPLACED, THE JUNCTION BOX DRYED OUT AND N-41 RETURNED TO SERVICE.

[296] THREE MILE ISLAND 1 DOCKET 50-289 LER 81-006
DIESEL FIRE PUMP BATTERY TERMINALS CORRODED.
EVENT DATE: 050781 REPORT DATE: 061081 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: BATTERIES & CHARGERS
CAUSE: SURVEILLANCE NEVER PERFORMED DUE TO SCHEDULING ERROR.

(NSIC 172868) SITE PERSONNEL OBSERVED CORROSION ON UNIT 2 DIESEL FIRE PUMP BATTERY TERMINALS. THE SURVEILLANCE PROCEDURE FOR SERVICING THIS PUMP AND THE UNIT 1 FIRE PUMPS HAD NEVER BEEN SCHEDULED OR PERFORMED. THE PROCEDURE WAS IMPROPERLY ENTERED INTO THE COMPUTER DATA BASE AND PROPER ENTRY WAS NOT VERIFIED. THIS ITEM IS REPORTED PER TECH SPEC 6.9.2.B.3. FAILURE TO PERFORM THE SURVEILLANCE WAS DUE TO NOT INCLUDING THE SURVEILLANCE IN THE COMPUTER TRACKING SYSTEM. THE FIRE PUMPS DID NOT FAIL TO WORK DURING THEIR FUNCTIONAL SURVEILLANCE

TESTS. ENTRY OF THE SURVEILLANCE INTO THE COMPUTER DATA BASE WAS VERIFIED. TECH SPEC WILL BE REVIEWED TO ENSURE ALL SURVEILLANCES ARE IN DATA BASE.

[297] THREE MILE ISLAND 1 DOCKET 50-289 LER 82-003
DEMINERALIZER NEUTRALIZING TANK OVERFLOWS RELEASING ACIDIC EFFLUENT.
EVENT DATE: 031882 REPORT DATE: 033182 NSSS: BW TYPE: PWR
SYSTEM: CONDENSATE CLEANUP SYS & CONT COMPONENT: DEMINERALIZERS
CAUSE: PERSONNEL ERROR.

(NSIC 172817) IN THE LONG TERM SHUTDOWN, WHILE REGENERATING 'B' STRING CATION ANION DEEP BED DEMINERALIZERS THE RINSE CYCLES HAD FILLED THE SECONDARY NEUTRALIZING TANK. A DELAY IN RESTORING DEMINERALIZER TO SERVICE CAUSED CONDUCTIVITY SENSORS TO INITIATE ANOTHER RINSE CYCLE OVERFLOWING 2500 GALLONS OF PH 3 TO 5 FROM THE NEUTRALIZING TANK TO THE STATION RELEASE POINT. DUE TO DILUTION WITH OTHER STATION EFFLUENT, THIS IS NOT A PUBLIC HEALTH OR SAFETY HAZARD. REPORTABLE PER TECH SPEC APPENDIX B 5.6.2. OPERATOR FAILED TO RECOGNIZE THE EFFECT OF PLACING DEMINERALIZER SYSTEM IN OPERATION WITH HIGH SECONDARY NEUTRALIZING TANK LEVEL. REVISING PROCEDURES WILL HELP ENSURE THIS EVENT DOES NOT RECUR. THE OPERATORS HAVE BEEN INSTRUCTED TO BE MORE ATTENTIVE.

[298] THREE MILE ISLAND 2 DOCKET 50-320 LER 81-038
WIND DATA INSTRUMENTS ON TOWER FAIL.
EVENT DATE: 122881 REPORT DATE: 020582 NSSS: BW TYPE: PWR
SYSTEM: OTHER SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: ICE FORMATION ON INSTRUMENTS.

(NSIC 172829) AT 0255 HOURS, THE WIND DIRECTION AND WIND SPEED MONITORING INSTRUMENTS LOCATED ON THE METEOROLOGICAL TOWER BECAME INOPERABLE DUE TO ICE FORMATION ON THE INSTRUMENTS. THIS EVENT IS CONSIDERED REPORTABLE PER SECTION 6.9.1.8(B) AS A VIOLATION OF THE ACTION STATEMENT OF TECH SPEC 3.3.3.4 DUE TO THE INABILITY OF THE MONITORS TO PERFORM THEIR INTENDED FUNCTION. LER'S 81-035/03L-0 AND 81-036/01L-0 REPORTED SIMILAR OCCURRENCES. THE ICING OF THE WIND DIRECTION MONITORING INSTRUMENT IS BELIEVED TO BE DUE TO THE UNIQUE ADVERSE WEATHER CONDITIONS EXISTING AT THE TIME. NO IMMEDIATE ACTION WAS TAKEN TO DEICE THE INSTRUMENTS. THE MONITORS WERE DECLARED OPERABLE AT 1120 HOURS ON DECEMBER 28, 1981 AFTER DEICING NATURALLY. THE INSTRUMENTS WERE HEAT TRACED AS A TEMPORARY MEASURE UNTIL THE RECEIPT AND INSTALLATION OF THE ORDERED INSTRUMENT JACKET HEATERS.

