
Licensee Event Report (LER) Compilation

For month of March 1983

Oak Ridge National Laboratory

Prepared for
U.S. Nuclear Regulatory
Commission

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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. Questions concerning this report or its contents should be directed to

Joel R. Buchanan, Director
Nuclear Safety Information Center
Oak Ridge National Laboratory
P.O. Box Y
Oak Ridge, TN 37830
Telephone 615/574-0391
FTS Number 624-0391

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[1] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-034
 SI TANK LEVEL EXCEEDS LIMIT.
 EVENT DATE: 110782 REPORT DATE: 120782 NSSS: CE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INDICATOR AND PERSONNEL FAILURES.

(NSIC 180225) IMPROPER LEVEL INDICATION WAS OBSERVED ON C SAFETY INJECTION TANK. THE TWO NARROW RANGES INDICATED AN OUT OF SPEC LOW CONDITION (70%) AND THE WIDE RANGE INDICATED A LEVEL WITHIN A TECH SPEC LIMIT (82%). I&C PERSONNEL WERE FILLING REFERENCE LEGS ON THE LEVEL INDICATORS TO TRY TO GET THEM TO AGREE. WITH A LOSS OF A REFERENCE LEG, THE TANK LEVEL INDICATOR READS A HIGHER THAN NORMAL LEVEL. THIS BEING THE CASE, IT WAS ASCERTAINED THAT THE NARROW RANGE INDICATORS WERE CORRECT AND THE WIDE RANGE WAS READING HIGHER THAN ACTUAL TANK LEVEL. BASED ON THIS ASSUMPTION, FILLING OF C TANK WAS BEGUN. AT APPROXIMATELY 1500 HRS, WATER ISSUED FROM THE RELIEF ON C TANK AND PRESSURE INCREASED RAPIDLY EXCEEDING TECH SPEC MAXIMUM PRESSURE OF 624 PSIG. AT THIS POINT, THE WIDE RANGE INDICATED 100% AND THE NARROW RANGES WERE WITHIN TECH SPEC LIMITS. WITH WATER ISSUING FROM THE VENT, IT WAS DETERMINED THAT THE WIDE RANGE INDICATION, ORIGINALLY BELIEVED TO BE IN ERROR, WAS IN FACT CORRECT. DRAINING WAS BEGUN IMMEDIATELY TO BRING THE TANK LEVEL INTO SPEC USING WIDE RANGE INDICATION. AT 1855 HRS, LEVEL WAS BROUGHT WITHIN THE TECH SPEC LIMIT AND REPRESSURIZATION WAS BEGUN. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THE WATER IN THE SI TANK WAS SATURATED WITH NITROGEN CAUSING GAS BUBBLES TO DEVELOP IN TRANSMITTER REF. LEGS WHEN IT CAME OUT OF SOLUTION AND CAUSED LEVEL INDICATION TO DRIFT.

[2] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-036 REV 1
 UPDATE ON INOPERABLE AFWS PUMP ISOLATION VALVE.
 EVENT DATE: 110882 REPORT DATE: 121582 NSSS: CE TYPE: PWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: WIRING PROBLEM.

(NSIC 180204) EPW PUMP 2P-7A ISOLATION VALVE 2CV-1026-2 FAILED TO CLOSE FOLLOWING SURVEILLANCE TESTING. THIS VALVE WOULD BE REQUIRED TO CLOSE UNDER MSIS CONDITIONS. THE FEEDWATER TRAIN WOULD HAVE PROVIDED EPW FLOW DELIVERY IF REQUIRED. THE REDUNDANT EPW TRAIN WAS OPERABLE. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THE VALVE FAILED TO CLOSE DUE TO CHANGES IN OPERATING CHARACTERISTICS. THESE CHANGES WERE COMPENSATED FOR BY VALVE STEM LUBRICATION AND BY INCREASING THE TORQUE SWITCH SETTING. A COMPLETE CHECK OF THE VALVE OPERATOR REVEALED THAT A CONTACT, WHICH BYPASSES THE TORQUE SWITCH UNTIL THE VALVE IS APPROXIMATELY 99% CLOSED, WAS NOT WIRED IN. THE VALVE STEM WAS LUBRICATED, THE TORQUE SWITCH SETTING WAS INCREASED AND THE TORQUE SWITCH BYPASS CONTACT WAS WIRED IN. THE WIRING PROBLEM IS APPARENTLY NOT MAINTENANCE RELATED AND COULD HAVE EXISTED SINCE INITIAL INSTALLATION. THE MISWIRING HAD NO EFFECT ON VALVE OPERATION UNTIL THE VALVE OPERATING CHARACTERISTICS CHANGED DUE TO FACTORS SUCH AS WEAR, AGE, TEMPERATURE CYCLING, ETC. THE VALVE WAS SUBSEQUENTLY TESTED TO ASSURE PROPER OPERATION.

[3] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-036
 AFWS PUMP ISOLATION VALVE FAILS TO CLOSE.
 EVENT DATE: 110882 REPORT DATE: 120782 NSSS: CE TYPE: PWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: CONTACT NOT WIRED PROPERLY.

(NSIC 180205) EPW PUMP 2P-7A ISOLATION VALVE 2CV-1026-2 FAILED TO CLOSE FOLLOWING SURVEILLANCE TESTING. THIS VALVE WOULD BE REQUIRED TO CLOSE UNDER MSIS CONDITIONS. THE FEEDWATER TRAIN WOULD HAVE PROVIDED EPW FLOW DELIVERY IF REQUIRED. THE REDUNDANT EPW TRAIN WAS OPERABLE. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THE VALVE FAILED TO CLOSE DUE TO CHANGES IN OPERATING CHARACTERISTICS. THESE CHANGES WERE COMPENSATED FOR BY VALVE STEM LUBRICATION AND

BY INCREASING THE TORQUE SWITCH SETTING. A COMPLETE CHECK OF THE VALVE OPERATOR REVEALED THAT A CONTACT, WHICH BYPASSES THE TORQUE SWITCH UNTIL THE VALVE IS APPROXIMATELY 99% CLOSED, WAS NOT WIRED IN.

[4] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-037
 CHARGING PUMP BREAKER TRIPS.
 EVENT DATE: 111082 REPORT DATE: 120782 NSSS: CE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 CAUSE: UNKNOWN.

(NSIC 180206) DURING LOW POWER PHYSICS TESTING IN MODE 2, THE BREAKER TO ONE OF TWO OPERATING CHARGING PUMPS (2P36A) TRIPPED. AT THE TIME OF THIS OCCURRENCE, CHARGING PUMP 2P36B WAS INOPERABLE DUE TO RELIEF VALVE MAINTENANCE. ONE BORATION FLOW PATH WAS OPERABLE VIA 2P36C. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THE CAUSE OF THE OCCURRENCE IS UNKNOWN. RESISTANCE CHECKS OF ALL MOTOR LEADS AND WINDINGS REVEALED NO ABNORMALITIES. AMPERE READINGS, TAKEN ON ALL PHASES, INDICATED NORMAL. THE PUMP AND MOTOR HAVE BEEN OPERATED SATISFACTORILY SUBSEQUENT TO THE OCCURRENCE. SINCE THE CAUSE OF THIS OCCURRENCE IS UNKNOWN, NO ACTIONS TO PREVENT RECURRENCE ARE PLANNED.

[5] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-038
 APWS CONTROL VALVE WIRED INCORRECTLY.
 EVENT DATE: 111182 REPORT DATE: 120682 NSSS: CE TYPE: PWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: INSTALLATION ERROR.

(NSIC 180207) DURING LOW POWER PHYSICS TESTING (LPPT), EMERGENCY FEEDWATER (EFW) CONTROL VALVE 2CV-1076-2 WAS FOUND TO NOT BE WIRED ACCORDING TO INSTALLATION DRAWINGS. A CONTACT FOR THE CLOSE CIRCUIT WHICH BYPASSES THE TORQUE SWITCH UNTIL THE VALVE IS APPROXIMATELY 99% CLOSED WAS NOT WIRED INTO THE CIRCUIT. THIS WAS DISCOVERED WHILE TROUBLESHOOTING CONTROL VALVE 2CV-1026-2. THE OCCURRENCE INVOLVING 2CV-1026-2 WAS REPORTED IN LER-82-036 BUT WAS NOT RELATED TO THE WIRING DISCREPANCY ABOVE. THE ONLY OTHER OCCURRENCE REPORTED ON EITHER 2CV-1076-2 OR 2CV-1026-2 WAS LER-79-037 ON 2CV-1076-2 BUT WAS NOT RELATED TO THE CIRCUIT DESCRIBED IN THIS REPORT. THE CAUSE OF THE OCCURRENCE IS BELIEVED TO BE AN INSTALLATION OVERSIGHT. THE CIRCUITRY FOR THE OPERATORS FOR BOTH 2CV-1076-2 AND 2CV-1026-2 WAS CORRECTED TO CONFORM TO THE ELECTRICAL SCHEMATIC FOR THESE VALVE OPERATORS. AN INSPECTION OF A SAMPLING OF SIMILAR SAFETY RELATED VALVE OPERATORS WILL BE CONDUCTED. ADDITIONAL CORRECTIVE ACTIONS WILL BE BASED ON THE RESULTS OF THE INSPECTION.

[6] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-039
 4 DEGRADED FIRE BARRIER PIPE PENETRATIONS FOUND.
 EVENT DATE: 111282 REPORT DATE: 121382 NSSS: CE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PIPES, FITTINGS
 CAUSE: PERSONNEL ERROR.

(NSIC 180210) DURING A ROUTINE QC INSPECTION IT WAS DETERMINED THAT A DEGRADED FIRE BARRIER EXISTED DUE TO TWO UNSEALED PIPING PENETRATIONS. WHILE INVESTIGATING THIS OCCURRENCE IT WAS DETERMINED THAT (PER THE 18 MONTH FIRE BARRIER SURVEILLANCE ON UNIT 2 COMPLETED 10/14/82) TWO OTHER REPORTABLE, DEGRADED FIRE BARRIER PENETRATIONS HAD EXISTED. AN UNSEALED CONDUIT WAS IDENTIFIED DURING AN NRC AUDIT EXIT MEETING ON 11/19/82. OTHER LERS CONCERNING UNIT 2 FIRE BARRIERS INCLUDE 82-029, 81-042, 81-036, 81-029, AND 80-081. THIS IS REPORTABLE PER TECH SPEC 6.9.1.9.B. IN EACH OF THE FOUR INSTANCES, THE CAUSE CAN BE ATTRIBUTED TO PERSONNEL ERROR BECAUSE INSUFFICIENT INSTRUCTION WAS PROVIDED ON THE APPLICABLE DESIGN CHANGE DOCUMENTATION AND/OR JOB ORDER AUTHORIZING THE WORK TO ENSURE THAT THE WORKERS KNEW THE PENETRATIONS INVOLVED FIRE BARRIERS, OR BECAUSE THE WORKERS

FAILED TO TAKE THE NECESSARY PRECAUTIONS IN THEIR WORK AFFECTING THE FIRE BARRIERS. IMMEDIATE CORRECTIVE ACTION IN EACH CASE WAS TO POST A FIRE WATCH. THE PENETRATIONS WERE SUBSEQUENTLY SEALED PROPERLY.

[7] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-041
AFWS TURBINE PUMP INOPERABLE DUE TO CLOSED CONTROL VALVES.
EVENT DATE: 112482 REPORT DATE: 121382 NSSS: CE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: STEAM LEAK ISOLATION.

(NSIC 180213) A STEAM LEAK WAS DISCOVERED COMING FROM A FITTING ON AN EMERGENCY FEEDWATER (EFW) PUMP STEAM SUPPLY PRESSURE TRANSMITTER 2PT-0340. THE ISOLATION VALVE (2MS-0340) FOR THE TRANSMITTER COULD NOT BE CLOSED AT THE TIME OF THE OCCURRENCE. THE STEAM SUPPLY WAS ISOLATED BY CLOSING THE UPSTREAM CONTROL VALVES 2CV-1000 AND 2CV-1050. THIS REMOVED THE STEAM DRIVEN EFW PUMP 2P-7A FROM SERVICE. EFW PUMP 2P-7B AND ASSOCIATED TRAIN REMAINED OPERABLE DURING THIS OCCURRENCE. AFTER ISOLATING THE STEAM SYSTEM, OPERATIONS PERSONNEL WERE ABLE TO CLOSE THE TRANSMITTER ISOLATION VALVE SO THAT REPAIRS COULD BE MADE WITH THE EFW PUMP IN SERVICE. THE EFW PUMP 2P-7A WAS OUT OF SERVICE FOR APPROXIMATELY 1 HOUR AND 20 MINUTES. VALVE 2MS-0340 WAS RELOCATED AS PART OF A DESIGN CHANGE. APPARENTLY WHEN THE TUBING CONNECTOR WAS INSTALLED, IT WAS OVERTORQUED, THUS CAUSING THE THREADS TO STRIP. THE TUBING CONNECTOR WAS REPLACED, AND THE TRANSMITTER WAS CALIBRATED AND RETURNED TO SERVICE.

[8] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-045
PRESSURIZER PRESSURE DROPS WHEN HEATER LOSES POWER.
EVENT DATE: 112982 REPORT DATE: 122382 NSSS: CE TYPE: PWR
SYSTEM: REACTOR VES. & APPURTENANCES COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: 3 FUSES OPEN CIRCUITED.

(NSIC 180004) A SLOW DECREASE IN PRESSURIZER PRESSURE WAS OBSERVED WITH BOTH PROPORTIONAL AND ONE BACKUP HEATER BANKS ENERGIZED. A SECOND BACKUP HEATER BANK WAS ENERGIZED TO MAINTAIN RCS PRESSURE. COMPONENTS REDUNDANT TO THE #2 PROPORTIONAL HEATER BANK THAT WERE OPERABLE AT THE TIME OF THE EVENT WERE THE #1 PROPORTIONAL AND FOUR BACKUP HEATER BANKS. IN THE EVENT OF A LOSS OF OFFSITE POWER, ONLY THE #1 PROPORTIONAL HEATER BANK, POWERED BY AN EMERGENCY BUS, WOULD HAVE BEEN AVAILABLE FOR USE. THIS EVENT IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THERE HAVE BEEN NO SIMILAR LER'S. SUBSEQUENT INVESTIGATION REVEALED THAT THREE FUSES HAD OPENED IN CIRCUIT 2SCR-2 OF THE #2 PROPORTIONAL HEATER BANK CAUSING A LOSS OF POWER TO THE HEATER BANK. FUSES WERE REPLACED AND THE HEATER BANK WAS ENERGIZED AND PERFORMED SATISFACTORILY. NO FAILURE CAUSE COULD BE DETERMINED.

[9] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-044
CHARGING PUMP INOPERABLE DUE TO OPEN POWER FUSE.
EVENT DATE: 120682 REPORT DATE: 122182 NSSS: CE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: FUSE FATIGUE.

(NSIC 180039) THE CONTROL POWER FUSE OPENED ON CHARGING PUMP 2P-036-C DURING AN ATTEMPT TO START THE PUMP. THE A CHARGING PUMP WAS INOPERABLE BECAUSE IT HAD BEEN ISOLATED FOR MAINTENANCE; HOWEVER, B CHARGING PUMP REMAINED OPERABLE. THIS CONDITION CAUSED ENTRY INTO AN ACTION STATEMENT PER TECH SPEC 3.1.2.4. OTHER UNIT TWO LER'S CONCERNING CHARGING PUMPS INCLUDE 82-037, 82-012, 82-007, 81-028, 81-001, 80-090, 80-019, 80-061, 80-034, AND 79-031. THIS IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THIS EVENT MAY HAVE BEEN CAUSED BY FUSE FATIGUE OR CONTACTOR DRAGGING IN THE MOTOR; AN EXACT CAUSE COULD NOT BE DETERMINED. THE IMMEDIATE CORRECTIVE ACTIONS WERE TO REPLACE THE FUSE AND THE MOTOR CONTACTS. AMPERAGE

READINGS IN THE CIRCUIT AFTER THESE ACTIONS WERE IN THE NORMAL RANGE. THE PUMP'S STATUS WAS RETURNED TO OPERABLE WITHIN THE LIMITS OF THE LCO.

[10] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-042
CORE PROTECTION CALCULATOR DATA IS INCORRECT.
EVENT DATE: 121082 REPORT DATE: 122182 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEM COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PERSONNEL ERROR.

(NSIC 180040) DURING POWER ASCENSION TESTING, IT WAS DETERMINED THAT THE VALUES OF THE SHAPE ANNEALING MATRIX FOR ALL FOUR CORE PROTECTION CALCULATORS (CPC) HAD BEEN IMPROPERLY LOADED INTO THE CPC'S. USE OF AN INCORRECT SHAPE ANNEALING MATRIX CAUSED THE CPC CHANNELS TO CALCULATE A MORE BOTTOM PEAKED CORE POWER DISTRIBUTION THAN ACTUAL AS CALCULATED WITH THE INCORE DETECTOR SYSTEM. THESE ERRORS MAY HAVE CAUSED NON-CONSERVATIVE DNBR AND LPD CALCULATIONS BY ALL FOUR CPC CHANNELS. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.8.F. THE CAUSE OF THIS OCCURRENCE WAS PERSONNEL ERROR. AT THE 50% FULL POWER ASCENSION TEST PLATEAU, NUCLEAR ENGINEERING PERSONNEL DETERMINED SHAPE ANNEALING MATRICES (SAM) FOR EACH CPC CHANNEL. THE MATRICES WERE TRANSPOSED AND INPUT INTO EACH CPC CHANNEL. THE CAUSE OF THE TRANSPOSITION WAS INADEQUATE LABELING OF THE INDIVIDUAL MATRIX ELEMENTS AS LISTED BY A SAM ANALYSIS CODE. THE SAM ELEMENTS WERE INSTALLED WITHIN 1 HOUR OF IDENTIFICATION OF THE ERROR. PRIOR TO UTILIZATION OF THE SAM ANALYSIS CODE FOR THE NEXT BEGINNING OF CYCLE TESTING, LABELING OF THE INDIVIDUAL MATRIX ELEMENTS WILL BE ADDED. THIS ITEM WAS PREVIOUSLY REPORTED BY LETTER (ANO-82-2-1246) FROM AP&L (LEVINE) TO NRC (COLLINS) DATED DECEMBER 10, 1982.

[11] ARNOLD DOCKET 50-331 LER 82-077
RHR SW PUMP FAILS TO MEET TDH REQUIREMENT.
EVENT DATE: 111682 REPORT DATE: 121082 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: PUMPS
CAUSE: DAMAGE TO IMPELLER.

(NSIC 180172) DURING TESTING, RHR SERVICE WATER PUMP 1P-22D FAILED TO MEET TECH SPEC REQUIRED TOTAL DISCHARGE HEAD (TDH) OF 610 FT (264 PSIG) AT RATED FLOW OF 2400 GPM. 1P-22D DELIVERED 2400 GPM AT 545 FT TDH (236 PSIG). REDUNDANT 1P-22A, 1P-22B, AND 1P-22C WERE OPERABLE. A 30 DAY LCO WAS ENTERED FOR APPROXIMATELY 7 DAYS PER TECH SPEC 3.5.C. FIVE PREVIOUS FAILURES TO MEET TECH SPEC FLOW REQUIREMENTS (SEE RO 78-24, 78-34, 81-25, 81-36, 82-54, AND 82-61). DAMAGE TO FIRST STAGE IMPELLER. IMPELLER HAD BECOME LOOSE ON SHAFT AND WAS RUBBING THE PUMP SUCTION BELL. CAUSE OF LOOSE IMPELLER IS BEING INVESTIGATED BY JOHNSTON PUMP. 1P-22D WAS REBUILT AND FUNCTIONALLY TESTED WITH SATISFACTORY RESULTS. 1P-22D IS A LAYNE-BOWLER MODEL 16EHH CENTRIFUGAL PUMP.

[12] ARNOLD DOCKET 50-331 LER 82-079
SET POINT DRIFT IN CORE SPRAY PRESSURE SWITCH.
EVENT DATE: 111782 REPORT DATE: 121082 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 180173) DURING TESTING, B CORE SPRAY SYSTEM HEADER TO TOP OF CORE PLATE HIGH DIFFERENTIAL PRESSURE SWITCH PDIS-2139 TRIPPED AT 2.1 PSID. TECH SPEC 3.2-B REQUIRES A SETPOINT OF 2.46 PLUS OR MINUS 0.25 PSID (0.74 PSID PLUS HEAD AND TEMPERATURE CORRECTION). THERE HAVE BEEN FIVE PREVIOUS SIMILAR OCCURRENCES (SEE AO 75-39; RO 76-11, 80-08, 80-35, AND 80-39). THE CAUSE IS INSTRUMENT DRIFT. PDIS-2139 WAS PROMPTLY RECALIBRATED AND FUNCTIONALLY TESTED SATISFACTORYLY. PDIS-2139 IS BARTON MODEL 288A DIFFERENTIAL PRESSURE SWITCH. THE USE OF BARTON

DIFFERENTIAL PRESSURE SWITCHES AT THIS FACILITY IS BEING INVESTIGATED. ANY FURTHER CORRECTIVE ACTION WILL BE A RESULT OF THIS INVESTIGATION.

[13] ARNOLD DOCKET 50-331 LER 82-080
 RWSS PUMP INOPERABLE DUE TO LOW DISCHARGE HEAD.
 EVENT DATE: 112282 REPORT DATE: 121782 NSSS: GE TYPE: BWR
 SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: PUMPS
 CAUSE: MOTOR COUPLING SLIPPED DUE TO LOOSE SCREWS.

(NSIC 180154) THE B RIVER WATER SUPPLY SYSTEM (RWSS) TRAVELING SCREEN WASH PUMP, 1P-112B, WAS FOUND TO HAVE A DISCHARGE HEAD OF APPROX 33 PSIG INSTEAD OF THE 60 PSIG REQUIRED FOR THE OPERATION OF TRAVELING SCREEN 1F-36B. B RWSS WAS DECLARED INOPERABLE AND A 7 DAY LCO WAS ENTERED PER TECH SPEC 3.5.J.2. ONE OCCURRENCE OF 1P-112B INOPERABILITY (SEE RO 82-68). LOW DISCHARGE PRESSURE DUE TO SLIPPAGE OF COUPLING BETWEEN MOTOR AND PUMP ON MOTOR SHAFT DUE TO SET SCREWS LOOSENED BY MISALIGNMENT AND SUBSEQUENT VIBRATION. THE PUMP AND MOTOR WERE ALIGNED AND THE SET SCREWS WERE TIGHTENED. 1P-112B FUNCTIONALLY TESTED SATISFACTORILY. ROOT CAUSE INVESTIGATION CONTINUES. UPDATE REPORT TO FOLLOW.

[14] ARNOLD DOCKET 50-331 LER 82-081
 SFU HEATER TRIPS ON OVERTEMPERATURE.
 EVENT DATE: 112382 REPORT DATE: 121082 NSSS: GE TYPE: BWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: CONTROLLER CIRCUIT FAILURE.

(NSIC 180152) DURING TESTING, THE B STANDBY FILTER UNIT (SFU) HEATER TRIPPED ON OVERTEMPERATURE. THE B SFU WAS DECLARED INOPERABLE. IN ACCORDANCE WITH TECH SPEC 3.10.A.3, A 7-DAY LCO WAS ENTERED. THERE HAS BEEN ONE PREVIOUS SIMILAR OCCURRENCE (SEE RO 82-64). HEATER TRIP DUE TO INOPERABLE CONTROLLER EC-7304B. CONTROLLER INOPERABLE DUE TO FAILURE OF OP AMP IN CONTROLLER CIRCUITRY. THE OP AMP WAS REPLACED. EC-7304B AND B SFU WERE FUNCTIONALLY TESTED WITH SATISFACTORY RESULTS.

[15] BEAVER VALLEY 1 DOCKET 50-334 LER 81-105 REV 1
 UPDATE ON LONG RECOMBINER HEATER RESPONSE TIME.
 EVENT DATE: 122381 REPORT DATE: 121382 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: RECOMBINERS
 CAUSE: CONTROL UNIT DESIGN PROBLEM.

(NSIC 180032) WHILE PERFORMING A SURVEILLANCE TEST ON THE 1B ROCKWELL INTERNATIONAL HYDROGEN RECOMBINER (HY-RT-1B), THE PREHEATER DISCHARGE AIR TEMPERATURE FAILED TO REACH THE REQUIRED TEMPERATURE IN THE SPECIFIED TIME. POWER OPERATIONS CONTINUED IN ACCORDANCE WITH TECH SPEC 3.6.4.2 WHILE (HY-RT-1B) WAS DECLARED INOPERABLE. THE CAUSE OF THE EVENT IS DUE TO A POSSIBLE DESIGN PROBLEM RESULTED IN THE OVERPOWERING OF TWO (2) RESISTORS IN THE TEMPERATURE CONTROL UNIT. THESE RESISTORS WILL BE REPLACED WITH RESISTORS OF A SUFFICIENT POWER RATING. ALSO, A MODIFICATION IS IN PROGRESS TO REPLACE THE EXISTING CONTROL UNIT WITH A NEWLY DESIGNED UNIT.

[16] BEAVER VALLEY 1 DOCKET 50-334 LER 82-012 REV 1
 UPDATE ON OVERSTRESSED SI AND MSL SUPPORTS.
 EVENT DATE: 041682 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 CAUSE: DESIGN ERROR.

(NSIC 180158) DURING RECORDS UPDATE OF THE 1E BULLETIN 79-14 ANALYSIS, A TOTAL OF THREE OVERSTRESSED SUPPORTS WERE IDENTIFIED UPSTREAM OF THE MAIN STEAM LINE

CONTAINMENT ISOLATION VALVES. ALSO IDENTIFIED WERE A TOTAL OF FOUR OVERSTRESSED SUPPORTS ON THE THREE PARALLEL BRANCH LINES PROVIDING HIGH HEAD SAFETY INJECTION TO THE REACTOR COOLANT SYSTEM COLD LEGS. THE MAIN STEAM LINE SUPPORT DEFICIENCIES RESULTED FROM A MISINTERPRETATION OF A WELD NOTE ON THE WORK SKETCH. THE SAFETY INJECTION LINE SUPPORT DEFICIENCIES RESULTED FROM THE FAILURE TO INCLUDE BRANCH LINE LOADING IN THE ORIGINAL CALCULATIONS FOR THESE SUPPORTS. ALL DEFICIENCIES HAVE BEEN CORRECTED THROUGH DCP 305.

[17] BEAVER VALLEY 1 DOCKET 50-334 LER 82-054
 CHLORINATION TIME LIMIT EXCEEDED.
 EVENT DATE: 092382 REPORT DATE: 120682 NSSS: WE TYPE: PWR
 SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
 CAUSE: OPERATOR ERROR.

(NSIC 180134) THE TWO HOUR PER DAY CHLORINATION TIME LIMIT OF TECH SPEC 2.3.1 WAS EXCEEDED. CONTINUOUS CHLORINATION OF THE CIRCULATING WATER SYSTEM OCCURRED OVER A SEVEN HOUR PERIOD WITH THE HIGHEST RECORDED FREE CHLORINE RESIDUAL MEASURED AT 0.45MG/L. THE ENVIRONMENTAL IMPACT ON THE RIVER ECOSYSTEM WAS MINIMAL SINCE THE TECH SPEC MAXIMUM DAILY CONCENTRATION LIMIT OF 0.50MG/L WAS NOT EXCEEDED. BECAUSE OF OTHER PLANT TRANSIENTS WHICH WERE OCCURRING AT THE SAME TIME, THE CHLORINATION SYSTEM WENT UNATTENDED FOR A PERIOD OF FIVE HOURS OVER THE TECH SPEC LIMIT. THE CHLORINATION SYSTEM HAS BEEN TURNED OVER TO THE OPERATIONS GROUP FROM THE CHEMISTRY GROUP. EVERY EFFORT IS BEING MADE TO HAVE THE CHLORINATION SYSTEM PLACED IN THE AUTO MODE, TO AVOID HUMAN ERROR.

[18] BEAVER VALLEY 1 DOCKET 50-334 LER 82-058
 POWER RANGE CHANNEL TRIP CONSTANT DRIFTS.
 EVENT DATE: 112282 REPORT DATE: 122182 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180199) WHILE PERFORMING MAINTENANCE SURVEILLANCE PROCEDURE 2.04 (POWER RANGE NEUTRON FLUX CHANNEL N-NI 42 QUARTERLY CALIBRATION), THE RATE TRIP TIME CONSTANT WAS FOUND TO BE 1.84 SECONDS. TECH SPEC 2.2-1 REQUIRES A MINIMUM TIME CONSTANT OF 2 SECONDS. THE NON-CONSERVATIVE SETPOINT WAS ATTRIBUTED TO INSTRUMENT DRIFT. THE TIME CONSTANT WAS ADJUSTED TO 2.24 SECONDS AND THE CHANNEL WAS RETURNED TO SERVICE.

[19] BEAVER VALLEY 1 DOCKET 50-334 LER 82-056
 HYDROGEN RECOMBINER DOES NOT REACH ACCEPTANCE CRITERIA.
 EVENT DATE: 112682 REPORT DATE: 120682 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: RECOMBINERS
 CAUSE: DESIGN PROBLEM IN CONTROL UNIT.

(NSIC 180136) HYDROGEN RECOMBINER 1B FAILED OST (1.46.4), DUE TO THE UNITS INABILITY TO ACHIEVE AN ACCEPTANCE CRITERIA TEMPERATURE OF AT LEAST 700F. THIS RESULTED IN ONLY ONE OF THE TWO REQUIRED SEPARATE AND INDEPENDENT HYDROGEN RECOMBINER SYSTEMS BEING OPERABLE (TECH SPEC 3.6.4.2). THE CAUSE OF THE EVENT IS DUE TO A POSSIBLE DESIGN PROBLEM RESULTING IN THE OVERPOWERING OF TWO RESISTORS IN THE TEMPERATURE CONTROL UNIT. THESE RESISTORS WILL BE REPLACED WITH RESISTORS OF A SUFFICIENT POWER RATING. ALSO, A MODIFICATION IS IN PROGRESS TO REPLACE THE EXISTING CONTROL UNIT WITH A NEWLY DESIGNED UNIT.

[20] BEAVER VALLEY 1 DOCKET 50-334 LER 82-055
 VALVE RESTROKING MISSED.
 EVENT DATE: 113082 REPORT DATE: 122782 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES

CAUSE: NONLICENSED OPERATOR ERROR.

(NSIC 180185) DURING A REVIEW OPERATIONS SURVEILLANCE TEST (OST 1.47.3A) WAS FOUND NOT PERFORMED WITHIN THE 25% MAXIMUM ALLOWABLE EXTENSION AND ITS ASME MONTHLY VALVE RESTROKING WAS NOT DONE IN OCT. AND NOV. AS PER TECH SPEC 4.0.2A & 4.0.5 RESPECTIVELY. ADDITIONALLY, OST 1.24.4'S ASME MONTHLY VALVE RETEST WAS NOT DONE IN OCT. AS PER TECH SPEC 4.0.5. THE PRESENT OST SCHEDULER, WHO WAS IN A TURNOVER PROCESS FROM THE FORMER SCHEDULER, WAS UNFAMILIAR WITH RETESTING OF VALVES EXCEEDING ASME STROKE TIMES AND FAILED TO SCHEDULE THE TESTS AS REQUIRED. THE SCHEDULER ALONG WITH THE TECHNICAL ADVISORY GROUP RECEIVED GENERAL RETRAINING ON ASME SECTION XI TESTING REQUIREMENTS.

[21] BEAVER VALLEY 1 DOCKET 50-334 LER 82-057
 ECCS PUMP INOPERABLE.
 EVENT DATE: 113082 REPORT DATE: 122382 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PUMPS
 CAUSE: UNKNOWN.