[299] TURKEY POINT 4 DOCKET 50-251 LER 82-003
COMPONENT COOLING WATER SYSTEM INADEQUATELY SUPPORTED.
EVENT DATE: 033182 REPORT DATE: 041482 NSSS: WE TYPE: PWR
SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: DESIGN ERROR.

(NSIC 173175) NOTIFICATION WAS RECEIVED THAT THE INSPECTION/EVALUATION IN PROGRESS IN ACCORDANCE WITH USNRC I & E BULLETIN 79-14 HAD REVEALED A DEFICIENCY INVOLVING SUPPORTS ASSOCIATED WITH THE COMPONENT COOLING WATER SYSTEM. THIS CONDITION WOULD POTENTIALLY EXIST WHEN SAFE SHUTDOWN EARTHQUAKE LOADS ARE SUPERIMPOSED ON ALL OTHER DESIGN BASIS LOADS. EVALUATION REVEALED THAT THE CALCULATED MAXIMUM STRESS EXCEEDED THE ACCEPTANCE CRITERIA (ESTABLISHED FOR THIS REVIEW) ON THE ABOVE SUPPORTS. BASED ON THE LOW PROBABILITY OF A SEISMIC EVENT AND CONTINUED OPERABILITY OF THE SYSTEM, POWER OPERATION CONTINUED WHILE PLANT CHANGE/MODIFICATIONS WERE EXPEDITIOUSLY IMPLEMENTED TO SUPPORT THE PIPING.

[300] VERMONT YANKEE DOCKET 50-271 LER 82-004
CONTINUOUS AIR SAMPLE MONITOR FAILS.
EVENT DATE: 021682 REPORT DATE: 031682 NSSS: GE TYPE: BWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: SWITCH FAILURE.

(NSIC 172884) DURING THE WEEKLY ENVIRONMENTAL AIR SAMPLE COLLECTION PERFORMED ON 2/16/82, IT WAS DISCOVERED THAT A CONTINUOUS SAMPLE WAS NOT OBTAINABLE AT STATION AT1.4 AS REQUIRED BY TECH SPEC TABLE 3.9.1. THE ELAPSED TIME METER INDICATED THAT POWER TO THE UNIT FAILED 12.2 HOURS AFTER SAMPLE INITIATION. PLANT STACK RELEASES DURING THIS PERIOD WERE BELOW DETECTABLE LEVELS. THE SOLDER LUG OF A STANDARD 125V-8A POWER TOGGLE SWITCH WAS PARTED AT A 90 DEGREE BEND, WITH NO EVIDENCE OF ARCING. A NEW SAMPLE WAS STARTED IMMEDIATELY BY INSERTING THE VACUUM PUMP POWER LEAD IN AN UNSWITCHED RECEPTACLE. THE FAULTY SWITCH WAS LATER REPLACED WITH A NEW SWITCH.

[301] VERMONT YANKEE DOCKET 50-271 LER 82-005
UNINTERRUPTIBLE POWER SUPPLY TRAIN FAILS.
EVENT DATE: 022382 REPORT DATE: 032582 NSSS: GE TYPE: BWR
SYSTEM: ONSITE POWER SYSTEM & CONTROL COMPONENT: OTHER COMPONENTS
CAUSE: CAPACITOR SHORT.

(NSIC 172882) CONTROL ROOM PERSONNEL REPORTED UPS B TRIPPED AND LOST POWER TO MCC 89B. THE MAINTENANCE DEPARTMENT WAS IMMEDIATELY INFORMED AND TESTING OF THE ALTERNATE SYSTEM WAS COMMENCED IN ACCORDANCE WITH TECH SPEC, SEC. 3.5.A.4. UPS B WAS DECLARED INOPERABLE AND ALTERNATE ACTION TAKEN IN ACCORDANCE WITH TECH SPEC, SECTION 3.10.B.4. MAINTENANCE TIE BREAKERS FOR MCC 89B WERE CLOSED. A SIMILAR EVENT WAS REPORTED AS LER 82-2/3L. A TRANSIENT SUPPRESSION CAPACITOR (GE 86F23IL, 2900 MF) SHORTED OUT CAUSING UPS B TO TRIP. THE CAPACITOR MALFUNCTIONED DUE TO AGING. ALL 16 CAPACITORS IN THE TRANSIENT SUPPRESSION CIRCUIT WERE REPLACED. ALSO, ALL 16 CAPACITORS IN THE UPS A TRANSIENT SUPPRESSION CIRCUIT WERE REPLACED AS PREVENTIVE MAINTENANCE. THE SYSTEM WAS OPERATIONALLY TESTED AND PLACED BACK IN SERVICE. THE CURRENT PM PROGRAM WILL BE REVIEWED AND MODIFIED AS APPROPRIATE IN VIEW OF THE RECENT UPS FAILURES.

[302] YANKEE ROWE DOCKET 50-029 LER 82-001
RPS LOW RCS FLOW RELAYS FAIL TO DROP.
EVENT DATE: 010782 REPORT DATE: 020582 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: BURRS ON RELAY PLUNGER.

(NSIC 172954) WHILE PERFORMING A SURVEILLANCE OF THE LOW MAIN COOLANT FLOW SYSTEM, RELAYS 1 AND 2C IN SYSTEM B FAILED TO DROP OUT WHEN DEENERGIZED. THE RELAYS ARE REQUIRED TO BE OPERABLE PER TECH SPEC TABLE 3.3-1. SIMILAR OCCURRENCES WERE REPORTED AS LER 81-01, 81-29, 81-31, 81-32 AND 81-33. THE CAUSE IS BURRS ON THE RELAY PLUNGER CAUSING EXCESSIVE FRICTION BETWEEN THE PLUNGER AND BUSHINGS. THE RELAYS ARE WESTINGHOUSE TYPE SC-1, 1876-072, REBUILT PER LER 81-29 REV. 1. THE BURRS WERE REMOVED, UPPER BUSHINGS REPLACED, CLEARANCES CHECKED AND IRREGULARITIES CORRECTED. ALL OTHER REBUILT RELAYS WILL BE INSPECTED.

[303] YANKEE ROWE DOCKET 50-029 LER 82-003
AUXILIARY FEEDWATER FLOW CHANNEL FAILS.
EVENT DATE: 031682 REPORT DATE: 041582 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: POWER SUPPLY FAILURE DUE TO HIGH TEMPERATURE.

(NSIC 173058) DURING NORMAL OPERATION IN MODE 1, THE NO. 2 AUXILIARY FEEDWATER FLOW CHANNEL FAILED. TECH SPEC 3.3.3.5 REQUIRES THE AUXILIARY FEEDWATER FLOW

INSTRUMENTATION TO BE OPERABLE IN MODES 1-3. THIS IS THE FIRST EVENT OF THIS NATURE. THE REMAINING FLOW INSTRUMENTATION, NORMAL FLOW AND STEAM GENERATOR LEVEL INSTRUMENTATION REMAINED OPERATIONAL. THE CAUSE OF THIS EVENT IS DUE TO A FAILED POWER SUPPLY, MODEL NO. 241A12 MANUFACTURED BY POWER PAC INC., LOCATED IN THE CONTROLOTRON SERIES 241 FLOW DISPLAY COMPUTER. THE POWER SUPPLY FAILED FROM HIGH ENVIRONMENTAL TEMPERATURES CAUSED BY EQUIPMENT INSTALLATION IN A NEMA 4 ENCLOSURE. THE INSTRUMENTATION WILL BE REPLACED WHEN EQUIPMENT IS AVAILABLE.

[304] YANKEE ROWE DOCKET 50-029 LER 82-002
MAIN COOLANT LOOP FLOW INDICATION ERRATIC.
EVENT DATE: 031682 REPORT DATE: 041582 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: AMPLIFIER FAILURE.

(NSIC 173059) DURING NORMAL OPERATION, A CONTROL ROOM OPERATOR NOTED NO. 4 MAIN COOLANT LOOP FLOW INDICATION RESPONDING ERRATICALLY. AN INVESTIGATION REVEALED AN INCORRECTABLE FAULTY AMPLIFIER OUTPUT CONDITION. THE CHANNEL WAS DECLARED INOPERABLE AND PLACED IN A TRIPPED CONDITION PER TECH SPEC 3.3.1 WITHIN ONE HOUR. AN AMPLIFIER FAILURE ALSO OCCURRED IN THIS CHANNEL IN NOV. OF 1960. THE ROOT CAUSE OF THIS OCCURRENCE IS THE FAILURE OF THE AMPLIFIER UNIT. THE AMPLIFIER UNIT IS A NO. 927D658 GR. 1 MANUFACTURED BY WESTINGHOUSE ELECTRIC CORP. THE MAIN COOLANT FLOW CHANNEL WAS PLACED IN THE TRIPPED CONDITION RESULTING IN A 1 OF 3 VERSUS 2 OF 4 COINCIDENCE TRIP LOGIC. THE AMPLIFIER WILL BE REPLACED IN KIND DURING THE NEXT OUTAGE.