(NSIC 180201) DURING THE PERFORMANCE OF OST 1.7.4 TO TEST THE OPERABILITY OF CH-P-1A, AN UNUSUAL NOISE WAS HEARD NEAR THE PUMP. CONTROL ROOM READINGS FOR CHARGING, SEAL FLOW, AND RUNNING CURRENT WERE LOW. CH-P-1C WAS THEN STARTED TO MAINTAIN CHARGING PARAMETERS. CH-P-1A WAS SHUT DOWN AT 0930 HOURS. THE FOLLOWING CORRECTIVE ACTIONS WERE TAKEN TO DETERMINE THE CAUSE OF FAILURE: THE ENTIRE ROTATING ASSEMBLY OF CH-P-1A WAS HAND ROTATED, THE GEARBOX AND GEAR ASSEMBLY WAS INSPECTED, AND THE PUMP WAS VENTED. NO APPARENT PROBLEMS WERE IDENTIFIED. FOLLOWING THE COMPLETION OF THESE ACTIONS, OST 1.7.4 WAS SATISFACTORILY COMPLETED.

[22] BIG ROCK POINT DOCKET 50-155 LER 82-033
 FIRE BARRIERS INOPERABLE.
 EVENT DATE: 113082 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: USE OF MATERIAL WHICH EXCEEDED SHELF LIFE.

(NSIC 180404) DURING ISSUE OF RTV FIRE BARRIER MATERIAL, IT WAS NOTED THAT A PREVIOUS ISSUE INCLUDED MATERIAL THAT HAD EXCEEDED THE VENDOR'S RECOMMENDED SHELF LIFE. THE FIRE BARRIERS INVOLVED WERE DEEMED INOPERABLE ON 12/2/82 AND PATROLS WERE ESTABLISHED AS REQUIRED BY TECH SPEC 3.7.12.B UNTIL REPAIRS TO THE AFFECTED BARRIERS WERE MADE. REPORTABILITY BASED ON TECH SPECS 6.9.2.B.(2). AN ERROR HAD BEEN MADE BY QUALITY CONTROL PERSONNEL IN TRANSCRIBING THE SHELF LIFE DATA TO THE TAGS ON THE RTV SEALANT MATERIAL IN STOCK. THE FIRE PENETRATIONS WERE REPAIRED ON 12/3/82. ALL INSPECTION PERSONNEL WERE MADE AWARE OF THE IMPORTANCE OF DOING ACCURATE WORK.

[23] BIG ROCK POINT DOCKET 50-155 LER 82-031
 ECCS PUMP INOPERABLE DUE TO LOSS OF POWER.
 EVENT DATE: 120782 REPORT DATE: 010583 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIPCUIT CLOSERS/INTERRUPTERS
 CAUSE: BREAKER TRIPPED DUE TO CONTACTOR WEAR.

(NSIC 180405) DURING ATTEMPTS TO SHUT OFF THE ELECTRIC FIRE PUMP FOLLOWING A REACTOR SCRAM, THE 480 VOLT CIRCUIT BREAKER TRIPPED RENDERING THE PUMP INOPERABLE FOR POTENTIAL FIRE USE OR EMERGENCY CORE COOLING USE. THE BACKUP DIESEL FIRE PUMP WAS OPERABLE. REPORTABILITY BASED ON TECH SPEC 6.9.2.B.(2). THE 3 PHASE MAIN MOTOR CONTACTOR WAS BURNED AND WORN PRESUMABLY DUE TO LONG-TERM WEAR. THE CONTACTORS WERE REPLACED AND A PERIODIC SCHEDULED INSPECTION WILL BE ESTABLISHED TO MINIMIZE THE CHANCE OF RECURRENT FAILURE.

[24] BIG ROCK POINT DOCKET 50-155 LER 82-032
ELECTRICAL EQUIPMENT ROOM FIRE ALARM INOPERABLE.
EVENT DATE: 120882 REPORT DATE: 010583 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: ANNUNCIATOR MODULES
CAUSE: INCORRECT INSTALLATION OF WIRING.

(NSIC 180406) DURING AN INSPECTION, THE AUDIBLE ALARM UNIT FOR THE FIRE DETECTION EQUIPMENT IN ZONE 1 AND ZONE 2 OF THE ELECTRICAL EQUIPMENT ROOM WAS FOUND TO BE INOPERATIVE. THE ALARM WAS RESTORED TO OPERABLE STATUS WITHIN TWO HOURS. A PRIOR FAILURE WAS REPORTED ON LER 82-030. REPORTABILITY BASED ON TECH SPEC 6.9.2.B.(2). FLEXING OF STIFF WIRING ON THE DOOR PANEL OF PYROTRONICS MODEL FIU-6, SUPERVISORY UNIT CAUSED FAILURE AT A SOCKET CONNECTION. THE UNIT WAS MODIFIED USING MORE FLEXIBLE WIRE FOR THE CIRCUIT INVOLVED AND IMPROVEMENTS TO OTHER CIRCUITS IN THE UNIT ARE PLANNED TO PREVENT SIMILAR FAILURES.

[25] BROWNS FERRY 1 DOCKET 50-259 LER 81-037 REV 2
UPDATE ON CRACKED RWCU ISOLATION VALVE.
EVENT DATE: 062981 REPORT DATE: 122882 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: STRESS CORROSION.

(NSIC 180119) REACTOR WATER CLEANUP SYSTEM INBOARD PRIMARY CONTAINMENT ISOLATION VALVE 69-1 WAS ULTRASONICALLY INSPECTED ON 6/21/81. AN INDICATION WAS OBSERVED ON THE VESSEL SIDE OF THE VALVE WELD. (TECH SPEC 3.6.G.) A SUBSEQUENT RADIOGRAPH SHOWED NO INDICATIONS. ON 6/24/81 A UT INSPECTION BY A LEVEL II INSPECTOR CONFIRMED AN INDICATION. PREVIOUS SIMILAR EVENT: BFRO-50-259/80-004. FOR CAUSE SEE ATTACHED METALLURGICAL REPORT. THE VELAN MODEL 900 LB. 6 INCH. (SS) STAINLESS STEEL GATE VALVE, RATED AT 1146 PSI AT 500 F (NORMAL OPERATING PRESSURE 960 PSI) WAS REPLACED. THE INDICATION IS ACCEPTABLE UNDER THE SUMMER 1978 ADDENDA TO ASME SECTION XI CODE. THIS IS CONSIDERED A RANDOM EVENT.

[26] BROWNS FERRY 1 DOCKET 50-259 LER 82-095
DIESEL GENERATOR INOPERABLE DUE TO START CIRCUIT RELAY FAILURE.
EVENT DATE: 120182 REPORT DATE: 122882 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: RELAYS
CAUSE: BURNED CONTACT.

(NSIC 180364) WHILE PERFORMING DIESEL-GENERATOR B REDUNDANT START TESTS, A FAULTY RELAY WAS FOUND. THIS RELAY PREVENTED START CIRCUIT 1 FROM FUNCTIONING. THE DIESEL WAS DECLARED INOPERABLE (TECH SPEC 3.9.B.3). START CIRCUIT 2 WAS STILL OPERABLE AND COULD HAVE STARTED THE DIESEL. THE DIESEL-GENERATOR, WHICH IS COMMON TO UNITS 1 AND 2, WAS INOPERABLE FOR 8 HOURS. TECH SPEC 3.9.B.3 ALLOWS OPERATION FOR 7 DAYS WITH ONE DIESEL-GENERATOR INOPERABLE. ALL OTHER REQUIREMENTS ON TECH SPEC 3.9.B.3 WERE MET. THE RELAY HAD A BURNED CONTACT STUCK IN THE CLOSED POSITION DUE TO NORMAL WEAR. THE FAULTY SPEED-SENSING RELAY (ZSR1), GM PART NO. 008327263, WAS REPLACED.

[27] BROWNS FERRY 1 DOCKET 50-259 LER 82-097
TEST FREQUENCY FOR SEVERAL ISOLATION VALVES IS INADEQUATE.
EVENT DATE: 120382 REPORT DATE: 122882 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180360) A ROUTINE EXAMINATION OF TECH SPECS AND SURVEILLANCE INSTRUCTIONS REVEALED SEVERAL ISOLATION VALVES ARE TESTED LESS OFTEN THAN REQUIRED BY TECH SPEC 4.7.D.1.B(1). THE TESTING FREQUENCY OF THE VALVES WAS ALTERED IN JUNE 1979 TO COMPLY WITH ASME SECTION XI GUIDELINES. THE SURVEILLANCE INSTRUCTIONS ARE COMMON TO ALL UNITS. PLANT PROCEDURES WERE REVISED PREMATURELY BASED ON A

MISINTERPRETATION OF NRC GUIDELINES FOR IMPLEMENTING ASME XI. PLANT INSTRUCTIONS HAVE BEEN REVISED TO REQUIRE TESTING ALL ISOLATION VALVES COVERED BY EXISTING TECH SPECS. APPROPRIATE SUPERVISORS HAVE BEEN CAUTIONED NOT TO REVISE PROCEDURES UNTIL TECH SPECS ARE APPROVED.

[28] BROWNS FERRY 1 DOCKET 50-259 LER 82-089
 RADWASTE CAM INOPERABLE.
 EVENT DATE: 120582 REPORT DATE: 010383 NSSS: GE TYPE: BWR
 SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: TORN MYLAR FILM.

(NSIC 180354) THE 0-90-252 RADWASTE CAM WAS OUT OF SERVICE FOR 7 1/2 HOURS TO REPAIR THE PARTICULATE DETECTOR. RADWASTE VENTILATION IS COMMON TO ALL 3 UNITS. TECH SPEC 3.8.B.8 REQUIRES CONTINUOUS MONITORING OF THIS VENT WHENEVER IN SERVICE. THIS EVENT WAS CAUSED BY A TORN MYLAR FILM COVERING THE PARTICULATE DETECTOR. THE CAUSE OF FAILURE CANNOT BE DETERMINED. THE NMC PART #90084 MYLAR FILM WAS REPLACED.

[29] BROWNS FERRY 2 DOCKET 50-260 LER 82-037
 MSIV LEAKAGE EXCEEDS LIMIT.
 EVENT DATE: 112282 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVES
 CAUSE: SEAT DETERIORATION.

(NSIC 179998) WHILE PERFORMING LOCAL LEAK RATE TESTS, THE TOTAL AS-FOUND LEAKAGE FROM PRIMARY CONTAINMENT LOCAL LEAK RATE TESTS WAS DETERMINED TO BE GREATER THAN 60 PERCENT OF L(SUB A) PER 24 HOURS (655.95 CFH) PER TECH SPEC 4.7.A.2.G. THE EXACT LEAKAGE RATE COULD NOT BE DETERMINED DUE TO INABILITY TO BUILD ADEQUATE TEST PRESSURE FOR ONE SET OF MAIN STEAM ISOLATION VALVES. SEE LER SUPPLEMENTAL INFORMATION SHEET. LEAKAGE WAS CAUSED BY DETERIORATION OF VALVE SEATING SURFACES (PRIMARY MSIVS) DURING OPERATION. SEE SUPPLEMENTAL INFORMATION SHEET FOR VALVE INFORMATION. PRIOR TO STARTUP, THE VALVES WILL BE REPAIRED AND RETESTED UNTIL SATISFACTORY LEAKAGE RATES ARE OBTAINED. A LONG TERM MSIV IMPROVEMENT PROGRAM IS BEING IMPLEMENTED.

[30] BROWNS FERRY 2 DOCKET 50-260 LER 82-039
 SUPPRESSION CHAMBER AND HPCI SUCTION LEVEL SWITCHES FAIL.
 EVENT DATE: 120482 REPORT DATE: 121782 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: SWITCH FLOAT STUCK.

(NSIC 179978) WHILE PERFORMING SI 4.2.B-27 (SUPPRESSION CHAMBER HIGH-LEVEL), LEVEL SWITCHES LS-73-57A AND 57B (HPCI SUCTION VALVE INTERLOCK) WERE FOUND INOPERABLE. TECH SPEC TABLE 3.2.B REQUIRES A MINIMUM OF ONE OPERABLE PER TRIP SYSTEM. THE ROBERTSHAW MODEL 82798-C3 LEVEL SWITCH FLOATS WERE STUCK. THE FLOATS WERE FREED AND THE LEVEL SWITCHES WERE RECALIBRATED, FUNCTIONALLY TESTED AND RETURNED TO SERVICE. IN THE FUTURE, THE SURVEILLANCE TEST WILL BE PERFORMED IMMEDIATELY BEFORE THE SUPPRESSION CHAMBER IS DRAINED SO THAT SWITCH OPERABILITY CAN BE DETERMINED.

[31] BROWNS FERRY 3 DOCKET 50-296 LER 82-056
 PARTICULATE CHANNEL ON DRYWELL CAM FAILS.
 EVENT DATE: 112882 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: CONDENSATION DUE TO LEAKY O-RINGS.

(NSIC 180026) THE PARTICULATE CHANNEL ON THE 3-90-256 DRYWELL CAM WENT DOWNSCALE

DUE TO MOISTURE IN THE SAMPLE CHAMBER. (TECH SPEC 3.6.C.2). THIS CAUSED THE UNIT TO OPERATE IN A DEGRADED MODE. THE CAM WAS OUT OF SERVICE FOR APPROXIMATELY 16 HOURS. THE CAUSE OF THE EVENT WAS THE ACCUMULATION OF CONDENSATION IN THE SAMPLE CHAMBER OF THE NMC MODEL - AM-331F CAM. IT IS BELIEVED THAT THIS WAS DUE TO AN INCREASE OF SAMPLE FLOW RATE CAUSED BY LEAKAGE PAST "O" RINGS SEALING THE CAM'S SAMPLE CHAMBERS. THE O-RINGS HAVE BEEN REPLACED. A PROGRAM TO INCREASE THE INSPECTION/REPLACEMENT OF THESE "O" RINGS WILL BE ESTABLISHED BY FEBRUARY 1, 1983.

[32] BROWNS FERRY 3 DOCKET 50-296 LER 82-061
 DRYWELL ATMOSPHERE CAM INOPERABLE.
 EVENT DATE: 120382 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: WATER IN PARTICULATE DETECTOR.

(NSIC 180588) RM 3-90-256 DRYWELL ATMOSPHERE CAM BECAME INOPERABLE DUE TO A MOISTURE DAMAGED PARTICULATE DETECTOR. TECH SPEC 3.6.C.2 REQUIRES THIS CAM TO BE OPERABLE DURING REACTOR POWER OPERATION. THIS EVENT WAS CAUSED BY THE ACCUMULATION OF CONDENSATION IN THE SAMPLE CHAMBER OF THE NMC MODEL-AM-331F CAM. IT IS BELIEVED THAT LEAKAGE PAST O RINGS THAT SEAL THE CAM SAMPLE CHAMBERS CAUSED THE CONDENSATION TO FORM. THE O RINGS HAVE BEEN REPLACED. A PROGRAM TO INCREASE THE INSPECTION OF THESE O RINGS WILL BE ESTABLISHED BY FEBRUARY 1, 1983.

[33] BRUNSWICK 1 DOCKET 50-325 LER 82-122
 RECIRC PUMPS TRIP 5 TIMES.
 EVENT DATE: 103082 REPORT DATE: 112982 NSSS: GE TYPE: BWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MOISTURE IN ATWS INSTRUMENT JUNCTION BOX.

(NSIC 179975) THE FOLLOWING REACTOR RECIRCULATION PUMP TRIPS OCCURRED CONCURRENT WITH THE RECEIPT OF THE ATWS HIGH REACTOR PRESSURE/LOW LEVEL TRIP ANNUNCIATION: ON OCTOBER 30, 1982, 1A PUMP TRIPPED, ON NOVEMBER 1, 1982, 1B PUMP TRIPPED, ON NOVEMBER 4, 1982, 1A PUMP TRIPPED TWICE AND WITHIN NINE MINUTES OF THE SECOND NOVEMBER 4, 1982, EVENT, 1B PUMP TRIPPED. THE PUMP TRIPS OCCURRED DUE TO ACTUATION OF ATWS INSTRUMENT, 2-B21-PS-N045C, ATTRIBUTED TO ELECTRICAL SHORTING OF THE INSTRUMENT WIRING RESULTING FROM MOISTURE ACCUMULATION WITHIN THE SUBJECT WIRING TERMINAL BOX. AFTER EACH EVENT THE MOISTURE WAS REMOVED FROM THE SUBJECT WIRING AND THE INSTRUMENT, MODEL NO. 9N-AA45-X9TT WAS RETURNED TO SERVICE. FOLLOWING FURTHER INVESTIGATION, A SUPPLEMENTAL REPORT WILL BE ISSUED.

[34] BRUNSWICK 1 DOCKET 50-325 LER 82-120
 TURBINE CONTROL VALVE OIL PRESSURE SWITCH FAILS.
 EVENT DATE: 103082 REPORT DATE: 112982 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: UNKNOWN.

(NSIC 179976) WHILE PERFORMING THE CHANNEL FUNCTIONAL TEST TO DETERMINE THE OPERABILITY OF THE TURBINE CONTROL VALVE AND STOP VALVE TRIP FUNCTIONS OF RPS, PT-01.3.2.P-1, TURBINE CONTROL VALVE FAST CLOSURE CONTROL OIL PRESSURE - LGW SWITCH, EHC-PSL-1759, FAILED TO ACTUATE AS REQUIRED. NO APPARENT CAUSE FOR THE SWITCH FAILURE COULD BE DETERMINED. IT WAS EXERCISED TO ENSURE PROPER OPERATION AND THE PT WAS SATISFACTORILY COMPLETED. A WORK REQUEST AND AUTHORIZATION HAS BEEN WRITTEN TO REBUILD OR REPLACE THE SWITCH, MODEL NO. C9622-3, DURING THE UPCOMING 1982 UNIT NO. 1 REFUELING OUTAGE.

[35] BRUNSWICK 1 DOCKET 50-325 LER 82-124
 SET POINT DRIFT IN CONTAINMENT OXYGEN ANALYZER.
 EVENT DATE: 103082 REPORT DATE: 112982 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: PIPES, FITTINGS
 CAUSE: MOISTURE IN SAMPLE LINE.

(NSIC 179986) ROUTINE SURVEILLANCE REVEALED THAT PRIMARY CONTAINMENT ATMOSPHERE OXYGEN ANALYZER, 1-CAC-AT-1259-2, HAD INDICATED A SUDDEN DOWNSCALE INDICATION OF DRYWELL OXYGEN CONCENTRATION. AT THE TIME REDUNDANT INSTRUMENT, 1-CAC-AT-1263-2, WAS INDICATING AN EXPECTED INDICATION. SEE: TECH SPEC 3.3.5.3, 3.6.6.4, 6.9.1.9B. THE 1259-2 INDICATED DOWNSCALE AS A RESULT OF MOISTURE ACCUMULATION IN THE ANALYZER SAMPLE LINES WHICH CAUSED A SHIFT OF THE INSTRUMENT CALIBRATION SETPOINT. THE MOISTURE ACCUMULATION WAS REMOVED FROM THE SAMPLE LINES AND THE ANALYZER WAS CALIBRATED AND RETURNED TO SERVICE SHOWING EXPECTED INDICATIONS. THESE TYPE CAC ANALYZERS, MODEL NO. F3M3, WILL BE REPLACED AS PER AN APPROVED PLANT MODIFICATION.

[36] BRUNSWICK 1 DOCKET 50-325 LER 82-123
 DRIFT IN SUPPRESSION POOL LEVEL INDICATOR.
 EVENT DATE: 110182 REPORT DATE: 120182 NSSS: GE TYPE: BWR
 SYSTEM: SYS REQD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: CHANGE IN TRICKLE FLOW.

(NSIC 179996) PERFORMANCE OF THE SUPPRESSION POOL LEVEL INDICATORS OPERABILITY TEST, PT-08.1.6, REVEALED THAT THE REMOTE SHUTDOWN PANEL INSTRUMENT, 1-CAC-LI-3842, INDICATED A LEVEL OF -24.5 INCHES WHILE THE ACTUAL LEVEL WAS -27.5 INCHES. TECH SPECS 3.3.5.2, 6.9.1.9B. A SLIGHT CHANGE IN TRICKLE FLOW TO THE WET REFERENCE LEG OF THE INDICATOR TRANSMITTER, 1-CAC-LT-3342, MODEL NO. 1152, CAUSED THE TRANSMITTER OUTPUT TO EXCEED SPECIFIED TOLERANCES, RESULTING IN THE INCORRECT INDICATION. THE TRANSMITTER WAS ADJUSTED TO OPERATE WITHIN SPECIFIED TOLERANCES AND THEN RETURNED TO SERVICE. THE PT WAS THEN SATISFACTORILY COMPLETED.

[37] BRUNSWICK 1 DOCKET 50-325 LER 82-129
 SUPPRESSION CHAMBER WATER TEMPERATURE RECORDER FAILS.
 EVENT DATE: 110382 REPORT DATE: 120382 NSSS: GE TYPE: EWR
 SYSTEM: SYS REQD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: WORN PRINT INK WHEEL.

(NSIC 179984) ROUTINE SURVEILLANCE DURING PLANT OPERATION REVEALED THAT SUPPRESSION CHAMBER WATER TEMPERATURE RECORDER, 1-CAC-TR-778, LOCATED ON THE REMOTE SHUTDOWN PANEL, WAS SHOWING EXPECTED INDICATIONS OF TEMPERATURES, BUT WAS NOT RECORDING THEM. ALSO, THE RECORDER CHART PAPER WAS NOT ADVANCING. SEE: TECH SPEC 3.3.5.2, 6.9.1.9B. THE RECORDER DID NOT RECORD INDICATIONS DUE TO A WORN PRINT INK WHEEL AND DID NOT ADVANCE DUE TO CHART SPEED TIMING ADJUSTMENT PROBLEMS. THE WORN INK WHEEL WAS REPLACED; THE RECORDER CHART SPEED WAS ADJUSTED FOR PROPER OPERATION AND THE INSTRUMENT, MODEL NO. 550, WAS RETURNED TO SERVICE. PLANT ENGINEERING IS EVALUATING OTHER TYPE RECORDERS TO REPLACE THE PRESENTLY UTILIZED INSTRUMENTS ON BOTH UNITS.

[38] BRUNSWICK 1 DOCKET 50-325 LER 82-128
 CONTAINMENT ATMOSPHERE OXYGEN MONITOR TRIPS.
 EVENT DATE: 110382 REPORT DATE: 120382 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: RELAYS
 CAUSE: FAILED LOW SAMPLE FLOW RELAY.

(NSIC 179985) ROUTINE SURVEILLANCE DURING PLANT OPERATION REVEALED THAT PRIMARY CONTAINMENT ATMOSPHERE OXYGEN ANALYZER, 1-CAC-AT-1259-2, HAD TRIPPED. AN

IMMEDIATE ATTEMPT TO RESTART THE INSTRUMENT WAS UNSUCCESSFUL. THE INSTRUMENT HAD TRIPPED AND COULD NOT BE RESTARTED DUE TO A FAILED LOW SAMPLE FLOW RELAY IN THE INSTRUMENT PHOTOHELIC UNIT. THE 1259-2 PHOTOHELIC UNIT WAS REPLACED AND THE INSTRUMENT WAS CALIBRATED AND RETURNED TO SERVICE. THESE TYPE CAC ANALYZERS, MODEL NO. F3M3, ARE BEING REPLACED IN ACCORDANCE WITH AN APPROVED PLANT MODIFICATION.

[39] BRUNSWICK 1 DOCKET 50-325 LER 82-132
CONTAINMENT ISOLATION VALVE INOPERABLE DUE TO LOSS OF POWER.
EVENT DATE: 110582 REPORT DATE: 120382 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: BLOWN FUSE.

(NSIC 179982) ROUTINE RTGB SURVEILLANCE DURING PLANT OPERATION REVEALED A LACK OF POSITION INDICATION FOR PCIV 1-B32-F042B, LOCATED AT RIP-X-243A. AN IMMEDIATE INVESTIGATION REVEALED THE VALVE OPERATOR SOLENOID POWER SUPPLY FUSE, FJ-1, HAD BLOWN, THEREBY DEFEATING THE CAPABILITY OF THE VALVE TO AUTOMATICALLY CLOSE ON EXCESS FLOW. F042B IS THE ROOT ISOLATION FOR A REACTOR RECIRCULATION PUMP'S DISCHARGE FLOW INDICATION INSTRUMENTATION. SEE: TECH SPEC 3.6.3, 6.9.1.9B. THE FAILURE OF THE FUSE, BUSS MODEL NO. MIN 5, IS ATTRIBUTED TO A NORMAL END OF LIFE. WITHIN TWO HOURS OF THE EVENT DISCOVERY, THE FUSE WAS REPLACED AND THE VALVE WAS RETURNED TO NORMAL OPERATION.

[40] BRUNSWICK 1 DOCKET 50-325 LER 82-139
HPCI INOPERABLE WHEN TURBINE SPEED INDICATOR FAILS.
EVENT DATE: 111482 REPORT DATE: 121082 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: SHORTED COIL IN EGR.

(NSIC 180103) WHILE PERFORMING HPCI SYSTEM OPERABILITY TEST, PT-09.2, TO VERIFY THE HPCI SYSTEM OPERABILITY DUE TO PULSATING INDICATIONS SHOWN ON THE HPCI TURBINE SPEED INDICATOR, A HPCI STEAMLINE FLOW HIGH CHANNEL B ISOLATION OCCURRED RENDERING HPCI INOPERABLE. SEE TECH SPEC 3.5.1, 6.9.1.9B. AN ELECTRICALLY SHORTED POSITIONING COIL IN THE HPCI SPEED CONTROL ELECTROHYDRAULIC GOVERNING REGULATOR (EGR) ACTUATOR PREVENTED THE HPCI TURBINE SPEED CONTROL VALVE FROM THROTTLING PROPERLY DURING INITIAL HPCI STARTING, WHICH CAUSED AN ACTUAL ISOLATION CONDITION. THE AFFECTED TURBINE SPEED CONTROL LOOP COMPONENTS WERE REPLACED, CALIBRATED, AND HPCI WAS SATISFACTORILY TESTED AND RETURNED TO SERVICE.

[41] BRUNSWICK 1 DOCKET 50-325 LER 82-145
SRV POSITION INDICATOR INOPERABLE.
EVENT DATE: 112982 REPORT DATE: 122882 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: WORN PRINTER MOTOR GEAR TEETH.

(NSIC 180220) ROUTINE SURVEILLANCE REVEALED THAT POINTS 2 AND 4 OF MAIN STEAM SRV POSITION INDICATION INSTRUMENT, 1-B21-TR-R614, WERE INTERMITTENTLY PRINTING ON THE INSTRUMENT CHART PAPER. AT THE TIME, THE INDICATION LIGHTS OF THE RESPECTIVE REDUNDANT SRV POSITION INDICATION SONIC DETECTORS, 1-B21-FY-4158 AND 4160 WERE NOT OPERABLE. SEE: TECH SPEC 3.3.5.3, 6.9.1.9B. WEAR OF THE TIMING MOTOR GEAR TEETH IN THE R614 CAUSED THE INTERMITTING PRINTING OF POINTS 2 AND 4. THE FAILURE OF THE 4158 AND 4160 INDICATION LIGHTS IS ATTRIBUTED TO DEFECTIVE SONIC DETECTORS. THE TIMING MOTOR GEAR IN THE R614, MODEL NO. P15FAAG2, WAS REPLACED AND THE INSTRUMENT WAS RETURNED TO SERVICE. DURING THE CURRENT REFUELING OUTAGE, THE 4158/4160 SONIC DETECTORS WILL BE REPAIRED AS REQUIRED.

[42] BRUNSWICK 1 DOCKET 50-325 LER 82-121
 SBG T INOPERABLE DUE TO IMPROPER CONTROL SWITCH POSITION.
 EVENT DATE: 113082 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: BROKEN SPRING RETURN FUNCTION.

(NSIC 180231) SURVEILLANCE DURING PLANT OPERATION REVEALED THAT THE RTGB CONTROL SWITCH, 1-VA-CS-2581, FOR 1B SBGTS WAS IN THE STANDBY VERSUS THE PREFERRED POSITION, THEREBY RENDERING THE TRAIN UNAVAILABLE FOR AUTOMATIC STARTING. TECH SPECS 3.6.6.1, 6.9.1.9B. WHEN SECURING THE SBG T FROM SERVICE, THE SPRING RETURN FUNCTION OF THE SWITCH FROM RESET TO PREFERRED FAILED CAUSING THE SWITCH TO GO TO THE STANDBY POSITION. THE SWITCH, SUPPLIED BY GEMCO, WAS REPAIRED, CLEANED, AND RESTORED TO SERVICE.

[43] BRUNSWICK 1 DOCKET 50-325 LER 82-134
 DRIFT IN CONTAINMENT OXYGEN ANALYZER.
 EVENT DATE: 120182 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT.

(NSIC 180212) SURVEILLANCE DURING PLANT OPERATION REVEALED THAT PRIMARY CONTAINMENT ATMOSPHERE OXYGEN ANALYZER, 1-CAC-AT-1263-2, INDICATED AN UNEXPECTED STEP INCREASE (2.5-4.1%) IN DRYWELL OXYGEN CONCENTRATION. TECH SPECS 3.3.5.3, 3.6.6.4, 6.9.1.9B. THE 1263-2 ANALYZER HAD EXPERIENCED AN INSTRUMENT ZERO SHIFT RESULTING IN ERRONEOUS INDICATION STEP INCREASE. THE ANALYZER WAS RECALIBRATED AND RETURNED TO SERVICE. DUE TO A HISTORY OF SIMILAR EVENTS, THESE TYPE CAC ANALYZERS, MODEL NO. F3M3 ARE BEING REPLACED AS PER AN APPROVED PLANT MODIFICATION.

[44] BRUNSWICK 1 DOCKET 50-325 LER 82-126
 DRIFT IN CONTAINMENT OXYGEN MONITOR.
 EVENT DATE: 120182 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT.

(NSIC 180232) SURVEILLANCE DURING PLANT OPERATION REVEALED THAT PRIMARY CONTAINMENT ATMOSPHERE OXYGEN ANALYZER, 1-CAC-AT-1259-2, WAS INDICATING AN UNEXPECTED DOWNWARD TREND IN DRYWELL OXYGEN CONCENTRATION. TECH SPECS 3.3.5.3, 3.6.6.4, 6.9.1.9B. THE 1259-2 ANALYZER HAD EXPERIENCED AN INSTRUMENT ZERO SHIFT RESULTING IN THE ERRONEOUS DOWNWARD INDICATION. THE ANALYZER WAS RECALIBRATED AND RETURNED TO SERVICE. DUE TO A HISTORY OF SIMILAR EVENTS, THESE TYPE CAC ANALYZERS, MODEL NO. F3M3 ARE BEING REPLACED AS PER AN APPROVED PLANT MODIFICATION.

[45] BRUNSWICK 1 DOCKET 50-325 LER 82-147
 DRIFT IN RHRSW DELTA P INDICATOR.
 EVENT DATE: 120282 REPORT DATE: 123182 NSSS: GE TYPE: BWR
 SYSTEM: SYS REQD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT.

(NSIC 180217) ROUTINE SURVEILLANCE REVEALED THAT THE RHRSW D/P INDICATOR, 1-E11-PDI-3344, LOCATED ON THE REMOTE SHUTDOWN PANEL, WAS SHOWING A DOWNSCALE INDICATION. SEE: TECH SPECS 3.3.5.2, 6.9.1.9B. THE 3344 INSTRUMENT WAS FOUND FUNCTIONING OUT OF CALIBRATION TOLERANCES, ATTRIBUTED TO INSTRUMENT DRIFT. THE INSTRUMENT, MODEL NO. 151-VB1-1-5VDC, WAS CALIBRATED AND RETURNED TO SERVICE. IT IS FELT THE PRESENTLY UTILIZED ONCE PER QUARTER CALIBRATION OF THE 3344 ON BOTH UNIT NOS. 1 AND 2 IS ADEQUATE TO ENSURE THE OPERABILITY OF THESE INSTRUMENTS.

[46] BRUNSWICK 2 DOCKET 50-324 LER 82-124
 QUICK START TESTING OF 3 DIESEL GENERATORS MISSED.
 EVENT DATE: 112182 REPORT DATE: 120382 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180018) IT WAS DETERMINED THAT REQUIRED QUICK START TESTING OF DIESEL GENERATORS 1, 2, AND 4, REQUIRED WITHIN TWO HOURS OF A DIESEL GENERATOR BEING DECLARED INOPERABLE, HAD NOT BEEN PERFORMED. THE SUBJECT QUICK START TESTING WAS NECESSITATED DUE TO THE UNAVAILABILITY OF DIESEL GENERATOR NO. 3, WHICH WAS UNDERGOING MONTHLY OPERABILITY TESTING. SEE: TECH SPECS 3.8.1.1, 6.9.1.8.B. THIS EVENT OCCURRED DUE TO A MISINTERPRETATION OF PLANT STANDING INSTRUCTIONS REGARDING THE PERFORMANCE OF REQUIRED DIESEL GENERATOR QUICK STARTING. FOLLOWING THE 11-22-82 DISCOVERY OF THIS EVENT, SATISFACTORY QUICK STARTS WERE PERFORMED ON THE CONCERNED DIESELS. PLANT STANDING INSTRUCTIONS HAVE BEEN REVISED TO PROVIDE FOR PROPER INTERPRETATION OF DIESEL QUICK STARTING REQUIREMENTS.

[47] BRUNSWICK 2 DOCKET 50-324 LER 82-133
 CONTROL ROD POSITION INDICATION LOST.
 EVENT DATE: 120482 REPORT DATE: 123182 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DEFECTIVE TRANSISTOR.

(NSIC 180208) SURVEILLANCE REVEALED CONTROL ROD 10-31 LACKED RTGB POSITION INDICATION AT POSITION "01." DURING SUBSEQUENT POWER OPERATION ON DECEMBER 5, 1982, IT WAS DISCOVERED CONTROL ROD 38-23 LACKED RTGB POSITION INDICATION AT POSITION "19" AND CONTROL ROD 18-11 HAD CONTINUOUS RTGB "FULL IN" POSITION INDICATION REGARDLESS OF ACTUAL ROD POSITION. IN EACH CASE ACTUAL ROD POSITIONS WERE VERIFIED IN ACCORDANCE WITH TECH SPECS. SEE: TECH SPECS 3.1.3.7, 6.9.1.9B. A DEFECTIVE IC CHIP AND TRANSISTOR ON THE RPIS PROBE BUFFER BOARD OF ROD 18-11 CAUSED ITS INDICATION PROBLEMS. THE IC CHIP AND TRANSISTOR WERE REPLACED AND INDICATION FOR THE ROD POSITION WAS RETURNED TO NORMAL. THE INDICATION PROBLEMS AFFECTING RODS 10-31 AND 38-23 ARE BELIEVED TO BE REED SWITCH PROBLEMS AND WILL BE FULLY INVESTIGATED AND RESOLVED DURING A FUTURE OUTAGE.

[48] BRUNSWICK 2 DOCKET 50-324 LER 82-139
 3 RWCU FLOW INDICATORS INOPERABLE.
 EVENT DATE: 121682 REPORT DATE: 123182 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: AIR IN SENSING LINES.

(NSIC 180227) WHILE INVESTIGATING THE CAUSE OF A DOWNSCALE INDICATION ON THE RWCU DIFFERENTIAL FLOW INDICATOR 2-G31-R615, IT WAS DETERMINED THAT THE THREE FLOW TRANSMITTERS 2-G31-FT-N012, N036, AND N041 WERE SUPPLYING ERRONEOUS SIGNALS TO SUMMER CIRCUIT 2-G31-K604. R615 PROVIDES AN INDICATION FOR ONE OF TWO PARALLEL OUTPUTS FROM K604. A REVIEW INDICATED THAT THIS PROBLEM HAD BEEN IDENTIFIED ON 12-13-82 AND HAD NOT BEEN PROPERLY INVESTIGATED AND THE REQUIRED ACTION STATEMENT FOLLOWED. TECH SPEC TABLE 3.3.2-1, ITEM 3A, 6.9.1.8(B AND F). AN INVESTIGATION OF THE TRANSMITTERS DETERMINED THAT AIR IN THE SENSING LINES CAUSED THE TRANSMITTER OUTPUT ERROR. THE LINES WERE DRAINED, AND ALL INSTRUMENTS WERE CALIBRATED AND RETURNED TO SERVICE. THE PROBLEM WITH NOT IDENTIFYING THE PROBLEM ON 12-13 AND TAKING CORRECT ACTIONS IS ATTRIBUTED TO PERSONNEL ERROR. THE OPERATOR HAS BEEN RELIEVED OF LICENSED DUTIES.

[49] CALVERT CLIFFS 1 DOCKET 50-317 LER 82-074
 CHARGING PUMP INOPERABLE DUE TO LEAKY DRAIN LINE.
 EVENT DATE: 112782 REPORT DATE: 122382 NSSS: CE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: PIPES, FITTINGS

CAUSE: CRACKED WELD.

(NSIC 180235) A PLANT OPERATOR DISCOVERED A WATER LEAK FROM A CRACKED WELD ON 11 CHARGING PUMP DISCHARGE DRAIN LINE (TECH SPEC 6.9.1.9.D). THE CHARGING PUMP WAS IMMEDIATELY REMOVED FROM SERVICE AND THE LEAK ISOLATED. THE WELD WAS REPAIRED AND THE PUMP RETURNED TO SERVICE AT 1512 ON 11/28/82. SIMILAR EVENTS: 50-317/79-44; 50-318/78-49. LEAK OCCURRED DUE TO A THIN CRACK IN THE HEAT AFFECTED ZONE OF A SOCKET WELD ON 3/4 INCH CHARGING PUMP DISCHARGE DRAIN LINE. THE CAUSE OF THE LEAK APPEARS TO BE VIBRATION OF THE PUMP DISCHARGE LINE. EVALUATION OF THIS FAILURE IS CONTINUING. THE WELD HAS BEEN REPAIRED.

[50] CALVERT CLIFFS 1 DOCKET 50-317 LER 82-069
 AFWS TURBINE PUMP INOPERABLE DUE TO HIGH BEARING TEMPERATURE.
 EVENT DATE: 112982 REPORT DATE: 122382 NSSS: CE TYPE: PWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: TURBINES
 CAUSE: IMPROPERLY MARKED OUT LEVEL GAUGE GLASS.

(NSIC 180234) DURING TESTING, #11 AUXILIARY FEEDWATER PUMP TURBINE JOURNAL BEARING TEMPERATURE RAPIDLY INCREASED TO 214 DEGREES. THE PUMP WAS IMMEDIATELY SHUTDCWN AND DECLARED INOPERABLE (TECH SPEC 3.7.1.2). THE BEARING WAS INSPECTED AND FOUND UNDAMAGED. THE PUMP WAS RETURNED TO SERVICE. SIMILAR EVENT: 50-317/81-17. THE BEARING HIGH TEMPERATURE WAS CAUSED BY AN IMPROPERLY MARKED OIL LEVEL GAUGE GLASS. THE BEARING IS PART #67270E-23 OF A TYPE GS-2 STEAM TURBINE. IT WAS FOUND THAT OIL LEVEL WAS AT THE BOTTOM OF THE BAND, BUT WAS TOO LOW TO LUBRICATE PROPERLY SINCE THE GAUGE WAS IMPROPERLY MARKED. IT WAS REMARKED. SIMILAR GAUGES HAVE BEEN CHECKED.

[51] CALVERT CLIFFS 2 DOCKET 50-318 LER 82-033 REV 1
 UPDATE ON MISSED SNUBBER TESTING.
 EVENT DATE: 070282 REPORT DATE: 122082 NSSS: CE TYPE: PWR
 SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 CAUSE: PROCEDURAL INADEQUACIES.

(NSIC 180236) IT WAS DISCOVERED THAT 6 ACCESSIBLE SNUBBERS IN THE MAIN FEEDWATER & AUXILIARY STEAM SUPPLY SYSTEMS WHICH ARE REQUIRED TO FUNCTION DURING A SEISMIC EVENT WERE NOT PERIODICALLY TESTED IN ACCORDANCE WITH THE SURVEILLANCE TEST PROGRAM (STP). ON 7-22-82, AN INACCESSIBLE SNUBBER ON 22A REACTOR COOLANT SYSTEM LOOP DRAIN LINE WAS DETERMINED NOT TO HAVE BEEN SURVEILLED. THIS IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.1.9.C. SIMILAR EVENT: 50-317/82-34. SNUBBERS WERE NOT PART OF STP DUE TO DISCREPANCY BETWEEN SAFETY RELATED ITEM LIST (Q-LIST) & PIPING STRESS ANALYSES. PRIOR ANALYSES DEMONSTRATED THAT THE UNSURVEILLED INACCESSIBLE SNUBBER DID NOT COMPROMISE SYSTEM INTEGRITY. ALL OF THE SNUBBERS IDENTIFIED HAVE BEEN UPGRADED AND TESTED. THE STP & TECH SPECS HAVE BEEN REVISED TO INCLUDE THEM.

[52] CALVERT CLIFFS 2 DOCKET 50-318 LER 82-053
 SHUTDOWN COOLING FLOW LOST WHEN VALVES CLOSED.
 EVENT DATE: 112282 REPORT DATE: 122082 NSSS: CE TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: ELECTRICAL CONDUCTORS
 CAUSE: POWER LOST DUE TO MAINTENANCE PERSONNEL ERROR.

(NSIC 180233) WHILE DEENERGIZING INSTRUMENT POWER SUPPLY PANEL 2Y02, SHUTDOWN COOLING FLOW WAS LOST (TECH SPEC 3.9.8.1). A SHUTDOWN COOLING RETURN VALVE, 2-SI-652, SHUT WHEN THIS PANEL WAS DEENERGIZED DUE TO AN INCORRECTLY INSTALLED TEMPORARY JUMPER MEANT TO PREVENT 2-SI-652 CLOSURE. SHUTDOWN COOLING FLOW WAS RESTORED. THE TECHNICIAN ASSIGNED TO DETERMINE THE ELECTRICAL LINE UP REQUIRED, FAILED TO CLARIFY THE EXACT POWER SUPPLY BEING DEENERGIZED. THIS RESULTED IN AN INCORRECT TEMPORARY JUMPER LOCATION. ALSO, TECHNICIAN DID NOT CLEARLY DESCRIBE

THE POWER SUPPLY ON THE LINE UP DOCUMENT. THE TECHNICIAN WAS REINSTRUCTED ON THE REQUIREMENTS RELATED TO TEMPORARY LINE UPS.

[53] CALVERT CLIFFS 2 DOCKET 50-318 LER 82-054
 SHUTDOWN COOLING FLOW INOPERABLE DUE TO POWER LOSS.
 EVENT DATE: 112482 REPORT DATE: 122382 NSSS: CE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: POWER SUPPLY FAILURE.

(NSIC 180211) POWER WAS LOST TO #24 4KV BUS RESULTING IN THE LOSS OF #22 SALTWATER PUMP AND #22 LPSI PUMP THEREBY DISABLING THE ONLY OPERABLE SHUTDOWN COOLING LOOP (TECH SPEC 3.9.8.1). POWER WAS RESTORED TO #24 4KV BUS AND SHUTDOWN COOLING FLOW RESTORED. BENCH TESTING SHOWED A FAILED 15V DC POWER SUPPLY (LAMBDA, MODEL LCS-A-15) IN ESFAS CABINET BL CAUSED INADVERTENT ACTUATION OF AN UNDERVOLTAGE LOGIC MODULE WHICH TRIPPED #24 4KV BUS. THE POWER SUPPLY WAS REPLACED WITH A SPARE AND SENT TO THE VENDOR FOR REPAIR AND TESTING. AN UPDATE WILL BE SUBMITTED WHEN THE CAUSE IS KNOWN.

[54] COOK 1 DOCKET 50-315 LER 82-024 REV 1
 UPDATE ON 2 MISSED VENTILATION SYSTEM TESTS.
 EVENT DATE: 041282 REPORT DATE: 010583 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: FILTERS
 CAUSE: PROCEDURAL INADEQUACIES.

(NSIC 180342) TWO EVENTS OCCURRED WHERE ESF VENTILATION SYSTEMS WERE DECLARED OPERABLE WITHOUT THE REQUIRED TECH SPEC EFFICIENCY TEST BEING PERFORMED. ON 04-14-82 IT WAS DISCOVERED THAT ON 04-12-82 1-HV-AES-1 WAS RETURNED TO SERVICE FOLLOWING A PARTIAL REPLACEMENT OF THE CHARCOAL BED WITHOUT COMPLETING TESTING REQUIRED BY TECH SPEC 4.7.6.1.F. ON 04-19-82 1-HV-AES-1 WAS RETURNED TO SERVICE FOLLOWING HEPA FILTER REPLACEMENT WITHOUT COMPLETING TESTING REQUIRED BY TECH SPEC 4.7.6.1.E. INVESTIGATION REVEALED THAT THESE EVENTS WERE CAUSED BY A COMBINATION OF PERSONNEL ERRORS AND PROCEDURAL INADEQUACIES. ADMINISTRATIVE PROCEDURES HAVE BEEN MODIFIED AND ADDITIONAL STEPS HAVE BEEN TAKEN BY PLANT DEPARTMENTS CONCERNING THE CONTROL OF REPAIRS TO TECH SPEC EQUIPMENT.

[55] COOK 1 DOCKET 50-315 LER 82-100
 AIR CONDITIONING ROOM FIRE DOOR INOPERABLE.
 EVENT DATE: 110582 REPORT DATE: 120382 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: DOOR SCRAPING ON STEP.

(NSIC 180055) AN AEO ON TOUR REPORTED FIRE DOOR 437, BETWEEN THE UNIT 1 AND UNIT 2 CONTROL ROOM AIR CONDITIONING EQUIPMENT ROOMS, AS BEING INOPERABLE. THIS CONSTITUTED AN INOPERABLE PENETRATION FIRE BARRIER, CONTRARY TO TECH SPEC 3.7.10. THOUGH THE CONDITIONS COULD NOT BE DUPLICATED, THE FAILURE APPEARED TO HAVE BEEN DUE TO THE DOOR SCRAPING ON A STAIR STEP. THE CLEARANCE BETWEEN THE DOOR AND STEP WAS IMPROVED. THE DOOR TESTED SATISFACTORILY.

[56] COOK 1 DOCKET 50-315 LER 82-102
 AUXILIARY BUILDING FIRE ALARM ACTUATES SPURIOUSLY.
 EVENT DATE: 111882 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LOW SET POINT.

(NSIC 180075) THE FIRE DETECTION SYSTEM ALARM FOR ZONE 2 IN THE AUX BUILDING WAS RECEIVED IN THE CONTROL ROOM. INVESTIGATION FOUND A PYRALARM DETECTOR ALARMING FOR NO APPARENT REASON. A FIRE WATCH WAS ESTABLISHED IN THE AREA OF THE ALARMING

DETECTOR UNTIL THE SITUATION WAS CORRECTED. THIS CONDITION REMOVED ANY FURTHER CAPABILITY FOR THE FIRE DETECTION SYSTEM TO ALARM IN THE CONTROL ROOM IF ANY ADDITIONAL PYRALARMS WITHIN THIS ZONE ALARMED. THIS DESIGN FEATURE WAS EXPLAINED IN DETAIL IN RO-050/315-096. THIS EVENT WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.3.7. INVESTIGATION FOUND THAT THE ALARM SETPOINT ON THE PYRALARM DETECTOR WAS LOW. THE DETECTOR ASSEMBLY WAS CLEANED AND THE ALARM SETPOINT WAS ADJUSTED TO THE PROPER VALUE. THE DETECTOR WAS VERIFIED TO BE OPERATING CORRECTLY AND THE SYSTEM WAS RETURNED TO SERVICE. FURTHER ACTION TO MINIMIZE DETECTOR INOPERABILITY TIME IS EXPLAINED IN RO-050/315-096.

[57] COOK 1 DOCKET 50-315 LER 82-101
AFWS TURBINE PUMP VALVE FAILS TO OPEN.
EVENT DATE: 112382 REPORT DATE: 120382 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES
CAUSE: POWER CABLE LEADS REVERSED.

(NSIC 180058) DURING ROUTINE SURVEILLANCE TESTING OF THE ESSENTIAL SERVICE WATER SYSTEM, IT WAS DISCOVERED THAT THE MOTOR OPERATED VALVE (WMO-753) TO THE WEST TURBINE DRIVEN AUXILIARY FEED PUMP WOULD NOT OPEN. THIS EVENT WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.1.2. INVESTIGATION REVEALED THAT WMO-753 AND THE EXHAUST FAN 1-HV-AFP-T2 FOR THE TURBINE DRIVEN AUXILIARY FEED PUMP ROOM WERE OPERATING IN A REVERSED MANNER. THIS RESULTED IN THE VALVE MOTOR BEING DAMAGED. THE MOTOR FOR WMO-753 WAS REPLACED, AND THE PHASING WAS CORRECTED. THE EQUIPMENT WAS TESTED, VERIFIED TO BE OPERATING CORRECTLY AND RETURNED TO SERVICE.

[58] COOK 1 DOCKET 50-315 LER 82-104
FEEDWATER ISOLATION VALVE INOPERABLE.
EVENT DATE: 112582 REPORT DATE: 122282 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: TRIPPED BREAKER.

(NSIC 180344) POWER TO THE POSITION INDICATING LAMP FOR FEEDWATER ISOLATION VALVE, FMO-201 WAS LOST. THE CONDITION WAS CORRECTED AFTER OPENING AND CLOSING THE CIRCUIT BREAKER AND DEPRESSING THE THERMAL OVERLOAD RESET. IT WAS SURMIZED THAT ONE OF THE 2 DEVICES MAY HAVE BEEN TRIPPED ALTHOUGH NEITHER APPEARED TRIPPED AT THE TIME. THUS, THE VALVE MAY NOT HAVE BEEN ABLE TO PERFORM ITS FEEDWATER ISOLATION FUNCTION. FIRST OCCURRENCE. THE CAUSE OF THE LOSS OF POWER COULD NOT BE CONCLUSIVELY DETERMINED. HOWEVER, THE WESTINGHOUSE FB3040L CIRCUIT BREAKER AND THE CUTLER HAMMER NEMA SIZE 2 CONTACTOR CONTAINING THE THERMAL OVERLOAD HAVE BEEN REPLACED AS A PREVENTIVE MEASURE.

[59] COOK 1 DOCKET 50-315 LER 82-103
AUX BUILDING FIRE DOOR IMPROPERLY CLOSED.
EVENT DATE: 112782 REPORT DATE: 120882 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
CAUSE: OPERATOR ERROR.

(NSIC 180076) FIRE DOOR #387, AT THE ENTRANCE TO QUADRANT #2 OF THE AUX. BLDG. AROUND UNIT 1 CONTAINMENT, WAS FOUND IN A CONFIGURATION THAT WAS NONCONSERVATIVE IN RESPECT TO TECH SPEC 3.7.10. THE ACTIVE LEAF OF THE DOUBLE DOORS WAS CLOSED BEFORE THE INACTIVE LEAF, PREVENTING THE INACTIVE LEAF FROM CLOSING COMPLETELY. THE ACTION REQUIREMENTS WERE MET BY RETURNING THE DOORS TO THE PROPER CONFIGURATION. AN INSPECTION OF THE FIRE DOOR DETERMINED THAT ALL OF THE DOOR HARDWARE FUNCTIONED PROPERLY. SINCE THE INACTIVE LEAF IS EQUIPPED WITH FLUSH BOLTS AND THE DOUBLE DOORS ARE EQUIPPED WITH A COORDINATOR WHICH MUST BE MANUALLY OVERRIDEN TO CLOSE THE ACTIVE LEAF FIRST, THE DOOR HAD TO BE PLACED IN THIS CONDITION INTENTIONALLY. THE RESPONSIBLE INDIVIDUAL COULD NOT BE DETERMINED.

[60] COOK 1 DOCKET 50-315 LER 82-105
 FIRE DOOR FOUND OPEN.
 EVENT DATE: 120682 REPORT DATE: 122882 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: LOOSE SCREWS ON LATCH BOLT COVER PLATE.

(NSIC 180343) FIRE DOOR #385 WAS FOUND UNLATCHED. SECURITY PERSONNEL REPAIRED THE DOOR AND RELEASED THE FIRE WATCH. AS THEY WERE NOT AWARE OF NEW SURVEILLANCE REQUIREMENTS, THE FIRE WATCH WAS RELEASED APPROXIMATELY 3 HOURS BEFORE THE REQUIRED OPERABILITY INSPECTION. THIS CONSTITUTED AN INOPERABLE PENETRATION FIRE BARRIER WHICH IS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.10. LOOSE SCREWS IN THE LATCH BOLT COVER PLATE PREVENTED LATCHING OF THE DOOR. THE SCREWS WERE TIGHTENED AND STAKED PER THE INSPECTION PROCEDURE. A MEMO HAS BEEN SENT TO ALL DEPARTMENT HEADS ADVISING THEM OF THE INSPECTION REQUIRED PRIOR TO DECLARING A FIRE DOOR OPERABLE. A PLANT MANAGERS INSTRUCTION IS BEING PREPARED WHICH OUTLINES THIS REQUIREMENT.

[61] COOK 2 DOCKET 50-316 LER 82-092
 CARBON DIOXIDE INADVERTENTLY DISCHARGED INTO CABLE VAULT.
 EVENT DATE: 110982 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: SHORTED FIRE DETECTOR.

(NSIC 180068) THE AUXILIARY CABLE VAULT (ZONE 11) EXPERIENCED AN INADVERTENT CO(2) DISCHARGE. INVESTIGATION FOUND A PYRALARM DETECTOR ALARMING FOR NO APPARENT REASON. A FIRE WATCH WAS ESTABLISHED IN THE AREA OF THE ALARMING DETECTOR UNTIL THE SITUATION WAS CORRECTED. THIS CONDITION REMOVED ANY FURTHER CAPABILITY FOR THE FIRE DETECTION SYSTEM TO ALARM IN THE CONTROL ROOM IF ANY ADDITIONAL PYRALARMS WITHIN THE ZONE ALARMED. THIS DESIGN FEATURE WAS EXPLAINED IN DETAIL IN RO-050/315/096. THIS EVENT WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.3.8. INVESTIGATION FOUND THE DETECTOR ALARMING DUE TO WATER THAT HAD ENTERED THE BASE, CAUSING THE DETECTOR TO BECOME SHORTED. THE DETECTOR AND BASE, MANUFACTURED BY PYRATRONICS, WERE REPLACED AND THE SYSTEM WAS RETURNED TO SERVICE. FURTHER ACTION TO MINIMIZE DETECTOR INOPERABILITY TIME IS EXPLAINED IN RO-50-315/095.

[62] COOK 2 DOCKET 50-316 LER 82-095
 DG FIRE DOOR BLOCKED OPEN.
 EVENT DATE: 111182 REPORT DATE: 121082 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: OPERATOR ERROR.

(NSIC 180110) DURING NORMAL PLANT, OPERATIONS A SEC. OFFICER FOUND DOOR TO U-2 CD DIESEL ENG. FUEL OIL DAY TANK ROOM HELD OPEN BY DOOR CLOSURE ARM AND A PIECE OF CONDUIT LEFT IN DOORWAY WHICH WOULD HAVE PREVENTED DOOR FROM CLOSING IF CLOSURE ARM HAD BEEN RELEASED. NO PERSONNEL IN AREA. DOOR WAS DESIGNATED AS TECH SPEC RELATED FIRE DOOR. IT HAS BEEN DETERMINED SINCE THIS EVENT THAT THIS DOOR SHOULD NOT BE A TECH SPEC DOOR. HOWEVER, AT TIME OF OCCURRENCE, IT WAS A VIOLATION OF PROCEDURAL REQUIREMENTS FOR SAFETY RELATED FIRE DOORS. CONDUIT WAS IMMEDIATELY REMOVED AND DOOR SECURED. INDIVIDUALS RESPONSIBLE COULD NOT BE DETERMINED. ELECTRICAL CONTRACT PERSONNEL HAD BEEN WORKING IN AREA. ALL ELECTRICAL CONTRACT PERSONNEL WERE REMINDED OF REQUIREMENTS FOR FIRE PROTECTION DOORS. THE SPECIFIC DOOR WILL BE REDESIGNATED AS A NON-SAFETY RELATED FIRE DOOR. PREVIOUS OCCURRENCES: RO 315/82-026, 315/82-033, 316/82-049, 316/82-052, 315/82-053, 316/82-053, 315/82-062, 316/82-062 315/82-064.

[63] COOK 2 DOCKET 50-316 LER 82-093
RCS IODINE CONCENTRATION EXCEEDS LIMIT.
EVENT DATE: 112182 REPORT DATE: 120882 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: FUEL ELEMENTS
CAUSE: LEAKY FUEL ASSEMBLIES.

(NSIC 180069) FOLLOWING UNIT SHUTDOWN, THE RCS DOSE EQUIVALENT (DOSEQ) IODINE-131 CONCENTRATION EXCEEDED THE 1.0 MICROCURIE/GRAM STEADY STATE LIMIT OF TECH SPEC 3.2.8. THE IODINE LEVELS REMAINED IN EXCESS OF TECH SPEC LIMITS FOR APPROXIMATELY 21 HOURS AND 45 MINUTES. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE: 50-315/76-059, 78-026; 50-316/81-049, 82-004, 013, 018, 067, 075, 078, 079. ON NOVEMBER 21, 1982, FOLLOWING A CONTROLLED UNIT SHUTDOWN, THE RCS DOSEQ-I-131 SPIKED TO 2.06 MICROCURIE/GRAM. PRIOR TO THE SHUTDOWN, THE RCS DOSEQ-I-131 WAS AVERAGING 1.5 E-1 MICROCURIE/GRAM. (SEE ATTACHED SUPPLEMENT).

[64] COOK 2 DOCKET 50-316 LER 82-094
RCS FALLS BELOW LIMIT DUE TO LOSS OF RHR AND 4 RCP'S.
EVENT DATE: 112282 REPORT DATE: 120282 NSSS: WE TYPE: PWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: BATTERIES & CHARGERS
CAUSE: BATTERY CONNECTING BAR FAILED.

(NSIC 180070) UNIT WAS IN MODE 5 WITH RCS TEMPERATURE 172 F. CD BATTERY WAS LOST DUE TO CONNECTING BAR FAILURE CAUSING RCP'S 21 AND 24 TO TRIP. WHEN POWER WAS RESTORED, RCP'S 22 AND 23 TRIPPED. BOTH RHR TRAINS WERE IN SERVICE FEEDING THE COLD LEGS AND RCS TEMPERATURE DECREASED BELOW 152 F. ALL THREE CHARGING PUMPS WERE STILL RACKED IN AT THIS TIME WHICH IS CONTRARY TO TECH SPEC 3.1.2.3. COMBINATION OF LOSS OF 4 RCP'S AND BOTH RHR TRAINS IN SERVICE CAUSED RCS TEMPERATURE TO DECREASE BELOW TECH SPEC LIMIT FOR CHARGING PUMP OPERATION. TWO OF THE THREE PUMPS WERE RACKED OUT AT THIS TIME IN ACCORDANCE WITH THE TECH SPEC ACTION STATEMENT.

[65] COOK 2 DOCKET 50-316 LER 82-099
FOUR ESF TIMING RELAY RESPONSE TIMES EXCEED LIMIT.
EVENT DATE: 112382 REPORT DATE: 122282 NSSS: WE TYPE: PWR
SYSTEM: OTHER ELEC POWER SYS & CONTROL COMPONENT: RELAYS
CAUSE: INSTRUMENT DRIFT.

(NSIC 180165) DURING A SURVEILLANCE TEST ON THE AUTOMATIC LOAD SEQUENCE TIMING RELAYS, FOUR RELAY TIMERS WERE FOUND TO HAVE EXCEEDED THE TOLERANCE ALLOWED BY TECH SPEC 4.8.1.1.2.C.2. THESE ARE ESF TIMERS: SIS PUMP 2N EXCEEDED THE MAXIMUM ALLOWABLE TIME BY 0.07 SECONDS, SIS PUMP 2S EXCEEDED THE MAXIMUM ALLOWABLE TIME BY 0.03 SECONDS, MDAF PUMP 2E EXCEEDED THE MAXIMUM ALLOWABLE TIME BY 0.73 SECONDS AND THE ESW PUMP 2E EXCEEDED THE MAXIMUM ALLOWABLE TIME BY 0.22 SECONDS. THE OUT OF SPECIFICATION VALUES OF THESE FOUR RELAY TIMERS (MANUFACTURED BY AGASTAT, MODEL 7012) IS ATTRIBUTED TO INSTRUMENT DRIFT. THE TIMERS WERE READJUSTED AND VERIFIED TO OPERATE WITHIN THE ALLOWABLE LIMITS. PRESENTLY AN ENGINEERING REVIEW IS BEING CONDUCTED ON A NEW TYPE OF SOLID STATE RELAY. DEPENDING ON THE RESULTS OF THIS REVIEW, THE EXISTING RELAYS MAY BE REPLACED.

[66] COOK 2 DOCKET 50-316 LER 82-101
TWO ESF RELAY RESPONSE TIMES EXCEED LIMIT.
EVENT DATE: 112482 REPORT DATE: 122282 NSSS: WE TYPE: PWR
SYSTEM: OTHER ELEC POWER SYS & CONTROL COMPONENT: RELAYS
CAUSE: SWITCH ASSEMBLY OUT OF ALIGNMENT.

(NSIC 180167) DURING A SURVEILLANCE TEST ON THE AUTOMATIC LOAD SEQUENCE TIMING RELAYS, IT WAS DISCOVERED THAT THE TIME DELAY OF TWO RELAY TIMERS WAS NOT REPEATABLE AND THEY EXCEEDED THE TOLERANCE ALLOWED BY TECH SPECS 4.8.1.1.2.C.2.

INSPECTION OF THE RELAY TIMERS REVEALED THE TOGGLE SWITCH ASSEMBLY WAS OUT OF ALIGNMENT. THE TOGGLE SWITCH ASSEMBLIES WERE REALIGNED; THE TIMERS WERE REINSTALLED, CALIBRATED AND VERIFIED TO BE OPERATING CORRECTLY. PRESENTLY, AN ENGINEERING REVIEW IS BEING CONDUCTED TO DETERMINE THE ACCURACY AND REPEATABILITY OF A NEW TYPE SOLID STATE RELAY TIMER. DEPENDING ON THE RESULTS, THE EXISTING TIMER MAY BE REPLACED.

[67] COOK 2 DOCKET 50-316 LER 82-098
 FIRE DETECTION PYRALARM DETECTOR ALARMS SPURIOUSLY.
 EVENT DATE: 112782 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LOW SET POINT.