[305] YANKEE ROWE DOCKET 50-029 LER 82-004
AUXILIARY FEEDWATER FLOW CHANNEL FAILS.
EVENT DATE: 032082 REPORT DATE: 041982 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: POWER SUPPLY FAILURE DUE TO TEMPERATURE.

(NSIC 173022) DURING NORMAL OPERATION IN MODE 1 THE NO. 3 AUXILIARY FEEDWATER FLOW CHANNEL FAILED. TECH SPEC 3.3.3.5 REQUIRES THE AUXILIARY FEEDWATER FLOW INSTRUMENTATION TO BE OPERABLE IN MODES 1-3. A SIMILAR OCCURRENCE WAS REPORTED AS LER 82-03. THE REMAINING FLOW INSTRUMENTATION, NORMAL FLOW AND STEAM GENERATOR LEVEL INSTRUMENTATION REMAINED OPERATIONAL. THE CAUSE OF THIS EVENT IS DUE TO A FAILED POWER SUPPLY, MODEL NO. 241A12 MANUFACTURED BY POWER PAC INC., LOCATED IN THE CONTROLOTRON SERIES 241 FLOW DISPLAY COMPUTER. THE POWER SUPPLY FAILED FROM HIGH ENVIRONMENTAL TEMPERATURES CAUSED BY EQUIPMENT INSTALLED IN A NEMA 4 ENCLOSURE. THE INSTRUMENTATION WILL BE REPLACED WHEN EQUIPMENT IS AVAILABLE.

[306] YANKEE ROWE DOCKET 50-029 LER 82-005
PRIMARY VENT STACK GAS MONITOR FAILS ERRATICALLY.
EVENT DATE: 032582 REPORT DATE: 042382 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: UNKNOWN.

(NSIC 173051) DURING NORMAL OPERATION IN MODE 1 THE PRIMARY VENT STACK NOBLE GAS MONITOR INDICATION BECAME ERRATIC. THE RADIATION PROTECTION TECHNICIAN TURNED OFF THE CHANNEL HIGH VOLTAGE WHILE ATTEMPTING TO FIND THE PROBLEM. TECH SPEC TABLE 3.3-4 REQUIRES THE CHANNEL TO BE OPERATIONAL AT ALL TIMES. THERE WERE NO RELEASES WHILE THE CHANNEL WAS OUT OF SERVICE AND THE OTHER CHANNELS REMAINED OPERATIONAL. THE CAUSE OF THIS EVENT WAS INSTRUMENT MALFUNCTION. THE MONITOR IS A NUCLEAR MEASURING CORPORATION MODEL RI-RM-115, THE RATE METER IS A MODEL NO. CRM-71. WHEN I&C PERSONNEL REENERGIZED THE CHANNEL, READINGS WERE NORMAL. THE CAUSE OF THE ERRATIC BEHAVIOR IS UNKNOWN. NO FURTHER ACTION IS DEEMED NECESSARY.

[307] ZION 1 DOCKET 50-295 LER 82-003 REV 1
UPDATE ON FAILURE OF RHR PUMP SUCTION VALVE TO OPEN.
EVENT DATE: 011982 REPORT DATE: 040282 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: UNKNOWN.

(NSIC 172869) DURING PERIODIC TESTING, RESIDUAL HEAT REMOVAL PUMP 1B SUCTION VALVE 1MOV-RH8700 B FAILED TO OPEN ELECTRICALLY AFTER BEING CLOSED, PLACING THE RHR SYSTEM IN A DEGRADED MODE PER TECH SPECS 3.8.3. THIS IS A NORMALLY OPEN VALVE AND WAS CLOSED ONLY FOR THIS TEST. THE 1A RHR PUMP SYSTEM WAS OPERABLE. PREVIOUS LER: 50-295/78-42. LOCALLY AT THE VALVE BREAKER, THE OPENING CONTACTOR WAS MANUALLY PRESSED AND THE VALVE OPENED OK. DURING SUBSEQUENT INSPECTION, THE BREAKER CONTACTORS WERE CHECKED AND CURRENT READINGS WERE TAKEN WHILE VALVE 1MOV-RH8700B WAS BEING STROKED. THE VALVE STROKED WITH NO APPARENT PROBLEM.

[308] ZION 1 DOCKET 50-295 LER 82-004
STEAM GENERATOR BLOWDOWN PIPING SNUBBER FAILS.
EVENT DATE: 020382 REPORT DATE: 030482 NSSS: WE TYPE: PWR
SYSTEM: STEAM GEN BLOWDOWN SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: SEAL LEAK.