(NSIC 180164) A FIRE DETECTION SYSTEM ALARM FOR THE 4KV SWITCHGEAR ROOM WAS RECEIVED DUE TO A PYRALARM DETECTOR ALARMING FOR NO APPARENT REASON. FIRE WATCHES WERE ESTABLISHED IN THE AFFECTED ZONE OF THE ALARMING DETECTOR UNTIL THE SITUATION WAS CORRECTED. THIS CONDITION REMOVED ANY FURTHER CAPABILITY FOR THE FIRE DETECTION SYSTEM TO ALARM IN THE CONTROL ROOM IF ANY ADDITIONAL PYRALARMS WITHIN THIS ZONE ALARMED. THIS DESIGN FEATURE WAS EXPLAINED IN DETAIL IN RO-050/315-096. THIS EVENT WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.3.8. OPERATION DEPARTMENT PERSONNEL IMMEDIATELY REPLACED THE ALARMING DETECTOR. THIS WAS PERFORMED TO MINIMIZE DETECTOR INOPERABILITY TIME AS EXPLAINED IN RO-050/315-096. THE NEW DETECTOR WAS VERIFIED TO BE OPERATING CORRECTLY AND THE SYSTEM WAS RETURNED TO SERVICE. INVESTIGATION OF THE REPLACED DETECTOR FOUND THAT THE ALARM SETPOINT WAS LOW.

[68] COOK 2 DOCKET 50-316 LER 82-103
 THREE TEMPORARY FIRE SEALS MISSING.
 EVENT DATE: 112882 REPORT DATE: 122882 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: UNKNOWN PERSONNEL.

(NSIC 180169) A SECURITY GUARD NOTICED THE TEMPORARY FIRE SEAL FOR FIRE BARRIER PENETRATION W-9392 MISSING AND THE SEAL FOR PEN. W-9393 NON-FUNCTIONAL. THE PENETRATIONS ARE IN WALLS BETWEEN THE TURBINE BLDG. AND THE EMERG. DIESEL GENERATOR ROOMS. THE CONDITION WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.10. THE ACTION REQUIREMENTS WERE MET. THE SEALS WERE AGAIN FOUND TO BE NON-FUNCTIONAL ON TWO OCCASIONS, 11/30/82 AND 12/2/82. THE SEALS WERE REPAIRED. FIRST OCCURRENCE OF THIS TYPE. THE TEMPORARY FIRE SEALS APPEARED TO HAVE BEEN INTENTIONALLY VIOLATED ON ALL 3 OCCASIONS. PLANT SECURITY ESTABLISHED A SURVEILLANCE ON THE FIRE SEALS BUT DID NOT CATCH ANYBODY TAMPERING WITH THEM. DISCIPLINARY ACTION WOULD HAVE BEEN TAKEN IF THE PERSON RESPONSIBLE FOR VIOLATING THESE SEALS HAD BEEN CAUGHT.

[69] COOK 2 DOCKET 50-316 LER 82-100
 SIX DG RELAY RESPONSE TIMES EXCEED LIMIT.
 EVENT DATE: 113082 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180166) DURING A SURVEILLANCE TEST ON THE DIESEL GENERATOR LOAD SHEDDING RELAYS, SIX 4-KV LOSS OF VOLTAGE RELAYS (27-1-T21A, 27-3-T21A, 27-1-T21B, 27-3-T21B, 27-1-T21C AND 27-2-T21C) WERE FOUND TO HAVE EXCEEDED THE TOLERANCE ALLOWED BY TECH SPECS TABLE 3.3-4 ITEM 8.A (3196 VOLTS PLUS OR MINUS 19 VOLTS). PREVIOUS OCCURENCE OF A SIMILAR NATURE INCLUDE: 50-315/82-059. THIS SITUATION IS ATTRIBUTED TO INSTRUMENT DRIFT. THE DIESEL GENERATOR LOAD SHEDDING RELAYS (MANUFACTURED BY G.E., MODEL NGV-13B) WERE READJUSTED TO WITHIN ALLOWABLE LIMITS.

THE DESIGN AND PROCUREMENT OF A REPLACEMENT TYPE SLV SOLID STATE UNDERVOLTAGE RELAY IS UNDER STUDY.

[70] COOK 2 DOCKET 50-316 LER 82-097
 FIRE DETECTION PYRALARM DETECTOR ALARMS SPURIOUSLY.
 EVENT DATE: 120482 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LOW SET POINT.

(NSIC 180163) A FIRE DETECTION SYSTEM ALARM FOR THE 4KV SWITCHGEAR ROOM WAS RECEIVED DUE TO A PYRALARM DETECTOR ALARMING FOR NO APPARENT REASON. FIRE WATCHES WERE ESTABLISHED IN THE AFFECTED ZONE OF THE ALARMING DETECTOR UNTIL THE SITUATION WAS CORRECTED. THIS CONDITION REMOVED ANY FURTHER CAPABILITY FOR THE FIRE DETECTION SYSTEM TO ALARM IN THE CONTROL ROOM IF ANY ADDITIONAL PYRALARMS WITHIN THIS ZONE ALARMED. THIS DESIGN FEATURE WAS EXPLAINED IN DETAIL IN RO-050/315-096. THIS EVENT WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPECS 3.3.3.8. INVESTIGATION FOUND THAT THE ALARM SETPOINT ON A NON-ADJUSTABLE TYPE PYRALARM DETECTOR WAS LOW AND OPERATING ERRATICALLY. A NEW DETECTOR, MANUFACTURED BY PYRATRONICS, WAS INSTALLED, VERIFIED TO BE OPERATING CORRECTLY AND RETURNED TO SERVICE. FURTHER ACTION TO MINIMIZE DETECTOR INOPERABILITY IS EXPLAINED IN RO-050/315-096.

[71] COOK 2 DOCKET 50-316 LER 82-105
 UNMONITORED RELEASE VIA SLUDGE LANCE LINES.
 EVENT DATE: 120482 REPORT DATE: 010383 NSSS: WE TYPE: PWR
 SYSTEM: STEAM GEN BLOWDOWN SYS & CONT COMPONENT: PIPES, FITTINGS
 CAUSE: NONLICENSED OPERATOR ERROR.

(NSIC 180229) FOLLOWING SLUDGE LANCING ON STEAM GENERATOR #21, THE SLUDGE LANCE LINES WERE FOUND CONNECTED TO THE EAST BLOWDOWN DEMINERALIZER IN A CONFIGURATION WHICH BYPASSED RMS CHANNEL DRA-353. THIS RESULTED IN AN UNMONITORED RELEASE OF APPROXIMATELY 200 GALLONS. A SAMPLE OF THE WATER WAS OBTAINED AND ANALYZED WHICH REVEALED THAT A CALCULATED TOTAL OF 3.499E-6 CURIES HAD BEEN RELEASED. THE RESPONSIBLE SUPERVISOR HAD MISUNDERSTOOD THE INSTRUCTIONS OUTLINING THE LOCATIONS AVAILABLE FOR CONNECTING THE SLUDGE LANCE LINES. THE SUPERVISOR HAS REVIEWED THE EVENT AND IS AWARE OF ALL PERTINENT ASPECTS. FUTURE SLUDGE LANCE PROCEDURES WILL HAVE STEPS SPECIFYING CONNECTIONS FOR SLUDGE LANCE LINES.

[72] COOK 2 DOCKET 50-316 LER 82-106
 BREAKER ANTI-PUMP CIRCUIT FAILS.
 EVENT DATE: 120482 REPORT DATE: 010383 NSSS: WE TYPE: PWR
 SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 CAUSE: CONTROL DEVICE MALFUNCTIONED.

(NSIC 180230) DURING A TEST, A 4KV CIRCUIT BREAKER (2C4) WAS FOUND TO HAVE AN INOPERABLE ANTI-PUMP CIRCUIT. BREAKER 2C4 IS ONE OF TWO RESERVE FEED BREAKERS TO REACTOR COOLANT PUMP BUS 2C. WHEN THE UNIT OR OVERALL DIFFERENTIAL HEA RELAYS OPERATE, A STANDING CLOSE SIGNAL EXISTS FOR BREAKER 2C4. THE ANTI-PUMP CIRCUIT PREVENTS MULTIPLE BREAKER OPERATIONS AND SELF DESTRUCTION OF THE BREAKER IF A STANDING TRIP SIGNAL DEVELOPS. THE STANDING CLOSE SIGNAL WAS REMOVED BY OPENING A KNIFE SWITCH. THIS EVENT IS NONCONSERVATIVE IN RESPECT TO TECH SPEC 3.8.1.1.A. INVESTIGATION REVEALED THAT A 250V DC CONTROL DEVICE, MANUFACTURED BY ITE IMPERIAL CORPORATION, PART NO. 191921-T7, MALFUNCTIONED. THIS MALFUNCTION WAS DUE TO AN OPEN CIRCUIT IN THE ANTI-PUMP COIL. THE CAUSE OF THE COIL FAILURE COULD NOT BE DETERMINED.

[73] COOK 2 DOCKET 50-316 LER 82-104
DEGRADED VOLTAGE RELAY RESPONSE TIME EXCEEDS LIMIT.
EVENT DATE: 120682 REPORT DATE: 010383 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: RELAYS
CAUSE: DRIFT.

(NSIC 180228) DURING A SURVEILLANCE TEST, A RELAY TIMER (62-1-T21D) ASSOCIATED WITH THE 4 KV BUS DEGRADED VOLTAGE WAS FOUND TO HAVE EXCEEDED THE ALLOWABLE VALUE OF TWO MINUTES AND SIX SECONDS BY 3.1 SECONDS. THIS IS NON-CONSERVATIVE IN RESPECT TO TECH SPEC TABLE 3.3-4 ITEM 8.B. THE RELAY TIMER, MANUFACTURED BY AGASTAT, MODEL 7012, WAS ADJUSTED AND VERIFIED TO OPERATE WITHIN THE ALLOWABLE VALUES. THIS EVENT IS ATTRIBUTED TO INSTRUMENT DRIFT. PRESENTLY, AN ENGINEERING REVIEW IS IN PROGRESS ON A NEW TYPE OF SOLID STATE RELAY TIMER. DEPENDING ON THE RESULTS OF THIS REVIEW, THE EXISTING RELAYS MAY BE REPLACED.

[74] COOK 2 DOCKET 50-316 LER 82-102
TWO ESP RELAY RESPONSE TIMES EXCEED LIMIT.
EVENT DATE: 120982 REPORT DATE: 122882 NSSS: WE TYPE: PWR
SYSTEM: OTHER ELEC POWER SYS & CONTROL COMPONENT: RELAYS
CAUSE: INSTRUMENT DRIFT.

(NSIC 180168) DURING A SURVEILLANCE TEST ON THE AUTOMATIC LOAD SEQUENCE TIMING RELAYS, TWO RELAY TIMERS WERE FOUND TO HAVE EXCEEDED THE TOLERANCE ALLOWED BY TECH SPEC 4.8.1.1.2.C.2. THESE ARE ESP TIMERS: CCW PUMP 2E EXCEEDED THE MAXIMUM ALLOWABLE TIME BY 0.09 SECONDS AND THE CCW PUMP 2W EXCEEDED THE MAXIMUM ALLOWABLE TIME BY 0.20 SECONDS. THE CCW PUMP 2E TIMER OUT OF SPECIFICATION VALUE IS ATTRIBUTED TO INSTRUMENT DRIFT. THE TOGGLE SWITCH ASSEMBLY ON THE CCW PUMP 2W WAS FOUND TO NEED REALIGNMENT. THE TIMERS WERE CALIBRATED AND VERIFIED TO OPERATE WITHIN THE ALLOWABLE LIMITS. PRESENTLY AN ENGINEERING REVIEW IS BEING CONDUCTED ON A NEW TYPE OF SOLID STATE RELAY. DEPENDING ON THE RESULTS OF THIS REVIEW, THE EXISTING RELAYS MAY BE REPLACED.

[75] COOPER DOCKET 50-298 LER 82-023
ECCS SNUBBER FOUND INVERTED.
EVENT DATE: 112882 REPORT DATE: 122382 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180029) SNUBBER CS-S7 WAS FOUND LEAKING OIL. WHEN INVESTIGATED FOR REPAIR IT WAS FOUND INVERTED AND AT THAT TIME WAS INOPERABLE. IT MAY HAVE BEEN INOPERABLE WHEN LEAK WAS FIRST DETECTED. SNUBBER WAS NOT REPAIRED FOR 90 HOURS AFTER DISCOVERY. TECH SPEC 3.6.H.3 REQUIRES AN INOPERABLE SNUBBER TO BE REPAIRED OR REPLACED WITHIN 72 HOURS OR ASSOCIATED SAFETY SYSTEM BE DECLARED INOPERABLE. CORE SPRAY LOOP WAS NOT DECLARED INOPERABLE. LEAK WAS REPAIRED 8 HOURS AFTER NOTING SNUBBER INOPERABLE. REDUNDANT CORE SPRAY LOOP WAS OPERABLE. DURING TORUS ATTACHED PIPING MODIFICATIONS, THE EXTENSION TUBE LOCKNUT ON CS-S7 WAS APPARENTLY NOT PROPERLY TIGHTENED ALLOWING THE SNUBBER TO ROTATE UPSIDE DOWN DURING SUBSEQUENT PLANT OPERATION. SNUBBER WAS REPLACED WITH A REBUILT UNIT. THIS EVENT WILL BE REVIEWED WITH MAINTENANCE PERSONNEL TO ENSURE PROPER SNUBBER REASSEMBLY AND WITH OPERATIONS PERSONNEL TO ENSURE THAT THEY ARE AWARE OF TECH SPEC REQUIREMENTS FOR SNUBBERS.

[76] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-074
CONTROL COMPARTMENT CHARCOAL FILTERS FAIL.
EVENT DATE: 111682 REPORT DATE: 121682 NSSS: BW TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: FILTERS
CAUSE: MOISTURE IN FILTERS.

(NSIC 180078) WHILE PERFORMING SURVEILLANCE PROCEDURE (SP-186), CONTROL COMPLEX CHARCOAL FILTERS FAILED THE FREON PORTION OF THE SURVEILLANCE REQUIRED BY TECH SPEC 4.7.7.1.G. MAINTENANCE WAS INITIATED AND OPERABILITY WAS RESTORED AT 2228, 11/18/82. THIS WAS THE FIRST EVENT FOR THIS SET OF FILTERS AND THE TENTH REPORT UNDER SPECIFICATION 3.7.7.1. THE APPARENT CAUSE OF THIS EVENT IS ATTRIBUTED TO MOISTURE ABSORPTION BY THE CHARCOAL FILTERS. THE FILTERS WERE REPLACED AND FUNCTIONALLY TESTED SATISFACTORILY.

[77] DAVIS-BESSE 1 DOCKET 50-346 LER 81-031 REV 6
UPDATE ON HIGH RCS IODINE LEVEL.
EVENT DATE: 051281 REPORT DATE: 123082 NSSS: BW TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
CAUSE: FISSION PRODUCT LEAK THROUGH CLADDING.

(NSIC 180378) ON 5/12/81 FOLLOWING A REACTOR TRIP, A REACTOR COOLANT SYSTEM (RCS) SAMPLE WAS COLLECTED IN ACCORDANCE WITH TECH SPEC 3.4.8, TABLE 4.4-4. AT 2037 HOURS, THE LEVEL PEAKED AT 1.52 MICRO-CI/GM DOSE EQUIVALENT IODINE I-131 WITH THE LIMIT BEING 1.0 MICRO-CI/GM. OTHER IODINE SPIKES HAVE OCCURRED ON 7/30/81, 9/2/81, 10/16/81, 10/23/81, 12/28/81, AND 12/4/82 WITH THE LEVEL PEAKING AT 1.2, 1.96, 2.17, 1.15, 1.64, AND 1.21 MICRO-CI/GM, RESPECTIVELY. THE CAUSE WAS A SLIGHT LEAKAGE OF FISSION PRODUCTS THROUGH THE FUEL CLADDING. SOME LEAKAGE IS NORMAL FOLLOWING A REACTOR TRIP WHEN RCS TEMPERATURE AND PRESSURE CHANGES OCCUR. THE LEVELS WERE MONITORED TO ENSURE IT DECREASED BELOW LIMITS. A TECH SPEC REVISION TO CHANGE THE LIMIT IS BEING EVALUATED PER FACILITY CHANGE REQUEST 81-163, REVISION A.

[78] DAVIS-BESSE 1 DOCKET 50-346 LER 82-045 REV ?
UPDATE ON SPURIOUS APWS PUMP SUCTION VALVE CLOSURES.
EVENT DATE: 090482 REPORT DATE: 123082 NSSS: BW TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVES
CAUSE: UNKNOWN.

(NSIC 180187) A CONTROL ROOM OPERATOR OBSERVED AUXILIARY FEEDWATER (AFW) PUMP 1-1 SUCTION VALVE FW786 CLOSE FOR NO APPARENT REASON WITHOUT AN OPERATOR TOUCHING THE CLOSE BUTTON. ON 12/3/82 A CONTROL ROOM OPERATOR FOUND FW786 CLOSED. ON BOTH OCCURRENCES, THE STATION ENTERED THE ACTION STATEMENT OF TECH SPEC 3.7.1.2. THE CAUSE OF THESE OCCURRENCES REMAINS UNKNOWN. MAINTENANCE WORK ORDERS 82-2334, 82-2929, AND 82-2974 WERE PERFORMED ON 9/28/82, 12/10/82 AND 12/15/82, RESPECTIVELY, TO INVESTIGATE THE CONTROL CIRCUIT; HOWEVER, NO CAUSE WAS FOUND AS TO WHY THE VALVE WENT CLOSED. FW786 WAS IMMEDIATELY REOPENED UPON DISCOVERY OF EACH OCCURRENCE, REMOVING THE UNIT FROM THE ACTION STATEMENT.

[79] DAVIS-BESSE 1 DOCKET 50-346 LER 82-056
EVS FAN TRIPS DUE TO LOSS OF POWER TO MCC.
EVENT DATE: 110482 REPORT DATE: 120282 NSSS: BW TYPE: PWR
SYSTEM: OTHER ENGRD SAFETY FEATR SYS COMPONENT: PUMPS
CAUSE: GROUND IN FIRE PUMP MOTOR.

(NSIC 180085) WHILE ATTEMPTING TO RESTART THE JOCKEY FIRE PUMP, BREAKER BF114 TRIPPED, CAUSING A LOSS OF POWER TO THE F12 SERIES MOTOR CONTROL CENTERS (MCC). THE STATION ENTERED THE ACTION STATEMENT OF TECH SPEC 3.6.5.1 SINCE THE EMERGENCY VENTILATION SYSTEM (EVS) FAN 1-2 TRIPPED DUE TO THE LOSS OF POWER TO F12A. THE CAUSE WAS A GROUND IN THE JOCKEY FIRE PUMP MOTOR WHEN THE PUMP SEIZED. ALL F12 SERIES LOADS WERE RE-ENERGIZED WITH THE EXCEPTION OF F12C AND EF12C. THIS REMOVED THE STATION FROM THE ACTION STATEMENT. MWO 82-2607 WAS ISSUED TO MEGGER MCCS E12C AND EF12C. THE PUMP WAS REBUILT, AND THE MOTOR WAS REPLACED. THE JOCKEY FIRE PUMP HAS BEEN PLACED ON A PREVENTIVE MAINTENANCE PROGRAM TO PREVENT RECURRENCE.

[80] DAVIS-BESSE 1 DOCKET 50-346 LER 82-057
 FIRE DOOR FOR SPENT FUEL POOL LEFT OPEN.
 EVENT DATE: 110582 REPORT DATE: 120282 NSSS: BW TYPE: PWR
 SYSTEM: OTHER ENGRD SAFETY FEATR SYS COMPONENT: VALVES
 CAUSE: PERSONNEL ERROR.

(NSIC 180087) AN OPERATOR FOUND DOOR 400 NOT COMPLETELY CLOSED AND LATCHED. THE DOOR WAS NOT BLOCKED OPEN, BUT WAS BEING HELD OPEN BY A DIFFERENTIAL PRESSURE ACROSS IT. SINCE DOOR 400 IS A NEGATIVE PRESSURE BOUNDARY DOOR FOR THE SPENT FUEL POOL AREA AND A FIRE DOOR, THE UNIT ENTERED THE ACTION STATEMENTS OF TECH SPECS 3.9.12 AND 3.7.10. THE CAUSE IS PERSONNEL ERROR IN THAT THE LAST PERSON THROUGH THE DOOR DID NOT ENSURE THAT IT WAS SECURELY CLOSED. UPON DISCOVERY, THE OPERATOR CLOSED THE DOOR, REMOVING THE UNIT FROM THE ACTION STATEMENTS. ALL STATION PERSONNEL WILL BE RECEIVING ADDITIONAL TRAINING ON BASIC SECURITY PROCEDURES. THE STATION IS INVESTIGATING THE FEASIBILITY OF INSTALLING A LOCAL AUDIBLE ALARM ON DOOR 400 AND OTHER DOORS.

[81] DAVIS-BESSE 1 DOCKET 50-346 LER 82-058
 SET POINT DRIFT IN RADIATION MONITOR.
 EVENT DATE: 110682 REPORT DATE: 120382 NSSS: BW TYPE: PWR
 SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MICROPROCESSOR BOARD FAILURE.

(NSIC 180097) WHEN OPERATORS WERE PERFORMING SURVEILLANCE TEST ST 5032.01 ON RE 4597BA, THE SETPOINTS FOR THE MONITOR WERE FOUND TO HAVE DRIFTED. THIS RESULTED IN ALERT AND HIGH ALARMS COMING IN. THE MONITOR WAS DECLARED INOPERABLE, PLACING THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.3.3.6. THE CAUSE WAS COMPONENT FAILURE WHICH WAS TRACED TO ONE OF THE TWO BOARDS IN THE MICROPROCESSOR. BOTH BOARDS WERE REPLACED. ST 5032.01 WAS PERFORMED, AND THE MONITOR WAS DECLARED OPERABLE, REMOVING THE UNIT FROM THE ACTION STATEMENT. THE BOARDS HAVE BEEN RETURNED TO THE MANUFACTURER FOR WARRANTY REPLACEMENT.

[82] DAVIS-BESSE 1 DOCKET 50-346 LER 82-059
 CONTAINMENT RADIATION MONITORS FAIL 3 TIMES.
 EVENT DATE: 110882 REPORT DATE: 120882 NSSS: BW TYPE: PWR
 SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: FAILED POWER SUPPLY.

(NSIC 180086) ON 11/8/82 AT 1308 HOURS, THE CONTROL ROOM OPERATOR NOTICED THAT THE CONTAINMENT POST ACCIDENT RADIATION MONITOR, RE 4597AA, CHANNEL 2 WAS READING A VERY LOW VALUE. ON 11/16/82 AT 2235 HOURS AND AGAIN ON 11/22/82 AT 0300 HOURS, AN EQUIPMENT FAILURE ALARM WAS RECEIVED ON RE 4597BA. ON ALL OCCURRENCES THE AFFECTED MONITOR WAS DECLARED INOPERABLE, PLACING THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.3.3.6. THE CAUSE OF THE FIRST FAILURE WAS A FAILED HIGH VOLTAGE POWER SUPPLY BOARD FOR CHANNELS 2 & 3. THE BOARD WAS REPLACED AND RE4597AA WAS DECLARED OPERABLE AT 1320 HRS. ON 11/11/82. CAUSE OF THE 2ND FAILURE IS UNKNOWN. RE4597BA WAS DECLARED OPERABLE AT 1540 HRS. ON 11/17/82. CAUSE OF THE 3RD FAILURE WAS FAILED HIGH VOLTAGE SUPPLY BOARD. THE BOARD WAS REPLACED AND RE4597BA DECLARED OPERABLE AT 0025 HOURS ON 11/23/82.

[83] DAVIS-BESSE 1 DOCKET 50-346 LER 82-059 REV 1
 UPDATE ON 3 CONTAINMENT RADIATION MONITOR FAILURES.
 EVENT DATE: 110682 REPORT DATE: 121582 NSSS: BW TYPE: PWR
 SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: FAILED POWER SUPPLY BOARDS.

(NSIC 180122) ON 11/8/82 THE CONTROL ROOM OPERATOR NOTICED THAT THE CONTAINMENT POST ACCIDENT RADIATION MONITOR, RE 4597AA, CHANNEL 2 WAS READING A VERY LOW

VALUE. ON 11/16/82 AND AGAIN ON 11/22/82 AN EQUIPMENT FAILURE ALARM WAS RECEIVED ON RE 4597BA. ON ALL OCCURRENCES THE MONITOR WAS DECLARED INOPERABLE, PLACING THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.3.3.6. THE CAUSE OF THE FIRST FAILURE WAS A FAILED HIGH VOLTAGE POWER SUPPLY BOARD FOR CHANNELS 2 & 3. THE BOARD WAS REPLACED AND RE4597AA WAS DECLARED OPERABLE ON 11/11/82. CAUSE OF THE 2ND FAILURE IS UNKNOWN. RE4597BA WAS DECLARED OPERABLE ON 11/17/82. CAUSE OF THE 3RD FAILURE WAS A FAILED HIGH VOLTAGE SUPPLY BOARD. THE BOARD WAS REPLACED AND RE4597BA WAS DECLARED OPERABLE ON 11/23/82.

[84] DAVIS-BESSE 1 DOCKET 50-346 LER 82-061
2 FIRE DOORS INOPERABLE DUE TO INCORRECT FIRE RATING LABELS.
EVENT DATE: 111682 REPORT DATE: 121582 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
CAUSE: DESIGN ERROR.

(NSIC 180120) FIRE DOOR 509, THE CONTROL ROOM ACCESS DOOR AND DOOR 512, THE CENTRAL ALARM STATION (CAS) ACCESS DOOR, WERE DECLARED NON-FUNCTIONAL DUE TO THE IMPROPER FIRE RATING LABELS ON THESE DOORS. THIS PLACED THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.7.10. THE CAUSE OF THIS OCCURRENCE WAS A DESIGN ERROR IN THAT THE MANUFACTURER, PROTECTIVE MATERIALS COMPANY, INCORRECTLY AFFIXED THE FIRE RATING LABELS ON DOORS 509 AND 512. THE STATION HAD PREVIOUSLY ESTABLISHED AN HOURLY FIRE WATCH WITH CONCURRENCE FROM NRC REGION III ON THESE DOORS SINCE 10/6/82. THE NRC CONFIRMED ON 11/16/82 THAT CONTINUING THE HOURLY FIRE WATCH WOULD SATISFY THE ACTION STATEMENT. DOORS TO BE REPLACED.

[85] DAVIS-BESSE 1 DOCKET 50-346 LER 82-062
HYDROGEN DILUTION BLOWER INOPERABLE DUE TO STUCK CHECK VALVE.
EVENT DATE: 111782 REPORT DATE: 121782 NSSS: BW TYPE: PWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: VALVES
CAUSE: DESIGN ERROR.

(NSIC 180118) WHILE PERFORMING ST 5065.02 TO DEMONSTRATE OPERABILITY OF THE CONTAINMENT HYDROGEN DILUTION BLOWER 1-1 FOLLOWING PREVENTATIVE MAINTENANCE, OPERATIONS PERSONNEL REPORTED THAT THE DISCHARGE CHECK VALVE, CV-186, WAS APPARENTLY STUCK. HYDROGEN DILUTION BLOWER 1-1 WAS DECLARED INOPERABLE, PLACING THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.6.4.3 WHICH REQUIRES RESTORATION OF THE INOPERABLE SYSTEM WITHIN 30 DAYS. THE APPARENT CAUSE WAS A DESIGN/FABRICATION ERROR. HYDROGEN DILUTION BLOWER 1-1 DISCHARGE CHECK VALVE WAS REMOVED FROM THE SYSTEM AND A DIFFERENT DESIGN VALVE WAS INSTALLED UNDER MWO 78-211-00 (FCR 78-211). ST 5065.02 WAS SUCCESSFULLY PERFORMED ON HYDROGEN DILUTION BLOWER 1-1, AND THE SYSTEM WAS DECLARED OPERABLE ON 11/29/82, REMOVING THE UNIT FROM THE ACTION STATEMENT OF TECH SPEC 3.6.4.3.

[86] DAVIS-BESSE 1 DOCKET 50-346 LER 82-063
TESTING OF EMERGENCY POWER SOURCES MISSED.
EVENT DATE: 111882 REPORT DATE: 121782 NSSS: BW TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
CAUSE: PERSONNEL ERROR.

(NSIC 180117) AT 0125 HOURS EMERGENCY DIESEL GENERATOR (EDG) 1-1 WAS TAKEN OUT OF SERVICE FOR PERIODIC MAINTENANCE. PER TECH SPEC 3.8.1.1 OPERABILITY OF BOTH EDG 1-2 AND TWO OFFSITE AC SOURCES SHOULD HAVE BEEN DEMONSTRATED WITHIN ONE HOUR. OPERABILITY OF THE OFFSITE AC SOURCES WAS NOT DEMONSTRATED WITHIN ONE HOUR INVOKING TECH SPEC 3.0.3. OPERABILITY WAS DEMONSTRATED AT 0255 HOURS REMOVING THE UNIT FROM THE TECH SPEC 3.0.3. EDG 1-2 WAS DEMONSTRATED OPERABLE. THE CAUSE WAS PERSONNEL ERROR. THE ASSISTANT SHIFT SUPERVISOR ASKED AN EQUIPMENT OPERATOR TO PERFORM ST 5080.01 TO DEMONSTRATE OPERABILITY OF THE OFFSITE SOURCES. COMMUNICATIONS BETWEEN THE INDIVIDUALS WERE INADEQUATE AND THE EQUIPMENT OPERATOR

DID NOT UNDERSTAND THAT THE TEST NEEDED TO BE COMPLETED WITHIN ONE HOUR. THE PERSONNEL INVOLVED HAVE BEEN COUNSELED AGAINST ALLOWING EVENTS OF THIS SORT TO RECUR.

[87] DAVIS-BESSE 1 DOCKET 50-346 LER 82-064
 DECAY HEAT TRAIN INOPERABLE DUE TO CCW VALVE FAILURE.
 EVENT DATE: 112982 REPORT DATE: 122982 NSSS: BW TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: VALVE MANUFACTURING ERROR.

(NSIC 180203) WHILE PERFORMING ST 5074.01 ON COMPONENT COOLING WATER (CCW) TRAIN 1, OPERATORS DISCOVERED THAT CC1467, DECAY HEAT COOLER CCW OUTLET VALVE WOULD NOT OPEN. DECAY HEAT TRAIN 1 WAS DECLARED INOPERABLE, AND THE UNIT ENTERED THE ACTION STATEMENT OF TECH SPEC 3.5.2. THE CAUSE IS MANUFACTURING ERROR. ON 11/30/82 THE VALVE ACTUATOR WAS INSPECTED, AND A FLANGED BEARING WAS FOUND MISSING FROM THE ACTUATOR MOUNTING PLATE. CC1467 WAS PLACED IN THE OPEN POSITION WITH THE AIR ISOLATED. DECAY HEAT TRAIN 1 WAS DECLARED OPERABLE ON 11/30/82 REMOVING THE UNIT FROM THE ACTION STATEMENT. ON 12/15/82, A FLANGED BEARING WAS INSTALLED IN CC1467 UNDER MAINTENANCE WORK ORDER IC-661-82.

[88] DAVIS-BESSE 1 DOCKET 50-346 LER 82-065
 CONTROL ROOM CHLORINE MONITOR FAILS.
 EVENT DATE: 120182 REPORT DATE: 123082 NSSS: BW TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PERSONNEL ERROR.

(NSIC 180202) ON 12/1/82 THE SHIFT SUPERVISOR DISCOVERED THAT THE CONTROL ROOM VENTILATION SYSTEM CHLORINE DETECTOR AE5358B HAD BEEN TAKEN OUT OF SERVICE ON 11/30/82 WITHOUT PLACING THE CONTROL ROOM IN THE RECIRCULATION MODE WITHIN ONE HOUR PER THE ACTION STATEMENT OF TECH SPEC 3.3.3.7. ON 12/3/82 CHLORINE DETECTOR AE5358A FAILED, PLACING THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.0.3 SINCE AE5358B WAS STILL OUT OF SERVICE. THE CAUSE OF THE 12/1/82 OCCURRENCE IS PERSONNEL ERROR. THE PERSONNEL WORKING ON AE5358B DID NOT EXPLICITLY FOLLOW ALL INSTRUCTIONS PRINTED ON THE MWO. A MEMO IS BEING SENT TO THE RESPONSIBLE PERSONNEL. THE CAUSE OF THE 12/3/82 OCCURRENCE WAS A DETECTOR MALFUNCTION. AE5358A WAS DECLARED OPERABLE AT 0910 HOURS ON 12/3/82. AE5358B WAS DEMONSTRATED OPERABLE ON 12/12/82 REMOVING THE UNIT FROM THE ACTION STATEMENT.

[89] DRESDEN 2 DOCKET 50-237 LER 82-036 REV 1
 UPDATE ON HIGH APRM GAIN FACTORS.
 EVENT DATE: 072382 REPORT DATE: 111682 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 180024) THE APRM GAIN ADJUSTMENT FACTOR (AGAF) FOR APRM'S 2 AND 3 HAD EXCEEDED 1.02. AN INSTRUMENT MECHANIC (I.M.) WAS CALLED TO MAKE ADJUSTMENTS PER DIS 700-17 (TECH SPEC TABLE 3.1). PRIOR TO THE ARRIVAL OF THE I.M., THE AGAF CONTINUED TO CHANGE UNTIL IT EXCEEDED 1.03, AT WHICH TIME THE NSO TOOK A 1/2 SCRAM ON CHANNEL A PER DOS 500-6. PREVIOUS OCCURRENCE REPORTED BY R.O. 81-32 ON DOCKET 50-237. CAUSE IS ATTRIBUTED TO A PROCEDURAL DEFICIENCY. IMMEDIATE CORRECTIVE ACTION WAS TO MAKE THE NECESSARY APRM GAIN ADJUSTMENTS. LONG TERM ACTION WILL BE TO MODIFY THE START-UP/SHUTDOWN PROCEDURES DGP 1-1, 1-3, 2-1, 2-4 AND TO HAVE AN INSTRUMENT MECHANIC AVAILABLE DURING REACTOR START-UP OR SHUTDOWN WHICH WOULD ALLOW MORE FREQUENT APRM GAIN ADJUSTMENTS.

[90] DRESDEN 2 DOCKET 50-237 LER 82-037 REV 1
UPDATE ON HIGH APRM GAIN FACTORS.
EVENT DATE: 072482 REPORT DATE: 112282 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 180023) WHILE IN THE FINAL HOURS OF A 12-HOUR XENON SOAK PERIOD, THE APRM GAIN ADJUSTMENT FACTOR (AGAF) FOR APRM 4 AND 6 HAD EXCEEDED 1.02. AN INSTRUMENT MECHANIC WAS CALLED TO MAKE ADJUSTMENTS PER DIS 700-17 (TECH SPEC TABLE 3.1). WHILE WAITING FOR HIM TO ARRIVE, THE AGAF CONTINUED TO CHANGE UNTIL IT EXCEEDED 1.03 AT WHICH TIME THE NSO TOOK A 1/2 SCRAM ON CHANNEL B PER DOS 500-6. PREVIOUS OCCURRENCE REPORTED BY R.O. 81-32 AND 82-36 ON DOCKET 50-237. CAUSE IS ATTRIBUTED TO A PROCEDURAL DEFICIENCY. IMMEDIATE CORRECTIVE ACTION WAS TO MAKE THE NECESSARY APRM GAIN ADJUSTMENTS. LONG TERM ACTION WILL BE TO MODIFY THE START-UP/SHUTDOWN PROCEDURES DGP 1-1, 1-3, 2-1, AND 2-4 AND HAVE AN INSTRUMENT MECHANIC AVAILABLE DURING REACTOR START-UP OR SHUTDOWN WHICH WOULD ALLOW MORE FREQUENT APRM GAIN ADJUSTMENTS.

[91] DRESDEN 2 DOCKET 50-237 LER 82-044
DG INOPERABLE WHEN OIL PUMP FAILS.
EVENT DATE: 110982 REPORT DATE: 120382 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: MOTORS
CAUSE: BAD BEARING IN PUMP MOTOR.

(NSIC 180019) THE 2/3 DIESEL GENERATOR (D/G) TROUBLE ALARM ANNUNCIATED IN THE CONTROL ROOM. OPERATOR FOUND D/G LUBRICATING OIL PUMP WAS OFF AND THE LOCAL BREAKER WAS TRIPPED. PREVIOUS SIMILAR EVENT REPORTED BY R.O. 81-27/01T ON DOCKET #50-237. THE CAUSE OF THIS EVENT WAS A BAD BEARING IN LUBRICATING OIL PUMP MOTOR. THE OIL PUMP MOTOR (MODEL B6738A) WAS REPLACED AND SATISFACTORILY TESTED. DIESEL GENERATOR OPERABILITY WILL CONTINUE TO BE VERIFIED MONTHLY DURING D/G SURVEILLANCE (DOS 6600-1).

[92] DRESDEN 2 DOCKET 50-237 LER 82-047
RCS LOW LEVEL SWITCH SET POINT IS WRONG.
EVENT DATE: 111782 REPORT DATE: 120682 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DEFECTIVE PROCEDURE.

(NSIC 180022) WHILE DIS 500-3 (REACTOR VESSEL LOW WATER LEVEL ECCS INITIATION) WAS IN PROGRESS, LIS 263-72A WAS FOUND SET AT 11.6 INCHES DELTA P (TECH SPEC TABLE 3.2.2). CAUSE OF THE EVENT WAS A DEFECTIVE PROCEDURE WHICH ALLOWED A SETPOINT IN VIOLATION OF TECH SPEC. LIS 263-72A WAS RESET TO MEET LIMIT REQUIREMENTS. A REVISION TO DIS 500-3 HAS BEEN INITIATED PROVIDING PROPER SETPOINTS FOR THE AFFECTED SWITCHES. DIS 500-3 WILL CONTINUE TO BE PERFORMED MONTHLY.

[93] DRESDEN 2 DOCKET 50-237 LER 82-049
TORUS INERT AND PURGE VALVE FAILS TO CLOSE.
EVENT DATE: 112882 REPORT DATE: 122082 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
CAUSE: HARDENING OF SEAL.

(NSIC 180373) DOS 1600-1, THE TORUS INERT AND PURGE VALVE 2-1601-56 WOULD NOT AUTO-CLOSE. VALVES 2-1601-55 AND 2-1601-22 WERE PLACED IN THE CLOSED POSITION PER TECH SPEC 3.7.D.2. PREVIOUS OCCURRENCE REPORTED BY R.O. 82-32 ON DOCKET 50-249. THE MOST PROBABLE CAUSE IS VERSA VALVE (MODEL NUMBER VPS 2402) LEAKING FROM THE WEEP HOLE DUE TO HARDENING OF THE O-RING SEAL. FOLLOWING THE REPLACEMENT OF THE VERSA VALVE AND TIGHTENING THE UPPER AIR SUPPLY LINE TO THE

VERSA VALVE, THE 2-1601-56 VALVE WAS PROVEN OPERABLE. SURVEILLANCE TEST, DOS 1600-1, WILL CONTINUE TO BE PERFORMED TO VERIFY VALVE OPERABILITY.

[94] DRESDEN 2 DOCKET 50-237 LER 82-050
REACTOR SHUTDOWN DUE TO HIGH INTAKE WATER LEVEL.
EVENT DATE: 120382 REPORT DATE: 121382 NSSS: GE TYPE: BWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PUMPS
CAUSE: HEAVY RAINFALL.

(NSIC 180021) WHILE PERFORMING A ROUTINE CRIBHOUSE INSPECTION, AN OPERATOR NOTED THAT THE INTAKE WATER LEVEL HAD RISEN TO ELEV. 509 FT. 2 IN. A GSEP ALERT WAS DECLARED AND EPIP 200-11 WAS INITIATED. BOTH UNITS 2 AND 3 WERE SHUTDOWN PER DGP 2-1 (TECH SPEC 6.6.B.1.G). INTAKE WATER LEVEL CONTINUED RISING TO A MAXIMUM OF 5.5 IN. ABOVE THE SERVICE WATER PUMP FLOOR ELEV. OF 509 FT. 6 IN. BEFORE RECEDING. THE HIGH INTAKE WATER LEVEL WAS CAUSED BY RISING OF THE RIVER LEVEL FROM SEVERAL DAYS OF HEAVY RAINFALL. UPON RECESSION OF INTAKE WATER LEVEL TO ELEV. 509 FT. 0 IN. AND WEATHER REPORTS INDICATING THAT IMMEDIATE HEAVY RAINFALL WAS NOT IMMINENT, BOTH UNITS 2 AND 3 WERE ON SITE REVIEWED AND RESTARTED.

[95] DRESDEN 3 DOCKET 50-249 LER 82-028 REV 1
UPDATE ON LPCI AND CORE SPRAY PRESSURE SWITCH FAILURES.
EVENT DATE: 070882 REPORT DATE: 110882 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: WATER FELL ON INSTRUMENT RACK.

(NSIC 180008) WITH DIS 287-1 (LPCI AND CORE SPRAY PRESSURE SWITCH TEST) IN PROGRESS, SWITCH PS 1554 F TRIPPED ABOVE TECH SPEC (TABLE 3.2.2) LIMIT. PREVIOUS OCCURRENCE REPORTED BY R.O. 78-88 ON DOCKET 050-237. POOR WORK PRACTICES INVOLVING MAINTENANCE ON THE LPCI HEAT EXCHANGER DURING BOTTOM HEAD REMOVAL ALLOWED WATER TO FALL ONTO THE INSTRUMENT RACK CAUSING THE LINKAGE TO STICK. THIS RACK IS NOW COVERED PRIOR TO BOTTOM HEAD REMOVAL. THE LINKAGE OF PS 1554F WAS FREED AND SATISFACTORILY TESTED. THE AFFECTED SWITCHES (STATIC-O-RING #5N-AA3) HAVE BEEN REPLACED.

[96] DRESDEN 3 DOCKET 50-249 LER 82-030 REV 1
UPDATE ON TIP BALL VALVE FAILURE TO RECLOSE.
EVENT DATE: 071682 REPORT DATE: 120882 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: UNKNOWN.

(NSIC 180402) WHILE EXERCISING THE TIP BALL VALVES, 3A TIP BALL VALVE FAILED TO RECLOSE AFTER OPENING (TECH SPEC 3.7.D.1). THIS WAS OF MINIMAL SAFETY SIGNIFICANCE SINCE THE TIP SHEAR VALVE WAS AVAILABLE TO ISOLATE THE TIP IF NECESSARY. LAST OCCURRENCE OF THIS TYPE REPORTED BY R.O. 77-17 ON DOCKET 50-237. SPECIFIC CAUSE WAS UNKNOWN. LIMIT SWITCHES AND BALL VALVE WERE REPLACED AND SUCCESSFULLY TESTED FOR OPERABILITY. DOS 1600-8 WILL CONTINUE TO BE PERFORMED WEEKLY. THE .25 INCH SOLENOID ACTIVATED VALVE IS SUPPLIED BY GENERAL PNEUMATIC CORPORATION.

[97] DRESDEN 3 DOCKET 50-249 LER 82-037 REV 1
UPDATE ON TIP BALL VALVE FAILURE TO CLOSE.
EVENT DATE: 092282 REPORT DATE: 121082 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: HARDENED LUBRICATION.

(NSIC 180010) WHILE EXERCISING THE TIP BALL VALVES, 3E TIP BALL VALVE WOULD NOT AUTOMATICALLY RECLOSE USING THE CONTROL SWITCH. LAST OCCURRENCE WAS REPORTED BY

R.O. 82-30/03L-0 ON DOCKET #50-249. PROBABLE CAUSE WAS HARDENED LUBRICATION THAT CAUSED THE BALL VALVE TO DRAG. IMMEDIATE ACTION WAS TO CLOSE "E" BALL VALVE MECHANICALLY. THE SPRING THAT CLOSSES THE BALL VALVE WAS RE-TENSIONED TO OVERCOME THE DRAG AND THE VALVE WAS TESTED SUCCESSFULLY FOR OPERABILITY. DOS 1600-8 WILL CONTINUE TO BE PERFORMED WEEKLY. THE .25 INCH SOLENOID ACTIVATED VALVE IS SUPPLIED BY GENERAL PNEUMATIC CORPORATION.

[98] DRESDEN 3 DOCKET 50-249 LER 82-047
 RCS LOW WATER SWITCH SET POINT IS INCORRECT.
 EVENT DATE: 111782 REPORT DATE: 120682 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DEFECTIVE PROCEDURE.

(NSIC 180057) WHILE DIS 500-3 (REACTOR VESSEL LOW WATER LEVEL ECCS INITIATION) WAS IN PROGRESS, LIS 263-72-C WAS FOUND SET AT 111.0 INCHES DELTA P (TECH SPEC TABLE 3.2.2). PREVIOUS REPORTABLE OCCURRENCE: 82-47, DOCKET #050-237. CAUSE OF THE EVENT WAS A DEFECTIVE PROCEDURE WHICH ALLOWED A SETPOINT IN VIOLATION OF TECH SPEC. LIS 263-72-C WAS RESET TO MEET LIMIT REQUIREMENTS. A REVISION TO DIS 500-3 HAS BEEN INITIATED PROVIDING PROPER SETPOINTS FOR THE AFFECTED SWITCHES. DIS 500-3 WILL CONTINUE TO BE PERFORMED MONTHLY.

[99] DRESDEN 3 DOCKET 50-249 LER 82-048
 OXYGEN ANALYZER UNIT FAILS.
 EVENT DATE: 112682 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LIGHT BULB FAILURE.

(NSIC 179972) THE OXYGEN ANALYZER UNIT FAILED WITH THE HIGH OXYGEN ALARM UP IN THE CONTROL ROOM. FIRST OCCURRENCE AT DRESDEN. THE CAUSE OF THIS EVENT WAS THAT THE LIGHT BULB FOR THE LIGHT UNIT THAT ACTIVATES THE PHOTOELECTRIC CELL OF THE ANALYZER FAILED. THIS CAUSED THE PHOTOELECTRICAL CELL TO TRIP ON LOSS OF LIGHT RESULTING IN A TOTAL ANALYZER FAILURE. LIGHT BULB WAS REPLACED AND ANALYZER WAS SATISFACTORILY TESTED AND PLACED BACK IN OPERATION.

[100] FARLEY 1 DOCKET 50-348 LER 82-059
 BIT CONCENTRATION FALLS BELOW LIMIT.
 EVENT DATE: 120782 REPORT DATE: 123082 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: ACCUMULATORS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180181) IT WAS DETERMINED THAT THE BORON CONCENTRATION IN THE BORON INJECTION TANK WAS 19,558 PPM. TECH SPEC 3.5.4.1, IN PART, REQUIRES THE BORON CONCENTRATION TO BE BETWEEN 20,000 AND 22,500 PPM. TECH SPEC 3.5.4.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO PERSONNEL ERROR. THE BORON INJECTION TANK WAS OVERDILUTED BY APPROXIMATELY SIXTEEN GALLONS WHILE MAKING UP TO THE SURGE TANK. THE BORON CONCENTRATION WAS RETURNED TO WITHIN TECH SPEC LIMITS. THE PERSONNEL INVOLVED HAVE BEEN COUNSELLED FOR NOT PROPERLY FOLLOWING THE PROCEDURE.

[101] FARLEY 2 DOCKET 50-364 LER 82-046
 RCS SNUBBER INOPERABLE DUE TO DAMAGED SEAL.
 EVENT DATE: 102882 REPORT DATE: 120182 NSSS: WE TYPE: PWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 CAUSE: INSTALLATION ERROR.

(NSIC 180096) SNUBBER 2RC-R50A WAS DETERMINED TO BE INOPERABLE IN THE AS FOUND CONDITION DUE TO A DAMAGED AND LEAKING O-RING. TECH SPEC 3.7.9, IN PART,

REQUIRES THIS SNUBBER TO BE OPERABLE. THIS EVENT WAS DUE TO A DAMAGED AND LEAKING O-RING. THE SNUBBER WAS REBUILT, SATISFACTORILY TESTED, REINSTALLED AND DECLARED OPERABLE AT 0330 ON 10-29-82. AN ENGINEERING EVALUATION HAS BEEN PERFORMED VERIFYING THAT THERE WAS NO EVIDENCE OF DAMAGE TO ANY OF THE PIPING SUPPORTS OR RESTRAINTS IN THE VICINITY OF THE SNUBBER.

[102] FARLEY 2 DOCKET 50-364 LER 82-047
 AREA TEMPERATURE MONITORING MISSED.
 EVENT DATE: 112482 REPORT DATE: 122382 NSSS: WE TYPE: PWR
 SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: COMPONENT CODE NOT APPLICABLE
 CAUSE: NONLICENSED OPERATOR ERROR.

(NSIC 180214) DURING SURVEILLANCE TEST REVIEW, IT WAS DETERMINED THAT FNP-2-STP-63.0 (AREA TEMPERATURE MONITORING) HAD NOT BEEN PERFORMED WITHIN THE REQUIRED TECH SPEC TIME INTERVAL. TECH SPEC 4.7.13 REQUIRES THAT THE SURVEILLANCE BE PERFORMED DAILY. THE SURVEILLANCE HAD BEEN LAST COMPLETED AT 1812 ON 11-22-82. TECH SPEC 4.7.13 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS ATTRIBUTED TO PERSONNEL ERROR. FNP-2-STP-1.0 (OPERATIONS DAILY AND SHIFT SURVEILLANCE REQUIREMENTS), WHICH SCHEDULES DAILY OPERATIONS SURVEILLANCE TESTING, HAS BEEN REVISED TO INCLUDE THE PERFORMANCE OF FNP-2-STP-63.0. FNP-2-STP-63.0 WAS SATISFACTORILY COMPLETED.

[103] FARLEY 2 DOCKET 50-364 LER 82-050
 2 SOURCE RANGE CHANNELS FAIL.
 EVENT DATE: 112482 REPORT DATE: 122382 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: FAULTY DETECTOR; FAULTY POWER SUPPLY.

(NSIC 180221) SOURCE RANGE CHANNEL N32 WAS DECLARED INOPERABLE DUE TO ERRATIC READINGS. SOURCE RANGE CHANNEL N31 HAD PREVIOUSLY BEEN DECLARED INOPERABLE DUE TO ERRATIC READINGS. TECH SPEC 3.3.1, IN PART, REQUIRES ONE SOURCE RANGE CHANNEL TO BE OPERABLE DURING PLANT SHUTDOWN. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. A SIMILAR OCCURRENCE WAS REPORTED IN LER-82-048/03L-0. THIS EVENT WAS DUE TO A FAULTY DETECTOR ON N31 AND A FAULTY HIGH VOLTAGE POWER SUPPLY CABLE CONNECTOR ON N32. FOLLOWING REPLACEMENT OF THE DETECTOR N31 WAS DECLARED OPERABLE ON 11-25-82. THE CABLE CONNECTOR WAS REPLACED AND N32 WAS RETURNED TO SERVICE ON 11-26-82.

[104] FARLEY 2 DOCKET 50-364 LER 82-048
 SOURCE RANGE CHANNEL INOPERABLE DUE TO VOLTAGE LOSS.
 EVENT DATE: 112782 REPORT DATE: 122382 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: FAULTY HIGH VOLTAGE CONNECTOR.

(NSIC 180218) SOURCE RANGE CHANNEL N-32 WAS DECLARED INOPERABLE DUE TO A LOSS OF DETECTOR VOLTAGE (SOURCE RANGE CHANNEL N-31 HAD PREVIOUSLY BEEN DECLARED INOPERABLE AT 0645 ON 11-27-82 DUE TO A FAULTY HIGH VOLTAGE POWER SUPPLY). TECH SPEC 3.3.1, IN PART, REQUIRES ONE SOURCE RANGE CHANNEL TO BE OPERABLE DURING PLANT SHUTDOWN. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO A FAULTY HIGH VOLTAGE CONNECTOR. FOLLOWING REPLACEMENT OF THE CONNECTOR AND SATISFACTORY COMPLETION OF FNP-2-STP-41.1 (SOURCE RANGE FUNCTIONAL CHECK CHANNEL N-32), SOURCE RANGE CHANNEL N-32 WAS DECLARED OPERABLE.

[105] FARLEY 2 DOCKET 50-364 LER 82-049
 2 CONTAINMENT ATMOSPHERE MONITORS INOPERABLE WHEN PUMP TRIPS.
 EVENT DATE: 120182 REPORT DATE: 122382 NSSS: WE TYPE: PWR
 SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: RELAYS

CAUSE: DEFECTIVE HIGH FLOW RELAY.

(NSIC 180219) CONTAINMENT ATMOSPHERE ACTIVITY MONITOR R-11 (PARTICULATE MONITOR) AND R-12 (GASEOUS MONITOR) WERE DECLARED INOPERABLE WHEN THE VACUUM PUMP TRIPPED DUE TO AN ERRONEOUS HIGH FLOW SIGNAL. TECH SPEC 3.4.7.1 REQUIRES R-11 AND R-12 TO BE OPERABLE. TECH SPEC 3.4.7.1 ACTION STATEMENT REQUIREMENTS WERE MET. SIMILAR OCCURRENCES WERE REPORTED IN LER 82-038/03L-0 AND LER 82-025/03L-0. THIS EVENT WAS ATTRIBUTED TO A DEFECTIVE HIGH FLOW RELAY. THE RELAY WAS REPLACED AND R-11 AND R-12 WERE RETURNED TO SERVICE.

[106] FARLEY 2 DOCKET 50-364 LER 82-051
RPS FEED FLOW INDICATOR FAILS.
EVENT DATE: 120382 REPORT DATE: 122982 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: VALVES
CAUSE: LEAKY EQUALIZING VALVE.

(NSIC 179962) THE INSTRUMENTATION CHANNEL ASSOCIATED WITH FEED FLOW INDICATOR FI 496 WAS DECLARED INOPERABLE WHEN THE INDICATOR FAILED LOW. TECH SPEC 3.3.1, IN PART, REQUIRES FI 496 TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO A LEAKING EQUALIZER VALVE. THE VALVE WAS REPAIRED AND FOLLOWING THE SATISFACTORY PERFORMANCE OF FNP-2-STP-215.5A (MAIN FEEDWATER FT 496 LOOP CALIBRATION AND FUNCTIONAL TEST), FI 496 INSTRUMENTATION CHANNEL WAS RETURNED TO SERVICE AT 1308 ON 12/04/82.

[107] FARLEY 2 DOCKET 50-364 LER 82-052
POST ACCIDENT HYDROGEN ANALYZER FAILS.
EVENT DATE: 121182 REPORT DATE: 123082 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: FAULTY CELL AND POWER SUPPLY BOARD.

(NSIC 180182) DURING THE PERFORMANCE OF FNP-2-STP-220.9B (POST ACCIDENT HYDROGEN ANALYZER 2B CALIBRATION AND FUNCTIONAL TEST), THE 2B POST ACCIDENT HYDROGEN ANALYZER WAS DECLARED INOPERABLE WHEN THE LOCAL METER FAILED LOW AND THE ANALYZER AND CELL FAILURE LIGHTS ENERGIZED. TECH SPEC 3.6.4.1, IN PART, REQUIRES THE 2B POST ACCIDENT HYDROGEN ANALYZER TO BE OPERABLE. TECH SPEC 3.6.4.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS ATTRIBUTED TO A FAULTY HYDROGEN ANALYZER CELL AND POWER SUPPLY BOARD. THE COMPONENTS WERE REPLACED AND FOLLOWING SATISFACTORY PERFORMANCE OF FNP-2-STP-220.9B, THE 2B POST ACCIDENT HYDROGEN ANALYZER WAS DECLARED OPERABLE.

[108] FITZPATRICK DOCKET 50-333 LER 82-030 REV 1
UPDATE ON OUT OF CALIBRATION ROD BLOCK MONITOR.
EVENT DATE: 070982 REPORT DATE: 121382 NSSS: GE TYPE: BWR
SYSTEM: ENGRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: INSTRUMENT DRIFT.

(NSIC 180150) UPDATE REPORT-PREVIOUS REPORT DATED 7-30-82. DURING NORMAL OPERATION, WHILE CONDUCTING SURVEILLANCE, ROD BLOCK MONITOR B WAS FOUND OUT OF CALIBRATION WHEN REQUIRED TO BE OPERABLE BY TECH SPEC TABLE 3.2-3. THE SETPOINT CORRESPONDING TO 100 PERCENT FLOW WAS APPROXIMATELY 0.7 PERCENT ABOVE THE TECH SPEC VALUE OF 108 PERCENT. ROD BLOCK MONITOR A WAS VERIFIED FULLY OPERABLE JUST PRIOR TO THE START OF SURVEILLANCE ON ROD BLOCK MONITOR B. INSTRUMENT DRIFT WAS THE CAUSE. FOLLOWING RECALIBRATION THE INSTRUMENT WAS RETURNED TO SERVICE LATER THE SAME DAY. SEE ATTACHMENT FOR ADDITIONAL DETAILS.

[109] FITZPATRICK DOCKET 50-333 LER 82-051 REV 1
 UPDATE ON DRIFT IN REACTOR LOW WATER LEVEL SWITCH.
 EVENT DATE: 110982 REPORT DATE: 120782 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180131) UPDATE REPORT-PREVIOUS REPORT DATE 11-24-82. DURING NORMAL OPERATIONS WHILE CONDUCTING SURVEILLANCE TESTING ON THE REACTOR LOW WATER SCRAM SWITCH 02-3-LIS-101D, SETPOINT WAS FOUND LESS CONSERVATIVE THAN GREATER THAN 12.5 INCHES OF WATER AS REQUIRED BY TECH SPEC TABLE 3.1-1. THE FOUND VALUE WAS 12.1 INCHES OF WATER. SLIGHT INSTRUMENT DRIFT WAS THE CAUSE. CORRECTIVE ACTION CONSISTED OF IMMEDIATE ADJUSTMENT OF THE SETPOINT WITHIN THE TECH SPEC REQUIRED VALUE AND INCREASING THE TEST FREQUENCY FOR TREND OBSERVATION. SEE ATTACHMENT FOR ADDITIONAL DETAILS.

[110] FITZPATRICK DOCKET 50-333 LER 82-053
 LPCI POWER SUPPLY BATTERY INOPERABLE.
 EVENT DATE: 120882 REPORT DATE: 122982 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: BATTERIES & CHARGERS
 CAUSE: DEFECTIVE CELL.

(NSIC 180216) DURING SURVEILLANCE TESTING OF THE LOW PRESSURE COOLANT INJECTION (LPCI) INDEPENDENT POWER SUPPLY BATTERY B, ONE CELL WAS DISCOVERED OUT OF SPECIFICATION LIMITS FOR CELL VOLTAGE. THE LPCI B SIDE BATTERY WAS REMOVED FROM SERVICE IN ORDER TO REPLACE THE DEFECTIVE CELL WITH A TEMPORARY JUMPER UNTIL A NEW CELL IS DELIVERED TO THE SITE. OTHER LPCI COMPONENTS WERE TESTED SATISFACTORILY AS REQUIRED BY TECH SPEC 4.9.F. THE DEFECTIVE CELL WAS NUMBER 166 LOCATED IN A 186 CELL BATTERY OF THE B SIDE LPCI INDEPENDENT POWER SUPPLY. THE CELL WAS REMOVED AND REPLACED BY TWO 4/0 AWG COPPER CABLES AND THE SYSTEM WAS RESTORED TO A FULLY OPERABLE STATUS LATER THAT DAY. CONTINUED SURVEILLANCE OF BOTH A & B LPCI BATTERIES WILL ENSUE IN ACCORDANCE WITH TECH SPEC 4.9.F.

[111] FITZPATRICK DOCKET 50-333 LER 82-054
 HPCI INOPERABLE DUE TO PRESSURE SWITCH PROBLEMS.
 EVENT DATE: 121382 REPORT DATE: 122982 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INCOMPLETE TESTING.

(NSIC 180215) WHILE CONDUCTING SURVEILLANCE TESTING OF THE HIGH PRESSURE TURBINE STEAM HIGH FLOW CONTAINMENT ISOLATION SWITCHES, 23DPIS-76 AND 77, AS REQUIRED BY TECH SPEC 4.2-2 DIFFICULTY WAS EXPERIENCED IN INITIATING THE TRIP (LESS THAN 106 INCHES OF WATER) ON DPIS-76 AND IN VENTING THE LOW PRESSURE SIDE OF DPIS-77. INVESTIGATION OF THE DIFFICULTY WAS IMMEDIATELY INITIATED AND THE HPCI SYSTEM WAS DECLARED INOPERABLE. INVESTIGATION REVEALED THE INSTRUMENT SURVEILLANCE PROCEDURE THAT GOVERNS THIS TEST WAS INCOMPLETE IN THAT THE PROCEDURE DID NOT NOTE THE PRESENCE OF INSTALLED SNUBBERS IN THE LOW SIDE LINES OF THE DIFFERENTIAL PRESSURE SWITCHES. SEE ATTACHMENT FOR ADDITIONAL DETAILS.

[112] FITZPATRICK DOCKET 50-333 LER 82-058
 MOLLUSK MANGANESE CONCENTRATION EXCEEDS LIMIT.
 EVENT DATE: 121782 REPORT DATE: 122982 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
 CAUSE: BIOACCUMULATION.

(NSIC 180345) THE DETECTED LEVEL OF MN-54 IN THE FITZPATRICK (ON-SITE) AND THE NINE-MILE POINT (ON-SITE) MOLLUSK SAMPLES ARE 10 OR MORE TIMES GREATER THAN THE CONTROL LOCATION (OFF-SITE) RESULTS FOR THE SAME SAMPLE PERIOD. THE CONTROL STATION 10 TIMES VALUE IS BASED ON 10 TIMES AN LLD VALUE (4.66 SIGMA). A

POSSIBLE EXPLANATION FOR THE EXISTENCE OF THE 10 TIMES CONCENTRATION OF MN-54 IN THE MOLLUSK SAMPLES COLLECTED IS THE VERY HIGH BIOACCUMULATION FACTOR (CONCENTRATION FACTOR). DUE TO THE FACT THAT STABLE MANGANESE IS AN ESSENTIAL TRACE ELEMENT IMPORTANT TO FRESH WATER MOLLUSKS, A BIOACCUMULATION FACTOR OF UP TO 1,600,000 CAN EXIST (MEAN VALUE 3,000). THE BIOACCUMULATION FACTOR WILL VARY WITH THE CONCENTRATION OF MANGANESE IN THE LAKE. BECAUSE OF THIS HIGH CONCENTRATION FACTOR, TRACE QUANTITIES OF MN-54 WILL BE ACCUMULATED IN THE MOLLUSKS WHICH ARE INDIGENOUS TO THE SITE.

[113] FITZPATRICK DOCKET 50-333 LER 83-001
 FISH IMPINGEMENT RATE EXCEEDS LIMIT.
 EVENT DATE: 123082 REPORT DATE: 011383 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
 CAUSE: BAD WEATHER.