(NSIC 173140) DURING VISUAL INSPECTION, SNUBBER BDRS-1761 ON THE STEAM GENERATOR BLOWDOWN PIPING WAS FOUND IN AN AIRBOUND CONDITION WHICH SUBSTANTIATED INOPERABILITY. THIS FAILURE DID NOT RENDER THE ASSOCIATED SYSTEM INOPERABLE. PREVIOUS LER'S: 50-295/81-12, 77-8, 55, 64, 69, 70, 80, 92; 50-302/78-34, 120, 79-31. THE HYDRAULIC FLUID LEAKED OUT DUE TO THE POOR SEAL CONDITION. NEW ETHYLENE PROPYLENE SEALS WERE INSTALLED WHICH WOULD STOP FUTURE LEAKAGE. THE SNUBBER WAS TESTED AND REINSTALLED. THE STATION'S OVERHAUL AND PERIODIC INSPECTION SCHEDULE IDENTIFIES AND CORRECTS PROBLEM SNUBBERS.

[309] ZION 1 DOCKET 50-295 LER 82-005
THREE RPS FLOW CHANNELS FOR RCS CALIBRATED INCORRECTLY.
EVENT DATE: 022682 REPORT DATE: 031282 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PROCEDURAL ERROR.

(NSIC 172980) DURING THE PERIOD 4/13/81 THRU 5/9/81, UNIT 1 RC LOOP D OPERATED WITH AN APPROXIMATE 4% FLOW REDUCTION. ALL 3 LOOP D FLOW CHANNELS WERE CALIBRATED ASSUMING THAT NORMAL FLOW CONDITIONS EXISTED, RESULTING IN NONCONSERVATIVE LOW LOOP FLOW TRIP SETPOINTS FOR LOOP D, IN VIOLATION OF TECH SPEC TABLE 3.1-1. THE REDUNDANT LOSS OF LOOP FLOW PROTECTION PROVIDED BY THE RCP BREAKER TRIP WAS OPERABLE. THE FLOW REDUCTION WAS CAUSED BY A NOZZLE COVER INADVERTENTLY LEFT IN THE 1D S/G HOT LEG DURING THE SPRING 1981 REFUELING OUTAGE EDDY CURRENT EXAM. MOST OF THE NOZZLE COVER DISSOLVED, REMOVING THE PARTIAL FLOW BLOCKAGE, AND THE LOOP D RC FLOW CHANNELS WERE RESET PROPERLY ON 5/9/81. PROCEDURAL CONTROLS ON S/G WORK WILL BE STRENGTHENED.

[310] ZION 1 DOCKET 50-295 LER 82-010
CONTAINMENT PURGE ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 030282 REPORT DATE: 032482 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 172990) CONTAINMENT PURGE EXHAUST ISOLATION VALVE 1RV-00 03 FAILED TO FULLY CLOSE ON RECEIPT OF AUTOMATIC CLOSING SIGNAL GENERATED FROM DE-ENERGIZATION OF CONTAINMENT PURGE EXHAUST RADIATION MONITORS 1RT PR09 A, B, C. THE REDUNDANT ISOLATION VALVE 1RV-0004 CLOSED SUCCESSFULLY. INSPECTION REVEALED TYGON TUBING TUBING STUCK IN THE VALVE HAD PREVENTED THE VALVE FROM FULLY CLOSING. THE TYGON

TUBING WAS USED TO VENT THE RCS TO THE PURGE EXHAUST DUCT PRIOR TO REFUELING. THE APPROPRIATE PROCEDURE IS BEING CHANGED TO PREVENT A RECURRENCE. AFTER TUBE REMOVAL THE VALVE SUCCESSFULLY STROKED AND SEALED.

[311] ZION 1 DOCKET 50-295 LER 82-013
SET POINT DRIFT OF REACTOR COOLANT FLOW TRANSMITTERS OCCURRS.
EVENT DATE: 030582 REPORT DATE: 040282 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172841) DURING REFUELING CALIBRATION, LOOP C AND LOOP D RC FLOW TRANSMITTERS 1FT-426 AND 1FT-434 WERE FOUND OUT-OF-TOLERANCE HIGH BY 4.8% AND 2.75% RESPECTIVELY. THIS CONDITION IS NONCONSERVATIVE FOR THE RC LOW FLOW REACTOR TRIP. THE CAUSE OF THE OUT-OF-TOLERANCE READINGS WAS DETERMINED TO BE ZERO SHIFT (F/P #10B2496). BOTH TRANSMITTERS WERE RECALIBRATED AND RETURNED TO SERVICE. BASED ON THE PERFORMANCE OF THE NEW XMTRS TO BE INSTALLED PER IE BULLETIN 79-01B, THE REMAINING F/P XMTRS IN CRITICAL APPLICATIONS WILL BE EVALUATED FOR REPLACEMENT.