(NSIC 180365) THE IMPINGEMENT RATE EXCEEDED 20,000 FISH FOR A 24 HOUR SAMPLE. THE SAMPLE COLLECTED ON DECEMBER 30 CONTAINED 20,229 FISH. PRIOR TO THIS SAMPLE THE IMPINGEMENT RATES AT THE FITZPATRICK PLANT WERE LOW WITH RATES OF LESS THAN 100 FISH/24 HR. BASED ON THE FOUR PREVIOUS IMPINGEMENT COLLECTIONS FOR THE MONTH OF DECEMBER 1982. THE FIVE DOMINANT SPECIES COLLECTED IN THE DECEMBER 30 SAMPLE (50 INDIVIDUALS) WERE RAINBOW SMELT (18,899), ALEWIFE (807), SPOTTAIL SHINER (216), WHITE PERCH (97), AND WHITE BASS (73). A TOTAL OF 17 DIFFERENT SPECIES WERE IDENTIFIED IN THE SAMPLE. THIS DRAMATIC INCREASE IN THE IMPINGEMENT RATE WAS DUE TO BAD WEATHER CONDITIONS EXPERIENCED DURING THE SAMPLING ON DECEMBER 29-30 AND THE LARGE NUMBERS OF YOUNG-OF-THE-YEAR AND SUB-ADULT FISH THAT INHABIT THE SHORE ZONE DURING THIS TIME OF THE YEAR.

[114] FT. ST. VRAIN DOCKET 50-267 LER 82-043
 PCRV COOLING WATER TEMPERATURE FALLS BELOW LIMIT.
 EVENT DATE: 102882 REPORT DATE: 112482 NSSS: GA TYPE: HTGR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VESSELS, PRESSURE
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180059) DURING OCTOBER 27 AND 28, 1982, THE AVERAGE OF THE PCRV COOLING WATER SYSTEM INLET AND OUTLET TEMPERATURES FELL BELOW THE 100F MINIMUM SPECIFIED BY TECH SPEC LCO 4.2.15(E). THE REACTOR WAS IN A COLD SHUTDOWN MODE DURING THE OCCURRENCE. SIMILAR OCCURRENCES: RO'S 81-007, 79-07, AND 77-28. INSUFFICIENT HEAT WAS AVAILABLE TO MAINTAIN THE LOOP AVERAGES OF THE PCRV COOLING SYSTEM INLET AND OUTLET TEMPERATURES ABOVE THE LCO LIMIT WHEN BOTH OF THE LOOPS WERE IN SERVICE. AUXILIARY HEAT WAS MADE AVAILABLE. ALL LICENSED OPERATORS WILL BE REINSTRUCTED IN PCRV COOLING WATER SYSTEM OPERATION.

[115] FT. ST. VRAIN DOCKET 50-267 LER 82-046
 2 ANALYTICAL SYSTEM MOISTURE MONITORS INOPERABLE.
 EVENT DATE: 113082 REPORT DATE: 122982 NSSS: GA TYPE: HTGR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: WATER IN SAMPLE LINES.

(NSIC 180600) ON TWO OCCASIONS, ON NOVEMBER 30, 1982, WITH THE REACTOR AT LESS THAN 1% THERMAL POWER, TWO ANALYTICAL SYSTEM MOISTURE MONITORS, ME-9306 AND ME-9307, WERE TAKEN OUT OF SERVICE, LEAVING ONLY ONE OPERABLE MONITOR IN SERVICE. THIS IS REPORTABLE AS A DEGRADED MODE OF LCO 4.4.5 PER TECH SPEC AC 7.5.2(B)2. RELATED OCCURRENCE IS RO 79-38. HIGH MOISTURE LEVELS IN THE PRIMARY COOLANT RESULTED IN WATER CONDENSATION WITHIN THE SAMPLE LINES TO THE MOISTURE MONITORS. THIS SITUATION WAS SUSPECTED OF CAUSING ERRONEOUS REACTOR DEWPOINT TEMPERATURE INDICATIONS. IN BOTH EVENTS, THE MONITORS WERE TAKEN OUT OF SERVICE, THE LINES WERE PURGED WITH HELIUM, AND THE MONITORS WERE RETURNED TO SERVICE.

[116] FT. ST. VRAIN DOCKET 50-267 LER 82-047
 CIRCULATOR PPS CIRCUITRY FAILS.
 EVENT DATE: 120182 REPORT DATE: 122982 NSSS: GA TYPE: HTGR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LOGIC CHIP FAILURE.

(NSIC 180599) DURING SCHEDULED SURVEILLANCE TESTING ON THE "LOSS OF BEARING WATER" PPS CIRCUITRY FOR 'C' CIRCULATOR, THE 'A' LOGIC C12 MODULE WAS FOUND TO BE INOPERABLE. THIS CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.4.1 AND IS REPORTABLE PER TECH SPEC AC 7.5.2(B)1. THE CAUSE OF THIS EVENT WAS THE FAILURE OF A CHIP (Z-32) IN THE CT-2A2 LOGIC MODULE OF THE PPS. THE CHIP WAS REPLACED, THE MODULE WAS FUNCTIONALLY TESTED, AND THE SURVEILLANCE TEST WAS SUCCESSFULLY COMPLETED.

[117] FT. ST. VRAIN DOCKET 50-267 LER 82-048
 HELIUM PURIFICATION COOLER LEAKS.
 EVENT DATE: 120782 REPORT DATE: 010683 NSSS: GA TYPE: HTGR
 SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: HEAT EXCHANGERS
 CAUSE: UNKNOWN.

(NSIC 180598) WHILE PERFORMING A SPECIAL LEAK ISOLATION TEST, IT WAS DETERMINED THAT A PRIMARY COOLANT TO PURIFICATION COOLING WATER SYSTEM LEAK WAS PRESENT. THE LEAK WAS IDENTIFIED AS BEING IN THE B PURIFICATION TRAIN, HELIUM PURIFICATION COOLER. THE COOLER IS A SINGLE PASS, COIL TUBE HEAT EXCHANGER. THIS EVENT IS BEING REPORTED PER AC 7.5.2(B)4 OF THE TECH SPECS. DUE TO THE DESIGN AND PHYSICAL LOCATION OF THE COOLER, THE EXACT CAUSE AND INTERNAL LOCATION OF THE LEAK IS NOT KNOWN. A SYSTEM MODIFICATION HAS BEEN PERFORMED TO FACILITATE CONTINUED OPERATION WITH THE COOLER UNTIL A COMPLETE REPLACEMENT UNIT IS RECEIVED AND INSTALLED.

[118] FT. ST. VRAIN DOCKET 50-267 LER 82-049
 STEAM GENERATOR LEAKS.
 EVENT DATE: 120882 REPORT DATE: 122282 NSSS: GA TYPE: HTGR
 SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: HEAT EXCHANGERS
 CAUSE: UNKNOWN.

(NSIC 180597) A SECONDARY TO PRIMARY SIDE LEAK WAS DISCOVERED IN THE EES SECTION OF THE B-2-3 MODULE IN THE LOOP 2 STEAM GENERATOR. THE LEAK IS ASSUMED TO HAVE DEVELOPED FOLLOWING A REACTOR SCRAM TRANSIENT ON SEPTEMBER 30, 1982. ACCOMPANYING OCCURRENCES REPORTED IN RO 82-044. SIMILAR REPORT IS RO 77-42. THE ACTUAL CAUSE IS NOT IDENTIFIED, BUT APPEARS TO BE RANDOM IN NATURE. THE AFFECTED STEAM GENERATOR WAS ISOLATED. EFFORTS TO IDENTIFY THE PRECISE LOCATION OF THE LEAK AND TO MAKE NECESSARY REPAIRS ARE IN PROGRESS. UPON COMPLETION OF THESE EFFORTS, A FINAL REPORT WILL BE SUBMITTED.

[119] FT. ST. VRAIN DOCKET 50-267 LER 82-050
 GAS WASTE VACUUM TANK RUPTURE DISC BURST.
 EVENT DATE: 121282 REPORT DATE: 011183 NSSS: GA TYPE: HTGR
 SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: VALVES
 CAUSE: EXCESSIVE WATER INGRESS TO SYSTEM.

(NSIC 180020) THE GAS WASTE VACUUM TANK RUPTURE DISC BURST DUE PRESUMABLY TO EXCESSIVE WATER INGRESS TO THE SYSTEM. THIS RESULTED IN A UNAUTHORIZED GAS WASTE RELEASE VIA THE FILTERED, MONITORED, AND RECORDED REACTOR PLANT EXHAUST STACK. THIS CONSTITUTES A DEGRADED MODE OF LCO 4.8.1(A) AND IS REPORTABLE PER TECH SPEC AC 7.5.2(B)4. SIMILAR REPORTS ARE: RO'S 82-009, 82-022, AND 82-042. A SUSPECTED GAS WASTE COMPRESSOR COOLING WATER LEAK IS BELIEVED TO HAVE INDIRECTLY CAUSED THE RUPTURE DISC TO BURST. ONE COMPRESSOR WAS RENDERED INOPERABLE, AND

THE OTHER WAS OPERATING AT LESS THAN RATED CAPACITY, WHILE SYSTEM INPUTS REMAINED NORMAL. THE RUPTURE DISC WAS REPLACED, AND THE COMPRESSOR WAS REPAIRED.

[120] FT. ST. VRAIN DOCKET 50-267 LER 82-051
 TWO STEAM PIPE RUPTURE CHANNELS INOPERABLE.
 EVENT DATE: 122082 REPORT DATE: 011983 NSSS: GA TYPE: HTGR
 SYSTEM: ENGRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MICROPHONE FAILURE; DRIFT.

(NSIC 180359) THE PERFORMANCE OF A TEST IDENTIFIED ONE OF SIX STEAM PIPE RUPTURE (UNDER THE PRESTRESSED CONCRETE REACTOR VESSEL) AND ONE OF TWELVE STEAM PIPE RUPTURE (PIPE CAVITY) CHANNELS AS INOPERABLE DUE TO LOW RESPONSE TO A CALIBRATED NOISE SOURCE. THIS IS REPORTABLE AS A DEGRADED MODE OF LCO 4.4.1, TABLE 4.4-2 PER TECH SPEC AC 7.5.2(B)2. RELATED OCCURRENCES ARE RO'S: 82-040, 81-042, 81-01, AND 80-48. FAILURE OF A RESISTOR MADE MICROPHONE XE-93470A INOPERABLE. THIS MICROPHONE WAS REPLACED WITH A CALIBRATED SPARE. ONE OTHER INDIVIDUAL MICROPHONE/TRANSMITTER WAS FOUND INOPERABLE DUE TO INSTRUMENT DRIFT. IT WAS ADJUSTED TO ACCEPTABLE LEVELS, AND THE SURVEILLANCE TEST WAS SUCCESSFULLY COMPLETED. PUBLIC SERVICE COMPANY'S NUCLEAR ENGINEERING DIVISION IS CURRENTLY EVALUATING THE DETECTION SYSTEM, AND THE RESULTS WILL BE INCLUDED IN A FUTURE SUPPLEMENTAL REPORT.

[121] FT. ST. VRAIN DOCKET 50-267 LER 82-053
 FUEL STORAGE WELL PRESSURE EXCEEDS LIMIT.
 EVENT DATE: 122982 REPORT DATE: 012883 NSSS: GA TYPE: HTGR
 SYSTEM: SPENT FUEL STORAGE FACILITIES COMPONENT: BLOWERS
 CAUSE: COMPRESSOR OUT FOR MAINTENANCE.

(NSIC 180336) ON DECEMBER 29, 1982, AT 2200 HOURS, THE PRESSURE IN THE FUEL STORAGE WELLS SLIGHTLY EXCEEDED ATMOSPHERIC PRESSURE AND REMAINED ABOVE ATMOSPHERIC PRESSURE UNTIL 0800 HOURS ON DECEMBER 30, 1982. THIS CONSTITUTES A DEGRADED MODE OF LCO 4.7.3(C) AND IS REPORTABLE PER TECH SPEC AC 7.5.2(B)2. RELATED REPORT IS RO 82-050. ONE GAS WASTE COMPRESSOR WAS OUT OF SERVICE FOR MAINTENANCE. THE SECOND COMPRESSOR WAS PUMPING AT LESS THAN RATED CAPACITY AND COULD NOT ACCOMMODATE ALL SYSTEM INPUTS AT THAT TIME. BOTH COMPRESSORS WERE REPAIRED AND RETURNED TO NORMAL SERVICE. THE COMPRESSORS ARE NORWALK, TYPE TR-S3T, SIZE 9 X 8.

[122] FT. ST. VRAIN DOCKET 50-267 LER 82-052
 8 SHOCK SUPPRESSORS INOPERABLE.
 EVENT DATE: 122982 REPORT DATE: 012883 NSSS: GA TYPE: HTGR
 SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 CAUSE: PIPE MOVEMENT; SEAL LEAKAGE.

(NSIC 180350) EIGHT CLASS I HYDRAULIC SHOCK SUPPRESSORS WERE FOUND INOPERABLE DUE TO IMPROPER RESERVOIR ORIENTATION OR LACK OF OIL. THESE EVENTS CONSTITUTE OPERATION IN A DEGRADED MODE OF LCO 4.3.10 AND ARE REPORTABLE PER TECH SPEC AC 7.5.2(B)2. SIMILAR REPORTS ARE RO'S: 81-026, 81-032, 81-040, 81-043, 81-051, 81-056, 81-059, 81-064, 81-074, 82-001, 82-008, 82-016, 82-032, AND 82-037. EVENT NOS. 1 AND 2: PIPE MOVEMENT CAUSED ATLANTA SNUBBER OIL RESERVOIRS TO INVERT. SNUBBERS WERE REBUILT, TESTED, AND RE-INSTALLED. EVENT NOS. 3 THROUGH 8: O-RING AND SEAL LEAKAGE CAUSED A LACK OF OIL LEVEL IN ITT GRINNELL SNUBBER RESERVOIRS. SNUBBERS WERE EITHER REBUILT, TESTED, AND RE-INSTALLED OR REPLACED WITH QUALIFIED SPARES, TESTED, AND RE-INSTALLED.

[123] FT. ST. VRAIN DOCKET 50-267 LER 82-054
 PCRV COOLING WATER TEMPERATURE EXCEEDS LIMIT.
 EVENT DATE: 122982 REPORT DATE: 012863 NSSS: GA TYPE: HTGR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VESSELS, PRESSURE
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180356) THE SERVICE WATER FLOW TO THE PCRV COOLING WATER HEAT EXCHANGERS WAS ISOLATED TO HELP MAINTAIN THE TEMPERATURE OF THE PCRV COOLING WATER SYSTEM WHEN THE REACTOR WAS IN A SHUTDOWN CONDITION. THE OUTLET TEMPERATURES EXCEEDED THE 120F LIMIT SPECIFIED BY LCO 4.2.15(B) WHEN THE REACTOR WAS TAKEN CRITICAL. THIS IS REPORTABLE AS A DEGRADED MODE OF LCO 4.2.15(B) PER TECH SPEC AC 7.5.2(B)2. RELATED OCCURRENCES ARE RO'S 82-045, 82-043, 81-048, 81-007, 81-001, 80-46, 79-07, AND 77-28. WITH THE SERVICE WATER FLOW ISOLATED TO THE PCRV COOLING WATER EXCHANGERS, NO COOLING SOURCE WAS AVAILABLE WHEN THE REACTOR WAS TAKEN CRITICAL. SERVICE WATER WAS RESTORED TO THE EXCHANGERS. OPERATION OF THE PCRV COOLING WATER SYSTEM WILL BE REVIEWED WITH ALL LICENSED OPERATORS. A DESIGN CHANGE IS IN PROGRESS TO PROVIDE EARLY WARNING OF SUCH CONDITIONS APPROACHING.

[124] FT. ST. VRAIN DOCKET 50-267 LER 83-001
 INSUFFICIENT NUMBER OF MOISTURE MONITOR CHANNELS OPERABLE.
 EVENT DATE: 010383 REPORT DATE: 011783 NSSS: GA TYPE: HTGR
 SYSTEM: ENGRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180357) IT WAS DETERMINED THAT DURING THE PERIOD 0700 HOURS, JANUARY 1, 1983, TO 0200 HOURS, JANUARY 2, 1983, THE REACTOR WAS OPERATED WITHOUT THE MINIMUM NUMBER OF OPERABLE MOISTURE MONITOR CHANNELS AS REQUIRED PER TABLE 4.4.1 OF LCO 4.4.1. AS THIS EVENT EXCEEDED 12 HOURS WITHOUT THE REACTOR BEING SHUTDOWN, IT IS REPORTABLE PER AC 7.5.2(A)6 OF TECH SPEC. SIMILAR REPORTS: RO'S 78-08, 78-13, AND 78-40. DUE TO AN ERRONEOUS INTERPRETATION OF TABLE 4.4-1 OF LCO 4.4.1, CONCERNING THE MINIMUM NUMBER OF OPERABLE MOISTURE MONITOR CHANNELS, PROPER CORRECTIVE ACTIONS WERE NOT TAKEN. THE OPERATING STAFF WAS REINSTRUCTED ON THE SEVERITY OF MISINTERPRETATION OF TECH SPEC. A TECH SPEC CHANGE WILL BE SUBMITTED TO CLARIFY NOTE (F) IN LCO 4.4.1 AND PREVENT FUTURE OCCURRENCES OF THIS TYPE.

[125] GRAND GULF 1 DOCKET 50-416 LER 82-021 REV 1
 UPDATE ON MISSED LIQUID EFFLUENT MONITORING SYSTEM TEST.
 EVENT DATE: 072082 REPORT DATE: 121582 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INADEQUATE SYSTEM DESIGN.

(NSIC 180051) A LIMITING CONDITION FOR OPERATION WAS ENTERED DUE TO QUARTERLY FUNCTIONAL TEST OF THE RADIOACTIVE LIQUID EFFLUENT MONITORING SYSTEM NOT BEING PERFORMED BY ITS LATE DATE OF JULY 9, 1982, AS REQUIRED BY TECH SPEC 4.3.7.11. THE EFFLUENT MONITOR WAS THEREFORE DECLARED INOPERABLE. THE SYSTEM DID NOT MEET THE REQUIREMENTS OF TECH SPEC 4.3.7.11 FOR AUTOMATIC ISOLATION OF THE PATHWAY ON A DOWNSCALE FAILURE. THE EVENT WAS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE SYSTEM DESIGN WAS INADEQUATE. A DESIGN CHANGE WAS MADE AND IMPLEMENTED ON A MAINTENANCE WORK ORDER TO PROVIDE AUTOMATIC ISOLATION ON A DOWNSCALE FAILURE AND ANNUNCIATE IN THE CONTROL ROOM. THE MAINTENANCE WORK ORDER WAS COMPLETED AUGUST 27, 1982. THE LCO WAS CLOSED SEPTEMBER 3, 1982, FOLLOWING COMPLETION OF THE FUNCTIONAL TEST. THIS IS A FINAL REPORT.

[126] GRAND GULF 1 DOCKET 50-416 LER 82-011 REV 1
 UPDATE ON HIGH DIESEL GENERATOR COOLING JACKET TEMPERATURE.
 EVENT DATE: 072282 REPORT DATE: 121482 NSSS: GE TYPE: BWR
 SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: VALVES

CAUSE: COOLING WATER OUTLET VALVE FAILURE.

(NSIC 180049) DURING FUNCTIONAL TESTING OF DIESEL GENERATOR 12, THE DIESEL TRIPPED DUE TO HIGH WATER JACKET TEMPERATURE. AN INVESTIGATION OF THE FAILURE REVEALED ELEVATED COOLING WATER TEMPERATURE WAS CAUSED BY AN ISOLATED COOLING WATER OUTLET VALVE. THE PROTECTIVE TRIPS FUNCTIONED AS DESIGNED. THE DIESEL GENERATOR FAILURE IS CONSIDERED INVALID IN ACCORDANCE WITH REGULATORY GUIDE 1.108, SECTION C.2E(2). THE EVENT WAS REPORTED PURSUANT TO TECH SPECS 4.8.1.1.3 AND 6.9.1.12. THIS IS A FINAL REPORT. THE INDICATOR ARROW ON THE PRATT MDT-5 OPERATOR GAVE FAULTY INDICATION AND SHOWED THE VALVE IN THE OPEN POSITION. FOR AN INTERIM PERIOD, INFORMATION TAGS WARNING OF THE PROBLEM WERE HUNG ON THE VALVE AND ALL SIMILAR VALVES UNTIL A DESIGN CHANGE COULD BE IMPLEMENTED TO ASSURE CORRECT INDICATION ON ALL PRATT BUTTERFLY VALVES WITH MDT-5 OPERATORS. WORK MODIFYING VALVE POSITION INDICATORS WAS COMPLETED OCTOBER 8, 1982.

[127] GRAND GULF 1 DOCKET 50-416 LER 82-031 REV 1
 UPDATE ON MISSING HVAC PENETRATION FIRE SEAL.
 EVENT DATE: 072282 REPORT DATE: 121582 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: CONSTRUCTION OVERSIGHT.

(NSIC 180197) DURING A SPECIAL INSPECTION BY THE FIRE-PROTECTION/SAFETY COORDINATOR, PENETRATION SEAL CV-19G WAS FOUND NOT INSTALLED. THE HVAC PENETRATION IS LOCATED ON THE 189 FOOT ELEVATION EAST PASSAGEWAY ROOM OC711 OF THE CONTROL BUILDING. THE EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.2. THE OPEN PENETRATION WAS A CONSTRUCTION OVERSIGHT. A MAINTENANCE WORK ORDER WAS RELEASED TO THE FIELD TO INSTALL THE SEAL. AN HOURLY FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.7.7.A UNTIL THE WORK TASK WAS COMPLETED. THIS IS A FINAL REPORT.

[128] GRAND GULF 1 DOCKET 50-416 LER 82-027 REV 1
 UPDATE ON 2 OPEN CONTAINMENT PENETRATIONS.
 EVENT DATE: 072782 REPORT DATE: 121482 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: INSTALLATION ERROR.

(NSIC 180200) DURING A SPECIAL INSPECTION IT WAS DISCOVERED THAT SEAL AV-8D WAS NOT INSTALLED IN A SPARE HVAC PENETRATION TO THE CONTAINMENT EXHAUST FILTER TRAIN ROOM. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7. ALSO AN OPEN PENETRATION IN THE SECONDARY CONTAINMENT ON THE 177 FOOT ELEVATION WAS FOUND WHICH CURRENT DRAWINGS DO NOT REFLECT. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 4.6.6.1.A.3. DRAWINGS ARE BEING REVISED TO INCLUDE THE PENETRATION. THE EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. A THREADED CONDUIT PLUG WAS IMMEDIATELY INSTALLED IN THE SECONDARY CONTAINMENT PENETRATION. A REQUEST FOR A DESIGN CHANGE HAS BEEN MADE TO SEAL THE FILTER TRAIN ROOM PENETRATION. AN HOURLY FIRE WATCH WAS ESTABLISHED FOR THE INTERIM. THIS IS AN INTERIM REPORT. A FINAL REPORT ADDRESSING ADDITIONAL CORRECTIVE ACTIONS WILL BE SUBMITTED UPON PENETRATION CLOSURE.

[129] GRAND GULF 1 DOCKET 50-416 LER 82-033 REV 1
 UPDATE ON HPCS DIESEL GENERATOR TRIP.
 EVENT DATE: 081482 REPORT DATE: 122082 NSSS: GE TYPE: BWP
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: RELAYS
 CAUSE: FAULTY TACHOMETER RELAY.

(NSIC 180195) HPCS DIESEL GENERATOR 13 STARTED (ON A LOW REACTOR VESSEL LEVEL INDICATION) AND TRIPPED ON OVERSPEED. THE DIESEL START FAILURE IS CONSIDERED A VALID FAILURE AND IS THE FIRST VALID FAILURE IN THE 10 VALID TESTS CONDUCTED

SINCE ISSUANCE OF THE OPERATING LICENSE. THE NORMAL POWER SUPPLY TO THE HPCS PUMP WAS AVAILABLE. THE FAILURE IS BEING REPORTED IN ACCORDANCE WITH TECH SPEC 4.8.1.1.3. CAUSE OF THE DIESEL START FAILURE IS ATTRIBUTED TO A FAULTY TACHOMETER RELAY. THE DYNALCO RELAY (PART NO. RT 2450A) WAS REPLACED AND THE SYSTEM WAS RESTORED ON AUGUST 18, 1982. THIS IS A FINAL REPORT.

[130] GRAND GULF 1 DOCKET 50-416 LER 82-063 REV 1
 UPDATE ON BROKEN CABLE PENETRATION FIRE SEALS.
 EVENT DATE: 090282 REPORT DATE: 121482 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: ELECTRICAL CONDUCTORS
 CAUSE: CABLE ROUTING.

(NSIC 180188) DURING SHUTDOWN SEVERAL FIRE-RATED CABLE PENETRATION SEALS WERE BROKEN ON FIELD TERMINATION CABINETS IN THE CONTROL ROOM. THE BROKEN SEALS COULD PROVIDE A PATH FOR FIRE TO SPREAD FROM THE AFFECTED CABINET. AN LCO WAS ENTERED AND AN HOURLY FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.7.7. THE SEALS WERE BROKEN IN ORDER TO ROUTE ADDITIONAL CABLE. UPON COMPLETION OF THE MAINTENANCE ACTIVITIES, THE SEALS WERE REPAIRED, AND THE LCO WAS LIFTED ON OCTOBER 30, 1982. ALL CORRECTIVE ACTION IS CONSIDERED COMPLETE. THIS IS BEING SUBMITTED AS A FINAL REPORT.

[131] GRAND GULF 1 DOCKET 50-416 LER 82-136
 SWITCHGEAR ROOM TEMPERATURE EXCEEDS LIMIT.
 EVENT DATE: 092782 REPORT DATE: 011483 NSSS: GE TYPE: BWR
 SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: COMPONENT CODE NOT APPLICABLE
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180367) AS A RESULT OF A QA AUDIT, IT WAS FOUND THAT THE TEMPERATURE IN THE DIVISION I SWITCHGEAR ROOM HAD EXCEEDED TECH SPEC 4.7.8 LIMIT OF 104F. THE DAILY LOGS DOCUMENT A TEMPERATURE OF 105F. OPERATIONS PERSONNEL FAILED TO IDENTIFY THIS AS A REPORTABLE EVENT. AT THE TIME OF THE EVENT, OPERATIONS PERSONNEL WERE NOT ADEQUATELY REVIEWING THE DAILY LOGS. SINCE THAT TIME THEY HAVE BEEN INSTRUCTED TO REVIEW THE LOGS FOR COMPLETENESS AND TECH SPEC VIOLATIONS, AND ARE CURRENTLY DOING SO.

[132] GRAND GULF 1 DOCKET 50-416 LER 82-107 REV 1
 UPDATE ON INOPERABLE VACUUM BREAKER POSITION INDICATORS.
 EVENT DATE: 101482 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DESIGN ERROR.

(NSIC 180186) WHEN ENTERING MODE 3 (FROM MODE 4) THE REQUIREMENTS OF TECH SPEC 3.6.5.C WERE NOT SATISFIED DUE TO THE DRYWELL POST-LOCA VACUUM BREAKER POSITION INDICATORS NOT BEING OPERABLE. AN LCO WAS ENTERED AND THE VACUUM BREAKERS WERE VERIFIED CLOSED ONCE PER 24 HOURS BY LOCAL INDICATION. THE LCO WAS LIFTED ON OCTOBER 27, 1982, WHEN THE PLANT REENTERED MODE 4. DRYWELL POST-LOCA VACUUM BREAKER POSITION INDICATORS PREVENTED PROPER VACUUM BREAKER OPERATION AT THE DESIGN REQUIREMENT OF 1.0 PSID, AND WERE REMOVED. A CORRECTION TO TECH SPEC AMEND. 4, ISSUED NOVEMBER 8, 1982, NOW REQUIRES OPERABILITY OF POSITION INDICATORS ON THE DRYWELL POST-LOCA ISOLATION VALVES IN LIEU OF THE VACUUM BREAKERS. THIS IS A FINAL REPORT.

[133] GRAND GULF 1 DOCKET 50-416 LER 82-126
 SEVERAL CONTROL ROOM FIRE DAMS BREACHED.
 EVENT DATE: 102682 REPORT DATE: 120182 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: REPLACEMENT OF SHORTED CABLE.

(NSIC 180250) IN THE PROCESS OF REPAIRING CABLES IN THE CONTROL ROOM SEVERAL FIRE DAMS AND PENETRATION SEALS WERE BROKEN. THESE DAMS PROVIDE A FIRE BARRIER BETWEEN THE CONTROL ROOM AND THE COMPUTER ROOM BELOW. AN HOURLY FIRE WATCH WAS ESTABLISHED AS REQUIRED BY TECH SPEC 3.7.7. THIS REPORT IS BEING SUBMITTED AS A SPECIAL REPORT REQUIRED BY TECH SPEC 3.7.7.A. THE FIRE BARRIERS WERE REMOVED TO REPLACE A SHORTED CABLE RUNNING FROM THE CONTROL ROOM TO THE COMPUTER ROOM. AFTER THE CABLE WAS REPLACED, THE FIRE DAMS WERE RESTORED; HOWEVER, WORK IS STILL PROGRESSING ON THE PENETRATION SEALS. THIS IS AN INTERIM REPORT. AN UPDATE WILL BE SUBMITTED BY FEBRUARY 2, 1983.

[134] GRAND GULF 1 DOCKET 50-416 LER 82-133
 LPCS AND LPCI INOPERABLE WHEN SUPPRESSION POOL DRAINED.
 EVENT DATE: 102782 REPORT DATE: 121782 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: ACCUMULATORS
 CAUSE: PAINTING OF CARBON STEEL COMPONENTS.

(NSIC 180180) THE SUPPRESSION POOL WAS DRAINED RESULTING IN RHR (LPCI MODE) AND LPCS BEING INOPERABLE. HPCS WAS STILL OPERABLE. AN LCO WAS ENTERED PURSUANT TO TECH SPEC 3.5.2. DRAINING COMMENCED ON OCTOBER 27, 1982 AND WAS COMPLETED ON OCTOBER 29, 1982, IN ACCORDANCE WITH TECH SPEC 3.5.3.B. THIS IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE SUPPRESSION POOL WAS DRAINED TO ALLOW PAINTING OF CARBON STEEL COMPONENTS IN THE POOL AREA. IN ACCORDANCE WITH TECH SPEC 3.5.2 AND 3.5.3, ALL ACTIONS REQUIRED FOR OPERATIONAL CONDITION 4 WERE OBSERVED. ALL SURVEILLANCE REQUIREMENTS OF TECH SPEC 4.5.3.2 WERE PERFORMED WHILE THE LCO WAS IN EFFECT. THE PAINTING WAS COMPLETED AND THE LCO WAS LIFTED ON DECEMBER 4, 1982. THIS IS BEING SUBMITTED AS A FINAL REPORT.

[135] GRAND GULF 1 DOCKET 50-416 LER 82-123 REV 1
 UPDATE ON BROKEN CABINET FIRE SEALS.
 EVENT DATE: 110282 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: MAINTENANCE ACTIVITIES.

(NSIC 180184) DURING COLD SHUTDOWN, ON NOVEMBER 2, 1982, FIRE BARRIER PENETRATIONS TO CABINETS 1H13P700A, B, D & E; 1H13P735 A & B; AND 1H13P714 A & B LOCATED IN CONTROL BUILDING, ELEVATION 166 FEET, WERE BROKEN IN ORDER TO PERFORM PLANNED MAINTENANCE ACTIVITIES. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7. AN HOURLY FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.7.7. THE PENETRATIONS WERE RESEALED AND THE LCO CLEARED ON DECEMBER 1, 1982. THIS IS A FINAL REPORT.

[136] GRAND GULF 1 DOCKET 50-416 LER 82-123
 FIRE BARRIERS PENETRATIONS TO 6 CABINETS BREACHED.
 EVENT DATE: 110282 REPORT DATE: 120182 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: PLANNED MAINTENANCE.