[312] ZION 1 DOCKET 50-295 LER 82-012
SET POINT DRIFT OF STEAM GENERATOR LEVEL TRANSMITTER.
EVENT DATE: 030582 REPORT DATE: 040282 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 172858) DURING REFU ALIBRATION, 1D STEAM GENERATOR LEVEL TRANSMITTER 1LT-538 WAS FOUND OUT-OF CE HIGH BY A MAXIMUM OF 2.8%. THIS OUT-OF-TOLERANCE CONDITI AS NON-CONSERVATIVE FOR THE S/G LO-LO LEVEL RX TRIP AND THE S/G LO LEVEL COINCIDENT WITH STEAM/FEED FLOW MISMATCH RX TRIP. THE OUT-OF-TOLERANCE CONDITION WAS CAUSED BY ZERO SHIFT ON TRANSMITTER 1LT-538 (F/P # 13D 2495). THE XMTR WAS RECALIBRATED TO WITHIN TOLERANCE, AND PLACED BACK IN SERVICE. BASED ON THE PERFORMANCE OF THE NEW XMTRS TO BE INSTALLED PER IE BULLETIN 79-01B, THE REMAINING F/P XMTRS IN CRITICAL APPLICATIONS WILL BE EVALUATED FOR REPLACEMENT.

[313] ZION 1 DOCKET 50-295 LER 82-013 REV 1
UPDATE ON SET POINT DRIFT OF REACTOR COOLANT FLOW SENSORS.
EVENT DATE: 030582 REPORT DATE: 041982 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT ZERO SHIFT.

(NSIC 173072) DURING REFUELING CALIBRATION, LOOP B, LOOP C AND LOOP D RC FLOW TRANSMITTERS 1FT-444, 1FT-426, AND 1FT-434 WERE FOUND OUT OF TOLERANCE HIGH BY 5%, 4.8% AND 2.75% RESPECTIVELY. THIS CONDITION IS NONCONSERVATIVE FOR THE RC LOW FLOW REACTOR TRIP. NO SAFETY IMPLICATIONS WERE INVOLVED SINCE THE REDUNDANT CHANNELS FOR EACH LOOP WERE OPERABLE. THE CAUSE OF THE OUT-OF-TOLERANCE READINGS WAS DETERMINED TO BE ZERO SHIFT (F/P #10B2496). ALL THREE TRANSMITTERS WERE RECALIBRATED AND RETURNED TO SERVICE. BASED ON THE PERFORMANCE OF THE NEW XMTRS TO BE INSTALLED PER IE BULLETIN 79-01B, THE REMAINING F/P XMTRS IN CRITICAL APPLICATIONS WILL BE EVALUATED FOR REPLACEMENT.

[314] ZION 1 DOCKET 50-295 LER 82-011
RHR SUCTION VALVE CLOSES SPURIOUSLY.
EVENT DATE: 031782 REPORT DATE: 032582 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: CONTRACTOR PERSONNEL ERROR.

(NSIC 172991) RESIDUAL HEAT REMOVAL SUCTION VALVE 1MOV-RH8702 STARTED TO CLOSE DUE TO AN INADVERTENT OPENING OF INVERTER 111 OUTPUT BREAKER. THE RUNNING RHR PUMP WAS TRIPPED. THIS EVENT PLACED THE RHR SYSTEM IN A DEGRADED MODE PER TECH SPEC 3.13.9.A. THE INVERTER OUTPUT BREAKER WAS RECLOSED, RHR SUCTION VALVE 1MOV-RH8702 WAS REOPENED, AND THE RHR SYSTEM WAS RESTORED TO OPERATION WITHIN 3 MINUTES. A CONTRACTOR WORKING IN THE AUX. ELECTRIC ROOM ACCIDENTALLY DROPPED A PIECE OF SHEET METAL ON INVERTER 111 OUTPUT BREAKER CAUSING IT TO OPEN, CAUSING RHR SUCTION PRESSURE TRANSMITTER 1PT-403 TO FAIL HIGH, WHICH CAUSED AN AUTOCLOSURE ON 1MOV-RH8702. CONTRACTOR PERSONNEL WERE INFORMED OF THE NECESSITY TO BE CAREFUL WHILE WORKING IN THIS AREA.