(NSIC 180249) DURING COLD SHUTDOWN ON NOVEMBER 2, 1982, FIRE BARRIER PENETRATIONS TO CABINETS 1H13P700 A, B, D, & E; 1H13P735A & B; AND 1H13P714A & B, LOCATED IN THE CONTROL BUILDING, ELEVATION 166 FEET, WERE BROKEN IN ORDER TO PERFORM PLANNED MAINTENANCE ACTIVITIES. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7. AN HOURLY FIRE WATCH WAS ESTABLISHED. THE PENETRATIONS WILL BE RESEALED WITHIN TWO WEEKS. THIS IS AN INTERIM REPORT. AN UPDATED REPORT WILL BE SUBMITTED BY FEBRUARY 2, 1983.

[137] GRAND GULF 1 DOCKET 50-416 LER 82-127
 RHR INOPERABLE DUE TO INCORRECTLY INSTALLED SSW VALVE.
 EVENT DATE: 110282 REPORT DATE: 120182 NSSS: GE TYPE: BWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
 CAUSE: CONSTRUCTION ERROR.

(NSIC 180251) WHILE THE REACTOR WAS IN COLD SHUTDOWN, (SDC) LOOP B OF THE RHR SYSTEM WAS DECLARED INOPERABLE IN ORDER TO PERFORM WORK ON A BUTTERFLY VALVE IN SSW LOOP B. THE DISK OF THE VALVE HAD BEEN INSTALLED BACKWARD. SSW LOOP B WAS TAGGED OUT TO PERFORM THE TASK. TECH SPEC 3.4.9.2 REQUIRES THAT TWO SDC LOOPS SHALL BE OPERABLE. HEAT REMOVAL CAPABILITY WAS NOT COMPROMISED DUE TO LACK OF DECAY HEAT AND THE AVAILABILITY OF RWCU. THE DISK OF THE BUTTERFLY VALVE WAS INSTALLED BACKWARD DUE TO CONSTRUCTION ERROR. SDC LOOP B WAS DECLARED INOPERABLE TO PERFORM THE WORK. THIS TASK WAS COMPLETED NOVEMBER 24, 1982, BUT A RETEST IS STILL REQUIRED. IN THE INTERIM RWCU IS BEING USED AS AN ALTERNATE HEAT REMOVAL METHOD. THIS IS AN INTERIM REPORT. AN UPDATED REPORT WILL BE SUBMITTED BY FEBRUARY 2, 1983.

[138] GRAND GULF 1 DOCKET 50-416 LER 82-128
 ECCS SYSTEMS WITHOUT POWER.
 EVENT DATE: 110282 REPORT DATE: 120182 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
 CAUSE: 2 DIESEL GENERATORS IN MAINTENANCE MODE.

(NSIC 180252) WHILE IN COLD SHUTDOWN ON NOVEMBER 2, 1982, STANDBY DIESEL GENERATOR 12 WAS PLACED IN THE MAINTENANCE MODE. AT THIS TIME DIESEL GENERATOR 11 WAS ALSO DOWN FOR MAINTENANCE. AN LCO WAS ENTERED PURSUANT TO TECH SPEC 3.8.1.2. THE SUPPRESSION POOL HAD BEEN DRAINED IN ACCORDANCE WITH TECH SPEC 3.5.3.B, AND THE ECC SYSTEMS OF DIVISIONS I & II WERE INOPERABLE IN ACCORDANCE WITH TECH SPEC 3.5.2. ON OCTOBER 27, 1982, THE SUPPRESSION POOL WAS DRAINED IN ACCORDANCE WITH TECH SPEC 3.5.3.B, DISABLING THE ECC SYSTEMS OF DIVISIONS I & II. THE INOPERABLE DIESEL GENERATORS POSED NO THREAT TO PLANT SAFETY. DIESEL GENERATOR 11 WAS REPAIRED AND RETURNED TO SERVICE ON NOVEMBER 18, 1982.

[139] GRAND GULF 1 DOCKET 50-416 LER 82-109
 DG AIR START RECEIVER PRESSURE FALLS BELOW LIMIT.
 EVENT DATE: 110282 REPORT DATE: 120182 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 CAUSE: BREAKERS TO AIR DRIERS OPEN.

(NSIC 180257) WHILE CONDUCTING THE DIVISION III DIESEL GENERATOR SURVEILLANCE TEST, IT WAS OBSERVED THAT THE AIR START RECEIVER PRESSURE WAS LESS THAN THE REQUIRED 175 PSIG. THE PLANT WAS IN COLD SHUTDOWN AND THE SUPPRESSION POOL WAS DRAINED. THIS CONDITION CONSTITUTED ENTERING AN LCO PER TECH SPEC 3.8.1.2. THE CIRCUIT BREAKER TO THE AIR DRYER WAS OPEN, PREVENTING THE COMPRESSOR FROM CHARGING THE AIR RECEIVER. THE OPEN BREAKER WAS CLOSED, ALLOWING THE COMPRESSOR TO CHARGE THE AIR RECEIVER TO GREATER THAN 175 PSIG. THE CAUSE OF THE BREAKER BEING OPEN IS UNKNOWN. THE SURVEILLANCE PROCEDURE WAS SUCCESSFULLY COMPLETED. AN UPDATED REPORT WITH RESULTS OF AN INVESTIGATION ON THE OPEN BREAKER WILL BE SUBMITTED BY FEBRUARY 2, 1983.

[140] GRAND GULF 1 DOCKET 50-416 LER 82-119
 AUX BUILDING SMOKE MONITOR FAILS TO RESET.
 EVENT DATE: 110482 REPORT DATE: 120282 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DUST ON DETECTORS.

(NSIC 180248) DURING SHUTDOWN, THE SMOKE DETECTORS IN THE ZONE COVERING THE

AUXILIARY BUILDING EAST CORRIDOR, ELEVATION 103 FEET, ANNUNCIATED. INVESTIGATION REVEALED NO SMOKE OR FUMES PRESENT IN THE AREA; HOWEVER, THE ALARMS WOULD NOT RESET. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.3.7.9. THIS EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. AN HOURLY FIRE WATCH WAS ESTABLISHED. THE CONTINUOUS ALARM WAS CAUSED BY AN ACCUMULATION OF DUST ON THE IONIZATION SMOKE DETECTORS. THE DETECTORS WERE CLEANED, TESTED, AND RETURNED TO SERVICE ON NOVEMBER 5, 1982. A PROGRAM HAS BEEN INITIATED TO MINIMIZE THE NUMBER OF ALARMS BY PERIODICALLY CLEANING THE DETECTORS. THIS IS A FINAL REPORT.

[141] GRAND GULF 1 DOCKET 50-416 LER 82-118
 AUX BUILDING SMOKE MONITORS FAIL TO RESET.
 EVENT DATE: 110482 REPORT DATE: 120282 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DUST ON DETECTORS.

(NSIC 180256) SMOKE DETECTORS IN THE PIPING PENETRATION ROOMS, THE RESIDUAL HEAT REMOVAL C PUMP ROOM AND THE LPCS PUMP ROOM OF THE AUXILIARY BUILDING (ELEVATION 93 FEET) ANNUNCIATED. INVESTIGATION REVEALED NO SMOKE OR FUMES PRESENT IN THE AREA; HOWEVER, THE ALARMS WOULD NOT RESET. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.3.7.9. THE EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. AN HOURLY FIRE WATCH WAS ESTABLISHED. THE CONTINUOUS ALARMS WAS CAUSED BY AN ACCUMULATION OF DUST ON THE IONIZATION SMOKE DETECTORS. THE AFFECTED DETECTORS WERE CLEANED, TESTED, AND RETURNED TO SERVICE ON NOVEMBER 4, 1982. A PROGRAM HAS BEEN INITIATED TO MINIMIZE THE NUMBER OF ALARMS BY PERIODICALLY CLEANING THE DETECTORS. THIS IS A FINAL REPORT.

[142] GRAND GULF 1 DOCKET 50-416 LER 82-135
 AUX BUILDING SMOKE DETECTORS INOPERABLE.
 EVENT DATE: 110582 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: COVERED DURING PAINTING.

(NSIC 180177) SMOKE DETECTORS IN THE AUXILIARY BUILDING STEAM TUNNEL WERE COVERED TO PREVENT PAINT FUMES FROM CAUSING ERRONEOUS SMOKE DETECTOR ALARMS WHILE PAINTING WAS IN PROGRESS IN THE AREA. THE PLANT WAS IN COLD SHUTDOWN DURING THIS TIME PERIOD. AN LCO WAS ENTERED AND AN HOURLY FIREWATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.3.7.9. COVERING THE SMOKE DETECTORS WAS REQUIRED TO COMPLETE A PLANNED MAINTENANCE ACTIVITY. THE SMOKE DETECTORS WERE UNCOVERED AFTER PAINTING WAS SECURED IN THE STEAM TUNNEL. THE LCO WAS LIFTED ON DEC 8, 1982. THIS IS BEING SUBMITTED AS A SPECIAL REPORT PURSUANT TO TECH SPEC 3.3.7.9 AND IS CONSIDERED AS A FINAL REPORT.

[143] GRAND GULF 1 DOCKET 50-416 LER 82-110
 AUX BUILDING SMOKE DETECTORS FAIL TO RESET.
 EVENT DATE: 110582 REPORT DATE: 120282 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DUST ON DETECTOR.

(NSIC 180253) THE SMOKE DETECTORS IN THE ZONE COVERING THE AUXILIARY BUILDING EAST CORRIDOR AREA, ELEVATION 119 FEET, ALARMED AND WOULD NOT RESET. INVESTIGATION REVEALED NO SMOKE OR FUMES PRESENT IN THE AREA. AN HOURLY FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.3.7.9. THIS IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE CONTINUOUS ALARM WAS CAUSED BY AN ACCUMULATION OF DUST ON THE IONIZATION SMOKE DETECTOR. THE SMOKE DETECTOR WAS CLEANED, FUNCTIONALLY CHECKED, AND RETURNED TO SERVICE ON NOVEMBER 8, 1982. A PROGRAM HAS BEEN INITIATED TO MINIMIZE THE NUMBER OF ALARMS BY PERIODICALLY CLEANING THE DETECTORS. THIS IS A FINAL REPORT.

[144] GRAND GULF 1 DOCKET 50-416 LER 82-112
 AUX BUILDING SMOKE DETECTORS FAIL TO RESET.
 EVENT DATE: 110582 REPORT DATE: 120282 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: CRUD ON DETECTOR.

(NSIC 180254) SMOKE DETECTORS IN THE EAST SWITCHGEAR AND PIPING PENETRATION ROOMS OF THE AUXILIARY BUILDING, ELEVATION 119 FEET, ALARMED AND WOULD NOT RESET. INVESTIGATION REVEALED NO SMOKE OR FUMES PRESENT IN THE AREA. A FIRE WATCH WAS ESTABLISHED PURSUANT TO TECH SPEC 3.3.7.9. THIS EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE CONTINUOUS ALARM WAS DUE TO DUST ACCUMULATION IN THE SMOKE DETECTOR. THE DETECTOR WAS REMOVED, CLEANED, TESTED, AND RETURNED TO SERVICE ON NOVEMBER 8, 1982. A PROGRAM HAS BEEN INITIATED TO MINIMIZE THE NUMBER OF ALARMS BY PERIODICALLY CLEANING THE DETECTORS. THIS IS A FINAL REPORT.

[145] GRAND GULF 1 DOCKET 50-416 LER 82-114
 CONTROL BUILDING SMOKE DETECTOR FAILS TO RESET.
 EVENT DATE: 110882 REPORT DATE: 120782 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DAMAGE DUE TO INSULATION WORK.

(NSIC 180255) A SMOKE DETECTOR IN THE ZONE COVERING THE CONTROL BUILDING ELEVATION 166 FEET AND 177 FEET ALARMED AND WOULD NOT RESET. INVESTIGATION REVEALED NO SMOKE OR FUMES PRESENT IN THE AREA. A FIRE WATCH WAS ESTABLISHED PURSUANT TO TECH SPEC 3.3.7.9. THE CONTINUOUS ALARM RESULTED FROM DAMAGE TO THE DETECTOR DUE TO INSULATION WORK IN THE AREA. THE DAMAGED DETECTOR WAS REPLACED WITH A NEW ONE. THE NEW DETECTOR WAS TESTED AND PLACED IN SERVICE ON NOVEMBER 9, 1982. THIS REPORT IS FINAL PURSUANT TO TECH SPEC 6.9.1.13.B.

[146] GRAND GULF 1 DOCKET 50-416 LER 82-138
 CONTROL ROOM FLOOR DUCT COVERS NOT INSTALLED.
 EVENT DATE: 111282 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: CABLE INSTALLATION.

(NSIC 180174) WHILE PERFORMING APPROVED MAINTENANCE WORK ON THE CONTROL ROOM FLOOR GRID SEALS AND DUCT COVERS, IT WAS NOT POSSIBLE TO INSTALL SEVERAL DUCT COVERS BECAUSE OF CABLES EXTENDING THROUGH THE DUCTS. DUCT COVERS INVOLVED ARE IDENTIFIED IN MATERIAL NONCONFORMANCE REPORT (MNCR)-00648-82. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7. THIS IS SUBMITTED AS AN INTERIM SPECIAL REPORT PURSUANT TO TECH SPEC 6.9.2. A FINAL REPORT WILL BE SUBMITTED BY FEBRUARY 14, 1983. AN HOURLY FIREWATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.7.7. CABLES WERE INSTALLED DURING CONSTRUCTION PHASE WHEN ALL COVERS WERE REMOVED. CONSIDERATION OF DUCT COVERS WAS NOT GIVEN BY THE APPLICABLE DESIGN DOCUMENT WHICH INSTALLED THE CABLES. AN ENGINEERING EVALUATION IS UNDERWAY TO DETERMINE IF FIRE BARRIERS SHOULD BE INSTALLED OR DUCT COVERS MODIFIED. THIS IS AN INTERIM REPORT.

[147] GRAND GULF 1 DOCKET 50-416 LER 82-140
 VALVE ROOM FIRE DOOR BLOCKED OPEN.
 EVENT DATE: 111282 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: HOSE USED FOR TESTING.

(NSIC 180179) FIRE DOOR 1A213 (ENTRANCE TO VALVE ROOM 1A220 ON ELEVATION 120 FEET 6 INCHES) WAS BLOCKED OPEN FOR A HOSE WHICH PROVIDED SUPPORT FOR LOCAL LEAK RATE TESTING. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7. AN HOURLY FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.7.7. WHEN THE WORK WAS

COMPLETED THE HOSE WAS REMOVED AND THE FIRE DOOR CLOSED. THE LCO WAS LIFTED ON NOVEMBER 29, 1982. THIS IS A SPECIAL REPORT SUBMITTED PURSUANT TO TECH SPEC 3.7.7 AND IS CONSIDERED A FINAL REPORT.

[148] GRAND GULF 1 DOCKET 50-416 LER 82-141
 2 AUXILIARY BUILDING FIRE DOORS BLOCKED OPEN.
 EVENT DATE: 111282 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: HOSES FOR PLANNED MAINTENANCE.

(NSIC 180269) FIRE DOORS 1A308 (AUXILIARY BUILDING, NORTH EMERGENCY EXIT) AND 1A306 (AUXILIARY BUILDING, SOUTH EMERGENCY EXIT) WERE BLOCKED OPEN TO ROUTE HOSES TO SUPPORT SANDBLASTING OPERATIONS IN THE SUPPRESSION POOL. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7. THE LCO WAS ENTERED DUE TO PLANNED MAINTENANCE ACTIVITIES. THE DOORS WILL BE RESTORED UPON WORK COMPLETION. THE HOURLY FIREWATCH WILL CONTINUE IN THE INTERIM. THIS IS SUBMITTED AS A SPECIAL REPORT PURSUANT TO TECH SPEC 3.7.7.A AND IS CONSIDERED AN INTERIM REPORT. AN UPDATE REPORT WILL BE SUBMITTED BY FEBRUARY 18, 1983.

[149] GRAND GULF 1 DOCKET 50-416 LER 82-137
 2 FIRE DOORS BLOCKED OPEN.
 EVENT DATE: 111782 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: HOSE USED FOR MAINTENANCE.

(NSIC 180175) FIRE RATED DOORS OC503 AND OC501 WERE BLOCKED OPEN BY HOSES BEING USED IN THE SEALING OF CONTROL ROOM PENETRATIONS. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7. THE EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE LCO WAS ENTERED DUE TO PLANNED MAINTENANCE ACTIVITIES. AN HOURLY FIREWATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.7.7. ON NOVEMBER 23, 1982, THE HOSES WERE REMOVED AND THE FIRE DOORS CLOSED.

[150] GRAND GULF 1 DOCKET 50-416 LER 82-139
 CONTROL CABINET ROOM SMOKE MONITORS FAIL TO RESET.
 EVENT DATE: 111882 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DEFECTIVE DETECTOR.

(NSIC 180176) THE SMOKE DETECTORS IN ZONE 1-24 (CONTROL CABINET ROOM, ELEVATION 189 FEET) ALARMED AND WOULD NOT RESET. INVESTIGATION REVEALED NO SMOKE OR FUMES PRESENT IN THE AREA. A FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.3.7.9. WHEN THE SMOKE DETECTORS WERE INVESTIGATED, UNDER A MAINTENANCE WORK ORDER, ONE DETECTOR WAS FOUND TO BE DEFECTIVE. THE DEFECTIVE DETECTOR WAS REPLACED ON NOVEMBER 24, 1982. THE LCO WAS LIFTED ON DECEMBER 10, 1982. AN HOURLY FIRE WATCH WAS ESTABLISHED BETWEEN NOVEMBER 18, 1982, AND DECEMBER 10, 1982. THIS IS A FINAL REPORT.

[151] GRAND GULF 1 DOCKET 50-416 LER 82-142
 CONTROL ROOM FIRE BARRIERS BROKEN.
 EVENT DATE: 111882 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: MAINTENANCE.

(NSIC 180263) FIRE BARRIERS WERE BROKEN IN THE CONTROL ROOM TO ALLOW CABLE REROUTING IN ACCORDANCE WITH AN APPROVED MAINTENANCE WORK ORDER. A LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7. THIS IS SUBMITTED AS A SPECIAL REPORT PURSUANT TO TECH SPEC 3.7.7.A. FIRE BARRIERS WERE BROKEN IN THE CONTROL

ROOM TO ALLOW CABLE REROUTING IN ACCORDANCE WITH AN APPROVED MAINTENANCE WORK ORDER. AN HOURLY FIREWATCH WAS ESTABLISHED UNTIL THE FIRE BARRIERS WERE RESTORED IN ACCORDANCE WITH TECH SPEC 3.7.7.A. THE LCO WAS LIFTED ON DECEMBER 9, 1982, AFTER THE WORK WAS COMPLETED AND FIRE BARRIERS WERE RESEALED. THIS IS A FINAL REPORT.

[152] GRAND GULF 1 DOCKET 50-416 LER 82-150
 5 AUX BUILDING FIRE PENETRATIONS OPENED.
 EVENT DATE: 112282 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: CABLE ROUTING.

(NSIC 180140) AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7 WHEN FIVE FIRE-RATED FLOOR PENETRATIONS IN THE AUXILIARY BUILDING WERE OPENED. THE PENETRATIONS WERE OPENED TO ROUTE CABLE AS REQUIRED BY DESIGN CHANGE PACKAGE (DCP) 82-4145. THIS REPORT IS SUBMITTED AS A SPECIAL REPORT PURSUANT TO TECH SPEC 3.7.7 AND IS CONSIDERED AN INTERIM REPORT. DCP 82-4145 WAS ISSUED TO COMPLETE THE HEAT TRACING PORTION OF THE DRYWELL MONITORING SYSTEM AND REQUIRED CABLE ROUTING THROUGH THE PENETRATIONS. A FIRE WATCH WAS ESTABLISHED ON NOVEMBER 22, 1982. WORK IS CONTINUING ON THE HEAT TRACING. A FOLLOW-UP REPORT WILL BE SUBMITTED BY FEBRUARY 28, 1983.

[153] GRAND GULF 1 DOCKET 50-416 LER 82-147
 2 FIRE DOORS BLOCKED OPEN TO AID ROOM VENTILATION.
 EVENT DATE: 112482 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: PLANT CHILLED WATER SYSTEM INOPERABLE.

(NSIC 180159) FIRE DOORS 0C408 AND 0C706 (RPS MOTOR-GENERATOR SET ROOMS A AND B) WERE BLOCKED OPEN TO AID IN ROOM VENTILATION. A CONTINUOUS FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.7.7.A. THIS IS SUBMITTED AS A SPECIAL REPORT PURSUANT TO TECH SPEC 3.7.7.A. THE FIRE DOORS WERE OPENED DUE TO RISING TEMPERATURES CAUSED BY INOPERABILITY OF THE PLANT CHILLED WATER (PCW) SYSTEM WHICH IS THE COOLING SUPPLY TO THE MOTOR-GENERATOR SET ROOM HVAC EQUIPMENT. PCW WAS NOT OPERABLE DUE TO SHUTDOWN OF PLANT SERVICE WATER FOR SUPPORT OF THE STANDBY SERVICE WATER SYSTEM HYDRO TEST. THE DOORS WERE RESTORED TO OPERABILITY ON DECEMBER 9, 1982.

[154] GRAND GULF 1 DOCKET 50-416 LER 82-146
 DRYWELL TO CONTAINMENT PRESSURE DROP NOT VERIFIED.
 EVENT DATE: 112482 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
 CAUSE: INADEQUATE PROCEDURE.

(NSIC 180261) AN INTERNAL QA AUDIT REVEALED THE FOLLOWING; FROM 9/22/82 TO 10/1/82 AND FROM 10/13/82 TO 10/25/82, WHILE THE PLANT WAS IN HOT SHUTDOWN, THE DRYWELL TO CONTAINMENT DIFFERENTIAL PRESSURE WAS NOT VERIFIED BETWEEN -0.1 AND /-2.0 PSID AT THE PROPER FREQUENCY REQUIRED BY TECH SPEC 3.6.2.5. THE DIFFERENTIAL PRESSURE DURING THESE PERIODS WAS VERIFIED ONCE PER 24 HOURS. THIS IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.C. THE CAUSE WAS DUE TO AN INADEQUATE PROCEDURE. OPERATIONS LOG 06-OP-1000-D-0001 WAS NOT COMPLETE IN THE APPLICABILITY REQUIREMENTS FOR THIS PARTICULAR TECH SPEC. THIS PROCEDURE WAS REVISED BY CHANGE NOTICE 10(TCN-10) ON NOVEMBER 26, 1982. THIS IS SUBMITTED AS A FINAL REPORT.

[155] GRAND GULF 1 DOCKET 50-416 LER 82-144
 2 AUXILIARY BUILDING SMOKE MONITORS FAIL TO RESET.
 EVENT DATE: 112582 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE UNKNOWN.

(NSIC 180268) FIRE DETECTION ZONE 2-8 (STEAM TUNNEL ROOF, 166 FEET AUXILIARY BUILDING) AND ZONE 2-7 (SET DOWN AREA, 166 FEET AUXILIARY BUILDING) ALARMED WITH NO FIRE OR SMOKE PRESENT AND WOULD NOT RESET. HOURLY FIRE WATCHES WERE ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.3.7.9.A. THE EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. MAINTENANCE PERSONNEL INVESTIGATING FOUND SMOKE DETECTOR N531G (ZONE 2-8) AND N707B (ZONE 2-7) IN ALARM. THE CAUSE OF THE ALARMS IS UNKNOWN. THE DETECTORS WERE RESET AND A FUNCTIONAL TEST (06-IC-SP65-0-1001) WAS PERFORMED AND COMPLETED SATISFACTORILY. THE DETECTORS WERE RESTORED TO OPERABLE STATUS ON NOVEMBER 26, 1982. THIS IS A FINAL REPORT.

[156] GRAND GULF 1 DOCKET 50-416 LER 82-145
 METEOROLOGICAL MONITORING SYSTEM INOPERABLE.
 EVENT DATE: 112782 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MAINTENANCE.

(NSIC 180264) THE METEOROLOGICAL MONITORING SYSTEM WAS REMOVED FROM SERVICE FOR APPROXIMATELY 7.5 HOURS TO PERFORM WORK AS REQUIRED BY DESIGN CHANGE PACKAGE 82-457. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.3.7.3. THE EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE EVENT WAS CAUSED BY A PLANNED MAINTENANCE OUTAGE. DCP 82-457 WAS IMPLEMENTED TO CHANGE BREAKERS AND CIRCUIT WIRES TO MEET NRC REQUIREMENTS. THE SYSTEM WAS RESTORED ON NOVEMBER 27, AT 1530 HOURS AND THE LCO WAS LIFTED. THIS IS SUBMITTED AS A FINAL REPORT.

[157] GRAND GULF 1 DOCKET 50-416 LER 82-149
 CONTAINMENT TO AUX BUILDING PRESSURE DROP NOT VERIFIED.
 EVENT DATE: 112982 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180142) A Q.A. AUDIT REVEALED THAT BEGINNING ON SEPTEMBER 23, DURING PERIODS WHEN THE PLANT WAS IN HOT SHUTDOWN, THE CONTAINMENT TO AUXILIARY BUILDING DIFFERENTIAL PRESSURE WAS VERIFIED EVERY 24 HOURS INSTEAD OF EVERY 12 HOURS AS REQUIRED BY TECH SPEC 4.6.1.7. IN ACCORDANCE WITH TECH SPEC 4.0.3 THIS IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE CAUSE WAS PERSONNEL ERROR. A REVIEW OF PROCEDURES IN OPERATIONS LOG 06-OP-1000-D-0001 REV. 16 CONFIRMED THAT THE SURVEILLANCE PROCEDURES AND THE REQUIREMENTS IN TECH SPEC 4.6.1.7 ARE IN AGREEMENT, OPERATIONS PERSONNEL WERE MADE AWARE OF THEIR ERROR VIA A MONITORING AUDIT REPORT, MAR-82/103, AND WERE INSTRUCTED ACCORDINGLY.

[158] GRAND GULF 1 DOCKET 50-416 LER 82-158
 CONTROL ROOM FLOOR FIRE BARRIER REMOVED.
 EVENT DATE: 113082 REPORT DATE: 010583 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: PLANNED MAINTENANCE.

(NSIC 180129) DURING RECENT MAINTENANCE WORK IN THE CONTROL ROOM FLOOR A SAFETY RELATED FIRE BARRIER WAS REMOVED. THIS IS A SPECIAL REPORT SUBMITTED PURSUANT TO TECH SPEC 3.7.7. A DESIGN CHANGE WAS IMPLEMENTED IN THE CONTROL ROOM TO ELIMINATE A WIRING PROBLEM. THE WORK INVOLVED REMOVING THE FIRE BARRIER. AN HOURLY FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.7.7. THE

MAINTENANCE WAS COMPLETED AND THE FIRE BARRIER WAS RESTORED ON DECEMBER 9, 1982. THIS IS A FINAL REPORT.

[159] GRAND GULF 1 DOCKET 50-416 LER 82-152
 DIESEL FUEL INSOLUBLES TEST MISSED.
 EVENT DATE: 113082 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
 CAUSE: PERSONNEL ERROR.

(NSIC 180137) DURING A Q.A. AUDIT IT WAS DISCOVERED THAT BETWEEN RECEIPT OF THE OPERATING LICENSE ON JUNE 17, 1982, AND SEPTEMBER 9, 1982, THE DIESEL FUEL OIL INSOLUBLE TEST REQUIRED BY TECH SPEC 4.8.1.1.2.C WAS NOT PERFORMED. THIS IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.C. DUE TO PERSONNEL ERROR, THE TESTS WERE OVERLOOKED, AND THE REQUIRED EQUIPMENT WAS NOT ON-HAND. THE NECESSARY EQUIPMENT WAS ORDERED AND RECEIVED, AND THE TESTS WERE COMPLETED ON SEPTEMBER 9, 1982. TESTING IS NOW BEING PERFORMED AS REQUIRED.

[160] GRAND GULF 1 DOCKET 50-416 LER 82-148
 2 FIRE DOORS BLOCKED OPEN BY HOSES.
 EVENT DATE: 113082 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: PLANNED MAINTENANCE.

(NSIC 180161) FIRE DOORS 0C408 AND 0C409 WERE BLOCKED OPEN TO ALLOW ACCESS FOR HOSES USED IN SEALING PENETRATIONS CE202D AND CE154D. AN ACTION STATEMENT WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.7, AND THIS EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE DOORS WERE OPENED FOR A PLANNED MAINTENANCE ACTIVITY. AN HOURLY FIRE WATCH WAS ESTABLISHED IN THE INTERIM IN ACCORDANCE WITH TECH SPEC 3.7.7. THE PENETRATIONS WERE SEALED, THE FIRE DOORS WERE CLOSED, AND THE LCO WAS LIFTED ON DECEMBER 1, 1982.

[161] GRAND GULF 1 DOCKET 50-416 LER 82-132
 SEVERAL OPEN FIRE BARRIERS FOUND.
 EVENT DATE: 113082 REPORT DATE: 121482 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: MAINTENANCE PERSONNEL ERROR.

(NSIC 180183) SEVERAL FIRE RATED ELECTRICAL PENETRATIONS WERE FOUND TO BE OPEN. THE PENETRATIONS ARE SAFETY RELATED BARRIERS REQUIRED BY TECH SPEC 3.7.7. INVESTIGATION REVEALED THESE PENETRATIONS WERE OPENED WITHOUT NOTIFYING THE CONTROL ROOM. THIS RESULTED IN THE REQUIRED FIRE WATCH AND REQUIRED REPORT NOT BEING COMPLETED. THIS REPORT IS BEING SUBMITTED PURSUANT TO TECH SPEC 6.9.1.12.B AS A FINAL REPORT. THE PENETRATION OPENINGS WERE AUTHORIZED BY MAINTENANCE WORK ORDERS WITH NO INSTRUCTIONS REGARDING FIRE BARRIERS. THIS RESULTED IN THE CONTROL ROOM NOT BEING NOTIFIED. UPON DISCOVERY OF THE OPEN BARRIERS, FIRE WATCHES WERE ESTABLISHED AND ACTION WAS INITIATED TO RESEAL THE BARRIERS. INSTRUCTIONS HAVE BEEN ISSUED TO PERSONS RESPONSIBLE FOR SCREENING MWOS TO CHECK JOBS WHICH MAY REQUIRE OPENING OF SAFETY RELATED FIRE BARRIERS.

[162] GRAND GULF 1 DOCKET 50-416 LER 82-151
 2 SMOKE DETECTORS FAIL TO RESET.
 EVENT DATE: 120182 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: SYS REQD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: WELDING FUMES.

(NSIC 180135) THE SMOKE DETECTORS IN THE ZONES COVERING THE HPCS DIESEL GENERATOR ROOM (ZONE 2-10) AND THE CONTROL BUILDING (ELEVATION 166 FEET, ZONE 1-18) ALARMED

AND WOULD NOT RESET. AN HOURLY FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.3.7.9. THE EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE ALARM IN THE CONTROL BUILDING WAS CAUSED BY WELDING FUMES PRESENT FROM ONGOING WELDING IN THE AREA. THE ALARM WAS DEACTIVATED UNTIL THE WELDING WAS COMPLETE. THE DETECTOR WAS RETURNED TO SERVICE ON DECEMBER 2, 1982. THE HPCS DG ROOM ALARM WAS CAUSED BY DUST IN THE DETECTOR. THE DETECTOR WAS CLEANED, FUNCTIONALLY TESTED, AND RETURNED TO SERVICE ON DECEMBER 6, 1982.

[163] GRAND GULF 1 DOCKET 50-416 LER 82-134
 BOTH RHR LOOPS INOPERABLE.
 EVENT DATE: 120182 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: PIPES, FITTINGS
 CAUSE: FLUSHING OF B LOOP.