[315] ZION 1 DOCKET 50-295 LER 82-014
SHIFT ENGINEER RECEIVES DOSE.
EVENT DATE: 032582 REPORT DATE: 042382 NSSS: WE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 172996) DURING THE FIRST QUARTER OF 1982, A SHIFT ENGINEER RECEIVED 4.901 REM WHOLE BODY DOSE EQUIVALENT. ALL BUT 180 MREM OCCURRED WHEN THE INDIVIDUAL ENTERED THE UNIT 1 REACTOR CAVITY AREA TO INSPECT FOR REFUELING POOL LEAKS DURING FLOOD UP OF THE REFUELING POOL. THIS REPORT IS BEING SUBMITTED PER THE REQUIREMENTS OF 10CFR20.405. THIS IS THE SECOND OCCURRENCE OF THIS TYPE. PREVIOUS LER: 50-295/76-28. THE SHIFT ENGINEER ENTERED AN AREA OF THE REACTOR CAVITY WHICH HAD NOT BEEN SURVEYED. THE HIGH DOSE WAS RECEIVED BECAUSE THE INCORE THIMBLES, WHICH RUN THRU THE REACTOR CAVITY AREA, WERE IN THE RETRACTED POSITION IN PREPARATION FOR REFUELING. PROCEDURES, TRAINING, AND ADMINISTRATIVE CONTROLS WILL BE MODIFIED TO PREVENT RECURRENCE.

[316] ZION 2 DOCKET 50-304 LER 82-002
BAT CONCENTRATION EXCEEDS LIMIT.
EVENT DATE: 011882 REPORT DATE: 021782 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: VALVES
CAUSE: FLUSH VALVE LEAKED AND DILUTED SAMPLES.

(NSIC 172812) OC BAT BORIC ACID SAMPLE RESULTS INDICATED 13.1 BORIC ACID CONCENTRATION. BACKUP SAMPLES CONFIRMED OC BAT CONCENTRATION HIGHER THAN TECH SPEC UPPER LIMIT. ADEQUATE DILUTION WATER WAS TRANSFERRED TO THE OC BAT TO LOWER THE BORIC ACID CONCENTRATION BELOW THE 13% LIMIT. OC BAT SAMPLES WERE DILUTED DUE TO PW FLUSH VALVE LEAKAGE CAUSING SAMPLE TO APPEAR LOWER IN CONCENTRATION. THE VALVE WAS REPAIRED, CORRECTING THE PROBLEM. OC BAT WAS OVERBORATED DUE TO THE ERRONEOUS SAMPLE INDICATIONS. OC BAT WAS DILUTED TO THE NORMAL RANGE OF CONCENTRATION.

[317] ZION 2 DOCKET 50-304 LER 82-003
PRESSURIZER LOW PRESSURE SAFETY INJECTION ACTUATION FAILS.
EVENT DATE: 030582 REPORT DATE: 032582 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
CAUSE: OUT OF ADJUSTMENT RELAYS.

(NSIC 172819) WHILE PERFORMING SAFEGUARDS LOGIC TESTING PER PROCEDURE PT-10C, RELAYS SIB1 FOR TRAINS A AND B MALFUNCTIONED, WHICH RESULTED IN A BLOCK OF S.I. DUE TO PRESSURIZER LOW PRESSURE. THIS IS IN THE NONCONSERVATIVE DIRECTION PER TABLE 3.4.1. OF THE TECH SPECS. THE UNIT WAS IN COLD SHUTDOWN. PRIOR TO UNIT SHUTDOWN, PRESSURIZER LOW PRESSURE S.I. WAS AVAILABLE, BECAUSE THE BLOCK PERMISSIVE STATUS LITE WAS NOT LIT. THE FAILURES WERE CAUSED BY THE RELAYS (WEST. MG-6 AUX. RELAYS) BEING OUT OF ADJUSTMENT. THE LATCH SCREW JAMMED BEHIND THE LATCH PLATE, KEEPING THE RESET COIL ENERGIZED, CAUSING THE COIL TO BURN UP.

THE AFFECTED RELAYS WERE REPLACED AND ALL RELAYS OF THIS TYPE WERE ADJUSTED. ADJUSTMENT WILL BE VERIFIED EACH REFUELING OUTAGE.

[318] ZION 2 DOCKET 50-304 LER 82-005
STEAM GENERATOR PRESSURE TRANSMITTER FAILS HIGH.
EVENT DATE: 030682 REPORT DATE: 040582 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: MOISTURE FROM STEAM LEAK PENETRATED INSTRUMENTS.

(NSIC 172886) DURING COLD SHUTDOWN, 2A STEAM GENERATOR PRESSURE TRANSMITTER 2PT-514 FAILED HIGH AT 4.690 VDC. THIS CONDITION WAS NONCONSERVATIVE FOR THE HIGH STEAM LINE DIFFERENTIAL PRESSURE SAFETY INJECTION. NO SAFETY IMPLICATIONS WERE INVOLVED SINCE THE UNIT WAS IN COLD SHUTDOWN AND THE REDUNDANT STEAM PRESSURE CHANNELS WERE OPERABLE. PREVIOUS LER: 50-304/81-35. THE FAILURE WAS CAUSED BY CONDENSATION ENTRY INTO THE TRANSMITTER (FISCHER PORTER #50EP1041) THRU THE SIGNAL CONDUIT CONNECTION DUE TO A NEARBY STEAM LEAK. THE STEAM LEAK WAS REPAIRED. THE TRANSMITTER WAS DRIED, CLEANED AND RECALIBRATED. A MODIFICATION TO INSTALL CONDENSATION PLUGS IN THE SIGNAL CONDUIT WILL BE PURSUED TO ELIMINATE THE PROBLEM.

[319] ZION 2 DOCKET 50-304 LER 82-004
REACTOR TRIP RELAY FAILS DISABLING THREE TRIPS IN RPS TRAIN.
EVENT DATE: 031582 REPORT DATE: 032682 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: RELAYS
CAUSE: DESIGN ERROR.

(NSIC 172900) DURING MONTHLY REACTOR PROTECTION LOGIC TESTING (PT-5A), REACTOR TRIP RELAY RT-3XA BURNED UP AND FAILED IN A NONCONSERVATIVE MODE. THIS RENDERED THREE REACTOR TRIPS (1 LOOP LOSS OF FLOW, 2 LOOP LOSS OF FLOW AND RCP BUS UNDERVOLTAGE) INOPERABLE FROM TRAIN A OF THE REACTOR PROTECTION SYSTEM, LEADING TO A DEGRADED MODE PER TECH SPEC TABLE 3.1-1. THE REST OF TRAIN A AND ALL OF REDUNDANT TRAIN B REACTOR PROTECTION TRIPS WERE OPERABLE. THE RELAY (WESTINGHOUSE BFD 22S) BURNED UP DUE TO OVERHEATING. INVESTIGATION REVEALED THE RELAY COIL WITH THE SAME MANUFACTURER'S CATALOG NUMBER HAD A RATING OF 120V DC VERSUS A 125/130V DC RATING OF ORIGINALLY INSTALLED RELAYS, AND THUS DETERMINED REPORTABLE PER 10CFR21. ALL AFFECTED RELAYS WERE REPLACED WITH 125/130V DC RELAYS.

[320] ZION 2 DOCKET 50-304 LER 82-006
SET POINT DRIFT OF STEAM GENERATOR LEVEL SENSORS.
EVENT DATE: 032182 REPORT DATE: 042082 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT ZERO SHIFT.

(NSIC 173074) DURING NORMAL OPERATION 2D S/G LEVEL TRANSMITTER 2LT-538 WAS FOUND OUT-OF-TOLERANCE BY 65.1%. THIS CONDITION WAS NON-CONSERVATIVE FOR S/G LO-LO LEVEL REACTOR TRIP AND THE S/G LO-LEVEL COINCIDENT WITH STEAM/FEED FLOW MISMATCH REACTOR TRIP. NO SAFETY IMPLICATIONS WERE INVOLVED SINCE THE REDUNDANT LEVEL CHANNELS WERE OPERABLE. THE OUT-OF TOLERANCE CONDITION WAS CAUSED BY ZERO SHIFT ON THE TRANSMITTER (F/P #13D2495). THE TRANSMITTER WAS ZERO ADJUSTED TO AGREE WITH REDUNDANT CHANNELS ON 3/21/82, AND RECALIBRATED ON 4/8/82. BASED ON PERFORMANCE OF THE NEW XMTRS TO BE INSTALLED PER IE BULLETIN 79-01B, THE REMAINING F/P XMTRS IN CRITICAL APPLICATIONS WILL BE EVALUATED FOR REPLACEMENT.

COMPONENT INDEX

This index is based on the components, as listed in "Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File," NUREG-0161, which are coded on the LER form submitted by the licensees.

SYSTEM INDEX

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KEYWORD INDEX

This index is based on the keywords assigned by the NSIC staff when the summaries of the LERs are prepared for computer entry.

KEYWORD INDEX

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16. ABSTRACT (200 words or less)

This monthly report contains Licensee Event Report (LER) operational information that was processed into the LER data file of the Nuclear Safety Information Center (NSIC) during the one month period identified on the cover of this document. The LERs, from which this information is derived, are submitted to the Nuclear Regulatory Commission (NRC) by nuclear power plant licensees in accordance with federal regulations. Procedures for LER reporting are described in detail in NRC Regulatory Guide 1.16 and NUREG-0161, Instructions for Preparation of Data Entry Sheets for Licensee Event Reports. The LER summaries in this report are arranged alphabetically by facility name and then chronologically by event date for each facility. Component, system, and keyword indexes follow the summaries. The components and systems are those identified by the utility when the LER form is initiated; the keywords are assigned by the NSIC staff when the summaries are prepared for computer entry.

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