(NSIC 180178) WITH ONLY THE RHR A SHUTDOWN COOLING LOOP OPERATING, IT BECAME NECESSARY TO FLUSH RHR B LOOP IN ORDER TO RETURN THE B LOOP TO OPERATION. LOOP A WAS SHUTDOWN TO ALLOW A FLUSH OF RHR B LOOP PIPING PER SOI 04-1-01-E12-1-TEMP 1 FOR 1.25 HOURS. A LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.4.9.2 AND IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. REACTOR COOLANT CIRCULATION WAS ESTABLISHED VIA THE RWCU SYSTEM IN ACCORDANCE WITH TECH SPEC 3.4.9.2. THE RHR A LOOP WAS RETURNED TO SERVICE AFTER 1.25 HOURS AND THE LCO WAS LIFTED AT THAT TIME. THIS IS A FINAL REPORT.

[164] GRAND GULF 1 DOCKET 50-416 LER 82-143
 CONTAINMENT FOUNDATION SEISMIC SWITCH FAILS TO RESET.
 EVENT DATE: 120182 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LOOSE COVER.

(NSIC 180266) A SEISMIC SWITCH (CONTAINMENT FOUNDATION (OBE)) ALARMED AND WOULD NOT RESET. NO SEISMIC EVENT OCCURRED AND NO OTHER VALID DISTURBANCE WAS RECORDED IN THE AREA. THIS RESULTED IN ENTERING AN ACTION STATEMENT FOR TECH SPEC 3.3.7.2 AND IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. UPON INVESTIGATION IT WAS DISCOVERED THAT THE INSTRUMENT COVER WAS TOUCHING THE COVER BRACKET AND CAUSING SPURIOUS ALARMS WHEN PERSONNEL WALKED ACROSS THE FLOOR IN THE IMMEDIATE AREA. THE COVER WAS REPOSITIONED UNDER A MAINTENANCE WORK ORDER AND THE LCO LIFTED ON DECEMBER 16, 1982. THIS IS SUBMITTED AS A FINAL REPORT.

[165] GRAND GULF 1 DOCKET 50-416 LER 82-154
 SHUTDOWN COOLING LOOP INOPERABLE.
 EVENT DATE: 120482 REPORT DATE: 123182 NSSS: GE TYPE: BWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: OTHER COMPONENTS
 CAUSE: SSW HYDROSTATIC TEST.

(NSIC 180138) WITH THE REACTOR IN COLD SHUTDOWN, SHUTDOWN COOLING (SDC) LOOP A OF THE RESIDUAL HEAT REMOVAL SYSTEM (RHR) WAS SECURED FOR A STANDBY SERVICE WATER (SSW) LOOP A HYDROSTATIC TEST. SDC LOOP B WAS IN OPERATION. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.4.9.2, AND THE EVENT IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. SDC LOOP A WAS SHUTDOWN IN ORDER TO PERFORM THE SSW HYDROSTATIC TEST. IN THE INTERIM REACTOR WATER CLEANUP (RWCU) WAS USED AS THE METHOD OF ALTERNATE DECAY HEAT REMOVAL IN ACCORDANCE WITH TECH SPEC 3.4.9.2. THE LCO WAS LIFTED, AND THE RHR A WAS RETURNED TO SDC MODE ON DECEMBER 29, 1982.

[166] GRAND GULF 1 DOCKET 50-416 LER 82-156
 DIESEL GENERATOR FAILS TO START WHEN FUEL PUMP TRIPS.
 EVENT DATE: 120482 REPORT DATE: 123182 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION

CAUSE: FUEL LEAKS DUE TO LOOSE VENT PLUGS.

(NSIC 180244) WHILE PERFORMING SURVEILLANCE TEST 06-OP-1P75-M-0002 THE DIESEL FAILED TO START. UPON INVESTIGATION IT WAS OBSERVED THAT THE OVERLOAD ON THE D.C. FUEL OIL PUMP HAD TRIPPED. UPON RESET OF THE OVERLOAD THE DIESEL STARTED WITHOUT INCIDENT. DURING THE RUN THE DIESEL WAS INTENTIONALLY SHUT DOWN DUE TO FUEL OIL LEAKS. THIS IS NOT A VALID FAILURE TO START AND IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.C. THE D.C. MOTOR-DRIVEN PUMP IS NONESSENTIAL FOR EMERGENCY OPERATION OF THE DIESEL GENERATOR. THE FUEL LEAKS WERE DUE TO LOOSE BLEED (VENT) PLUGS ON THE INJECTORS. THE PLUGS WERE TIGHTENED, AND THE SURVEILLANCE TEST WAS RUN. THIS IS A FINAL REPORT.

[167] GRAND GULF 1 DOCKET 50-416 LER 82-157
CONTROL ROOM SMOKE DETECTORS FAIL TO RESET.
EVENT DATE: 120682 REPORT DATE: 010583 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: WELDING IN UNIT 2 CONTROL ROOM.

(NSIC 180121) SMOKE DETECTORS IN ZONE 1-18 (CONTROL ROOM) ALARMED AND WOULD NOT RESET. THE ZONE WAS DEACTIVATED AND A CONTINUOUS FIRE WATCH WAS ESTABLISHED IN ACCORDANCE WITH TECH SPEC 3.3.7.9. THIS IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. AN INVESTIGATION REVEALED THAT THERE WAS NO SMOKE IN THE AREA, HOWEVER, WELDING ACTIVITIES WERE IN PROGRESS IN THE UNIT 2 CONTROL ROOM. THE DETECTOR WAS CLEANED AND FUNCTIONALLY TESTED AND ZONE 1-18 WAS RESTORED TO OPERABLE STATUS ON DECEMBER 10, 1982. THIS IS SUBMITTED AS A FINAL REPORT.

[168] GRAND GULF 1 DOCKET 50-416 LER 82-159
ALL SHUTDOWN COOLING MODE LOOPS INOPERABLE.
EVENT DATE: 120682 REPORT DATE: 010583 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180130) A QA AUDIT REVEALED THAT ON OCTOBER 25, 1982, WHILE IN MODE 3 (HOT SHUTDOWN), NO SHUTDOWN COOLING MODE LOOPS WERE IN OPERATION. REACTOR COOLANT CIRCULATION WAS ESTABLISHED VIA THE RECIRCULATION SYSTEM. REACTOR COOLANT PRESSURE AND TEMPERATURE WERE MONITORED AT LEAST ONCE PER HOUR IN ACCORDANCE WITH TECH SPEC 3.4.9.1.B. THE EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. A SHUTDOWN COOLING (SDC) LOOP SHOULD HAVE BEEN PLACED IN OPERATION BEGINNING AT 0930 HOURS ON OCTOBER 25. THE SDC LOOP WAS PUT INTO OPERATION AT 1430 HOURS ON OCTOBER 25. THIS IS A FINAL REPORT.

[169] GRAND GULF 1 DOCKET 50-416 LER 82-155
CAM INOPERABLE WHILE VENTILATION SYSTEM OPERATES.
EVENT DATE: 120682 REPORT DATE: 010583 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PERSONNEL ERROR.

(NSIC 180139) THE TEMPORARY VENTILATION EXHAUST SYSTEM FOR THE SUPPRESSION POOL AREA WAS OBSERVED OPERATING AND DISCHARGING TO ATMOSPHERE WHILE ITS CAM (CONTINUOUS AIR MONITOR) WAS NOT OPERATING. EARLIER ON THE SAME DAY THE SYSTEM HAD BEEN SHUTDOWN BY OPERATIONS. THIS EVENT IS BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.C. THE EVENT OCCURRED DUE TO PERSONNEL ERROR. THE TEMPORARY VENTILATION EXHAUST SYSTEM WAS STARTED WITHOUT STARTING THE CAM AND WITHOUT NOTIFYING THE SHIFT SUPERINTENDENT. THE CAM WAS IMMEDIATELY PLACED INTO SERVICE UPON DISCOVERY. OPERATIONS PERSONNEL HAVE BEEN APPROPRIATELY INSTRUCTED TO PREVENT RECCURRENCE.

[170] GRAND GULF 1 DOCKET 50-416 LER 82-153
 WIND DIRECTION CHANNEL FAILS.
 EVENT DATE: 120782 REPORT DATE: 122382 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DEFECTIVE SENSOR.

(NSIC 180258) DURING A DAILY CHANNEL CHECK THE CHANNEL A WIND DIRECTION SENSOR AT ELEVATION 162 FOOT WAS GIVING ERRONEOUS INDICATION. THE SENSOR WAS DECLARED INOPERABLE AND AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.3.7.3. THIS IS BEING SUBMITTED AS A SPECIAL REPORT PURSUANT TO TECH SPEC 6.9.2. THE CAUSE WAS A DEFECTIVE SENSOR. THE SENSOR WAS REPLACED ON DECEMBER 16, 1982, AND CHANNEL A (ELEVATION 162") WAS RETURNED TO SERVICE ON DECEMBER 16, 1982. THE LCO WAS LIFTED ON DECEMBER 16, 1982. THIS IS BEING SUBMITTED AS A FINAL REPORT.

[171] HATCH 1 DOCKET 50-321 LER 81-090 REV 1
 UPDATE ON RCIC TURBINE PRESSURE SWITCH DRIFT.
 EVENT DATE: 092181 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMP. (ENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180031) THE PERFORMANCE OF THE RCIC TURBINE EXHAUST DIAPHRAGM PRESSURE INST. F.T. & C. SHOWED THE N012 A-D SWITCHES TO ACTUATE AT 10.4, 11.25, 14.2, AND 13.4 PSIG RESPECTIVELY. TECH SPEC TABLE 3.2-3, ITEM 11 REQUIRES A SETPOINT OF LESS THAN 10 PSIG. LAST REPORTED ON LER 50-321/1981-008. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO SETPOINT DRIFT. THESE BARKSDALE PRESSURE SWITCHES WERE RECALIBRATED, SUCCESSFULLY FUNCTIONALLY TESTED, AND RETURNED TO SERVICE. DESIGN CHANGES WILL BE IMPLEMENTED AS NECESSARY.

[172] HATCH 1 DOCKET 50-321 LER 81-109 REV 1
 UPDATE ON HPCI STEAM LINE PRESSURE SENSOR DRIFT.
 EVENT DATE: 092981 REPORT DATE: 120782 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180089) A SURVEILLANCE TEST ON THE HPCI STEAM LINE PRESSURE SWITCHES SHOWED THE N001A AND N001D SWITCHES TO ACTUATE AT 103 AND 105 PSIG RESPECTIVELY. TECH SPEC SECTION 3.2-2, ITEM 10, REQUIRES ACTUATION AT GREATER THAN 100 PSIG, WHICH WITH THE 47.3 PSIG HEAD CORRECTION CORRESPONDS TO AN INSTRUMENT READING AND SETPOINT OF LESS THAN 107.3 PSIG. LAST REPORTED ON LER 50-321/1981-064. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO SETPOINT DRIFT. THE BARKSDALE PRESSURE SWITCHES WERE RECALIBRATED, SUCCESSFULLY FUNCTIONALLY TESTED, AND RETURNED TO SERVICE. DESIGN CHANGES WILL BE IMPLEMENTED AS NECESSARY.

[173] HATCH 1 DOCKET 50-321 LER 82-087 REV 1
 UPDATE ON RCIC FLOW SWITCH SET POINT DRIFT.
 EVENT DATE: 100582 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: SET SCREW VIBRATED LOOSE.

(NSIC 180209) THE RCIC FLOW SWITCH ACTUATED LOW (BELOW ZERO) DURING THE PERFORMANCE OF THE RCIC SYSTEM FLOW (FLOW SWITCH) INSTRUMENT FT&C SURVEILLANCE PROCEDURE AND WAS DECLARED INOPERABLE. TECH SPECS TABLE 3.2-3 REQUIRES THE LOW SWITCH ACTUATION AT 40 GPM (APPROXIMATELY 2.24 INCHES WATER). A SEVEN-DAY LCO WAS DECLARED PER TECH SPEC 3.5.E.2. THE SET SCREW ON THE RCIC FLOW INSTRUMENT HAD VIBRATED LOOSE ALLOWING THE LOW SETPOINT TO DRIFT. THE SWITCH WAS RESET (2.05 INCHES WATER), SATISFACTORILY CALIBRATED AND FUNCTION TESTED PER THE "RCIC SYSTEM FLOW (FLOW SWITCH) INSTRUMENT FT&C" PROCEDURE. THE SET SCREWS WERE FIRMLY TIGHTENED. THE INSTRUMENT WAS RETURNED TO SERVICE, CLEARING THE LCO.

[174] HATCH 1 DOCKET 50-321 LER 82-085
 TIP RELAY WIRING INCORRECT.
 EVENT DATE: 110382 REPORT DATE: 112382 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: ELECTRICAL CONDUCTORS
 CAUSE: DESIGN ERROR.

(NSIC 180060) A WALK-DOWN OF THE TIP WITHDRAWAL LSFT LOGIC WAS BEING PERFORMED. WHILE CHECKING THE RELAY WIRING, IT WAS FOUND THAT TWO WIRES WERE INSTALLED ONTO THE WRONG RELAY, AND THEREFORE THE WRONG RELAY CONTACTS, THUS VIOLATING 10CFR50 APPENDIX A CRITERIA 56. TWO WIRES WERE INSTALLED ONTO THE WRONG RELAY BECAUSE THE RELAY CONNECTION DIAGRAM SHOWS THESE TWO WIRES CONNECTED TO THE WRONG RELAY EVEN THOUGH THE ELEMENTARY DIAGRAM IS CORRECT. DURING THE CURRENT REFUELING OUTAGE, THE WIRES WILL BE TERMINATED TO THE CORRECT RELAY TERMINALS.

[175] HATCH 1 DOCKET 50-321 LER 82-097
 SPENT FUEL ROD BREAKS DURING INSPECTION.
 EVENT DATE: 111682 REPORT DATE: 113082 NSSS: GE TYPE: BWR
 SYSTEM: SPENT FUEL STORAGE FACILITIES COMPONENT: FUEL ELEMENTS
 CAUSE: SEVERE LOCALIZED CORROSION.

(NSIC 180016) A SPENT FUEL ROD WAS BROKEN DURING A VISUAL INSPECTION OF SEVERAL SPENT FUEL BUNDLES. THE ROD HAD BEEN REMOVED FROM BUNDLE LJE516 AND WAS BEING PLACED IN THE INSPECTION FIXTURE WHEN IT BROKE INTO TWO PIECES. THE LOWER PIECE FELL INTO A CONTROL ROD HOLDER WHILE THE OTHER PIECE REMAINED ATTACHED TO THE HANDLING TOOL. THE ROD WAS EXAMINED AND SHOWED EVIDENCE OF SEVERE LOCALIZED CORROSION AT THE POINT OF SEPARATION. THE HANDLING OF THE ROD WAS SUFFICIENT TO CAUSE IT TO BREAK AT THE POINT OF DEGRADATION. THE ROD WILL BE PLACED BACK INTO THE BUNDLE AND THE BUNDLE WILL BE SEPARATED FROM GOOD BUNDLES AND FLAGGED IN PLANT RECORDS SO AS TO PREVENT ITS REUSE.

[176] HATCH 1 DOCKET 50-321 LER 83-003
 AUTO DEPRESSURIZATION VALVE TECH SPEC IS INCORRECT.
 EVENT DATE: 010583 REPORT DATE: 012083 NSSS: GE TYPE: BWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVES
 CAUSE: PERSONNEL ERROR.

(NSIC 180362) THE NRC NOTIFIED GEORGIA POWER COMPANY OF AN INCORRECT PAGE (3.5-9) IN TECH SPEC. THIS PAGE UNDER TECH SPEC 3.5.F.1. STATED "SIX OF SEVEN" INSTEAD OF "SEVEN" OF THE AUTOMATIC DEPRESSURIZATION VALVES SHALL BE OPERABLE. RECORDS SHOW WRONG REVISION TO PAGE 3.5-9 WAS ISSUED ON 8/1/80. A REVIEW OF ALL AFFECTED DEVIATIONS HAS ENSURED NO VIOLATION OF THE CORRECT TECH SPEC PAGE. THE CAUSE OF THIS EVENT WAS ATTRIBUTED TO PERSONNEL ERROR. PERSONNEL REPLACED ILLEGIBLE PAGES WITH LEGIBLE PAGES, INSERTING WRONG REVISION FOR PAGE 3.5-9. RESPONSIBLE PERSONNEL WERE COUNSELED. THE CORRECT REVISION FOR TECH SPEC PAGE 3.5-9 WAS ISSUED BY DOCUMENT CONTROL DEPARTMENT ON 1/5/83.

[177] HATCH 2 DOCKET 50-366 LER 81-102 REV 1
 UPDATE ON CONTAINMENT HYDROGEN OXYGEN MONITOR FAILURE.
 EVENT DATE: 102681 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: PUMPS
 CAUSE: WORN PUMP HEAD VALVE BODY.

(NSIC 180038) THE P001B PRIMARY CONTAINMENT H2-O2 ANALYZER WAS DECLARED INOPERABLE DUE TO ERRATIC OPERATION. TECH SPEC TABLE 3.3.6.4-1, ITEM 9 REQUIRES TWO OPERABLE CHANNELS. REDUNDANT CHANNEL, P001A, WAS OPERABLE. PLANT OPERATION WAS PLACED IN A 30-DAY LCO AS REQUIRED BY TECH SPEC 3.3.6.4, ACTION A. THE FAILURE WAS DUE TO A WORN PUMP HEAD VALVE BODY. THE PUMP WAS REPAIRED. THE ANALYZER WAS FUNCTIONALLY TESTED SATISFACTORILY AND RETURNED TO SERVICE.

[178] HATCH 2 DOCKET 50-366 LER 81-115 REV 1
 UPDATE ON HPCI TURBINE PRESSURE SWITCH DRIFT.
 EVENT DATE: 112381 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180037) THE PERFORMANCE OF THE HPCI TURBINE EXHAUST DIAPHRAGM PRESSURE INST. F.T.&C PROCEDURE SHOWED PRESSURE SWITCH N012A TO ACTUATE AT 10.5 PSIG. TECH SPEC TABLE 3.3.2-2, ITEM 4C REQUIRES ACTUATION AT LESS THAN OR EQUAL TO 10 PSIG. REDUNDANT SWITCHES N012B, C, AND D WERE OPERABLE. LAST REPORTED ON LER 50-366/1981-096. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO SETPOINT DRIFT. THE BARKSDALE PRESSURE SWITCH WAS CALIBRATED, SUCCESSFULLY FUNCTIONALLY TESTED, AND RETURNED TO SERVICE. DESIGN CHANGES WILL BE IMPLEMENTED AS NECESSARY.

[179] HATCH 2 DOCKET 50-366 LER 81-116 REV 1
 UPDATE ON HPCI STEAM LINE DELTA P SWITCH DRIFT.
 EVENT DATE: 112581 REPORT DATE: 120782 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180071) DURING THE PERFORMANCE OF THE HPCI STEAM LINE DELTA P INSTRUMENT F.T. AND C PROCEDURE, THE N004 HPCI STEAM LINE DP SWITCH WAS FOUND TO ACTUATE AT 205 INCHES OF WATER. TECH SPEC TABLE 3.3.2-2, ITEM 5.A REQUIRES ACTUATION AT LESS THAN OR EQUAL TO 300 PERCENT OF RATED FLOW (A DP OF LESS THAN OR EQUAL TO 196 INCHES OF WATER). LAST REPORTED ON LER 50-366/1981-084. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO SETPOINT DRIFT. THE SWITCH, A BARTON MODEL 288A, WAS RECALIBRATED, SUCCESSFULLY FUNCTIONALLY TESTED, AND RETURNED TO SERVICE. DESIGN CHANGES WILL BE IMPLEMENTED AS NECESSARY.

[180] HATCH 2 DOCKET 50-366 LER 82-043 REV 1
 UPDATE ON HPCI PRESSURE SWITCH DRIFT.
 EVENT DATE: 042882 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180126) THE PERFORMANCE OF THE HPCI STEAM LINE DELTA P INSTRUMENT FT&C PROCEDURE SHOWED DP SWITCH N004 TO ACTUATE AT 196.9 INCHES OF WATER. TECH SPECS TABLE 3.3.2-2 REQUIRES ACTUATION AT LESS THAN 300 PERCENT OF RATED STEAM FLOW (EQUIVALENT TO A DP OF 196 INCHES OF H2O). REDUNDANT SWITCH N005 WAS OPERABLE. THIS IS A REPETITIVE EVENT AS LAST REPORTED ON LER 50-366/1981-121. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO SETPOINT DRIFT. THE SWITCH, A BARTON MODEL 288A, WAS RECALIBRATED, SUCCESSFULLY FUNCTIONALLY TESTED, AND RETURNED TO SERVICE. DESIGN CHANGES WILL BE IMPLEMENTED AS NECESSARY.

[181] HATCH 2 DOCKET 50-366 LER 82-112 REV 3
 UPDATE ON INADEQUATE TESTING OF SBGT SYSTEM.
 EVENT DATE: 100982 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 180034) PLANT PERSONNEL (AS A RESULT OF AN NRC AUDIT ON OCTOBER 8, 1982) DISCOVERED THAT PLANT PROCEDURES DID NOT ADEQUATELY TEST THE AUTOMATIC INITIATION LOGIC OF SEVERAL PLANT SYSTEMS. THE TECH SPEC TESTING REQUIREMENTS FOR THE SYSTEMS WERE NOT ADEQUATELY MET. PLANT PROCEDURES DID NOT ADEQUATELY TEST THEIR RESPECTIVE SYSTEMS. NEW PROCEDURES WERE WRITTEN AND PERFORMED TO TEST THE LOGIC EXCLUDED IN THE EXISTING PROCEDURES. THE SYSTEMS INVOLVED AND ALL UNIT 2 SYSTEMS ARE IN FULL COMPLIANCE WITH THE REQUIREMENTS. FURTHER INVESTIGATION IS UNDERWAY AND A SUBSEQUENT REPORT WILL BE WRITTEN.

[182] HATCH 2 DOCKET 50-366 LER 82-123
 2 CONTROL ROD POSITION INDICATORS FAIL.
 EVENT DATE: 103082 REPORT DATE: 112382 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: UNKNOWN.

(NSIC 180093) WHILE INSERTING CONTROL RODS FOR REACTOR SHUTDOWN, REED SWITCH POSITION INDICATORS FOR CONTROL RODS 14-07 AND 34-43 WERE FOUND INOPERABLE. THIS EVENT IS CONTRARY TO TECH SPECS 3.1.3.7. BOTH CONTROL RODS WERE FULLY INSERTED. THEIR POSITIONS WERE DETERMINED WITHIN ONE HOUR BY USE OF THE FULL-IN POSITION INDICATORS, THEREFORE, TECH SPECS 3.1.3.7, ACTION A WAS SATISFIED. THIS EVENT IS REPETITIVE AS LAST REPORTED ON LER 50-366/1982-088. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO COMPONENT FAILURE. THE CAUSE OF THIS FAILURE HAS NOT BEEN DETERMINED. THE REED SWITCH POSITION INDICATORS WILL BE REPAIRED DURING THE 1983 REFUELING OUTAGE. THE POSITION OF THE AFFECTED CONTROL RODS WILL BE DETERMINED BY AN ALTERNATE METHOD PER TECH SPEC 3.1.3.7 UNTIL THE REED SWITCHES ARE REPAIRED.

[183] HATCH 2 DOCKET 50-366 LER 82-124
 CHANGES TO APRM CALIBRATION PROCEDURE NOT REVIEWED.
 EVENT DATE: 110282 REPORT DATE: 113082 NSSS: GE TYPE: BWR
 SYSTEM: SYS REQD FOR SAFE SHUTDOWN COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MAINTENANCE PERSONNEL ERROR.

(NSIC 180091) DURING AN ADMINISTRATIVE REVIEW, IT WAS DISCOVERED THAT TEMPORARY CHANGES MADE TO THE APRM CALIBRATION PROCEDURE WERE NOT REVIEWED BY THE PRB AND SIGNED BY THE PLANT MANAGER WITHIN 14 DAYS AS REQUIRED PER TECH SPECS SECTION 6.8.3.C. THESE CHANGES WERE MADE ON 10/12/82 AND SHOULD HAVE BEEN REVIEWED AND SIGNED BY 10/26/82. LAST REPORTED ON LER 50-366/1982-107. THIS EVENT WAS DUE TO PERSONNEL ERROR. TO PREVENT RECURRENCE OF THIS EVENT, ONE DEPARTMENT IS NOW RESPONSIBLE FOR TRACKING TO ENSURE THAT TEMPORARY PROCEDURE CHANGES ARE REVIEWED AND SIGNED AS REQUIRED. THE PROCEDURE WAS PRB REVIEWED ON 11/2/82 AND SIGNED BY THE PLANT MANAGER ON 11/3/82.

[184] HATCH 2 DOCKET 50-366 LER 82-125
 SET POINT DRIFT IN RPS OVERVOLTAGE RELAY.
 EVENT DATE: 110382 REPORT DATE: 113082 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: RELAYS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180088) WITH THE RPS ALTERNATE SUPPLY OUT OF SERVICE FOR MAINTENANCE, THE RPS SUPPLY OVER-VOLTAGE RELAY WAS DISCOVERED TO BE OUT OF CALIBRATION DURING MAINTENANCE WORK. TECH SPECS SECTION 4.8.2.7 REQUIRES THE RELAY TO TRIP AT LESS THAN OR EQUAL TO 132 VAC. THE RELAY TRIPPED AT 132.6 VAC. THE CAUSE OF THE RPS SUPPLY OVER-VOLTAGE RELAY BEING OUT OF CALIBRATION WAS COMPONENT FAILURE DUE TO SETPOINT DRIFT. THE RELAY WAS RECALIBRATED ACCORDING TO THE RPS MG SET OVERVOLTAGE-UNDERFREQUENCY & UNDERVOLTAGE FT&C PROCEDURE, AND SET TO TRIP AT 131.9 VAC. THE RPS SUPPLY OVERVOLTAGE RELAY WAS RETURNED TO SERVICE ON NOVEMBER 3, 1982.

[185] HATCH 2 DOCKET 50-366 LER 82-127
 CONTAINMENT HYDROGEN OXYGEN MONITOR INOPERABLE.
 EVENT DATE: 111382 REPORT DATE: 120782 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LOOSE POWER SUPPLY CONNECTION.

(NSIC 180223) WHILE PERFORMING THE HYDROGEN AND OXYGEN ANALYZER FT&C PROCEDURE, THE A DRYWELL H2 AND O2 ANALYZER WAS DISCOVERED TO BE INOPERABLE. THIS EVENT IS CONTRARY TO ITEM 9 OF TECH SPECS TABLE 3.3.6.4-1. THE REDUNDANT B DRYWELL H2 AND

O2 ANALYZER WAS OPERABLE. PLANT OPERATION WAS PLACED IN A 30-DAY LCO AS REQUIRED BY TECH SPECS 3.3.6.4, ACTION A. THE CAUSE OF THIS EVENT WAS ATTRIBUTED TO COMPONENT FAILURE, DUE TO A LOOSE CONNECTION ON THE INDICATOR POWER SUPPLY. THE LOOSE CONNECTION WAS REPAIRED AND THE COMPONENT RETURNED TO NORMAL OPERABLE STATUS. THE HYDROGEN AND OXYGEN ANALYZER FT&C PROCEDURE WAS SATISFACTORILY COMPLETED. TECH SPECS WAS SATISFIED AND THE LCO WAS CLEARED.

[186] HATCH 2 DOCKET 50-366 LER 82-115
 CORE SPRAY PRESSURE SWITCH INOPERABLE.
 EVENT DATE: 112282 REPORT DATE: 122182 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: STUCK SWITCH.

(NSIC 180124) WHILE PERFORMING BARTON MODEL 288A AND 289A DIFFERENTIAL PRESSURE INDICATING SWITCH CALIBRATION PROCEDURE, THE B CORE SPRAY RHR PERMISSIVE PRESSURE SWITCH WAS FOUND TO BE INOPERABLE. TECH SPECS SECTION 3.3.3 & TABLES 3.3.3-1 AND 3.3.3-2 (ITEMS 1.C, 2.D, AND 2.3) REQUIRES THIS INSTRUMENT TO BE OPERABLE. THIS EVENT WAS CAUSED BY COMPONENT FAILURE. THE HIGH SET POINT MICRO SWITCH WOULD NOT ACTUATE; HOWEVER, AFTER BEING EXERCISED IT OPERATED PROPERLY & WAS SATISFACTORILY CALIBRATED & RETURNED TO SERVICE ON 11/22/82. ON 12/17/82 THE MICRO SWITCH WAS REPLACED TO PREVENT RECURRENCE OF THIS EVENT. THE SWITCH WAS CALIBRATED & RETURNED TO SERVICE ON 12/17/82.

[187] HATCH 2 DOCKET 50-366 LER 82-122
 FIRE DETECTOR TESTING MISSED.
 EVENT DATE: 112382 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PERSONNEL ERROR.

(NSIC 180226) THE FIRE DETECTOR SURVEILLANCE-SAFETY RELATED AREAS PROCEDURE WAS NOT COMPLETED BY THE LATEST POSSIBLE DATE (11/23/82: DUE DATE OF 11/8/82 PLUS GRACE PERIOD OF 15 DAYS; 15 DAYS IS 25% GRACE PERIOD PER TECH SPECS 4.0.2.A). A 14 DAY LCO WAS INITIATED PER TECH SPEC 3.3.6.8, ACTION B. LAST REPORTED IN LER 50-366/1982-108. BECAUSE OF ACTIVITIES CONCERNING THE UNIT 1 OUTAGE, RESPONSIBLE PERSONNEL OVERLOOKED THE FIRE DETECTOR SURVEILLANCE LATEST POSSIBLE PERFORMANCE DATE. WHEN THE PERSONNEL RESPONSIBLE FOR PROCEDURE PERFORMANCE LEARNED OF THE DELINQUENCY, A CONCENTRATED EFFORT RESULTED IN TEST COMPLETION ON 11/24/82. RESPONSIBLE PERSONNEL HAVE BEEN VERBALLY COUNSELLED.

[188] HATCH 2 DOCKET 50-366 LER 82-128
 CMFLPD EXCEEDS FRTP.
 EVENT DATE: 112582 REPORT DATE: 122182 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CORE COMPONENT: CONTROL RODS
 CAUSE: ROD MOVEMENT IN AREAS OF LOW XENON CONCENTRATION.

(NSIC 180224) FOLLOWING A CONTROL ROD PATTERN ADJUSTMENT AND DURING POWER ASCENSION ON UNIT 2, TWO INSTANCES OCCURRED IN WHICH CMFLPD WAS FOUND GREATER THAN FRTP IN VIOLATION OF TECH SPECS 3.2.2. CORRECTIVE ACTION ON BOTH OCCASIONS WAS COMPLETED WITHIN THE 2 HOUR TIME LIMIT. LAST REPORTED IN LER 50-366/1982-111. CONTROL ROD MOVEMENT IN AREAS OF LOW XENON CONCENTRATION PRODUCED AREAS OF HIGHER THAN NORMAL POWER DUE TO THE REDUCTION OF XENON RESULTING FROM INCREASED BURNOUT. APRM'S WERE ADJUSTED TO READ AT LEAST CMFLPD AS THE CORRECTIVE ACTION IN BOTH CASES. AN ONGOING REVIEW OF PAST OCCURRENCES IS BEING PERFORMED TO HELP PRECLUDE RECURRENCES OF THIS NATURE.

[189] HATCH 2 DOCKET 50-366 LER 82-007S
 TRIAXIAL RESPONSE SPECTRUM RECORDER FAILS.
 EVENT DATE: 122082 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DAMAGED SWITCHES.

(NSIC 180133) WHILE PERFORMING THE PEAK SHOCK ANNUNCIATOR AND RECORDER FUNCTIONAL TEST PROCEDURE, THE TRIAXIAL RESPONSE SPECTRUM RECORDER WAS FOUND INOPERABLE. THIS EVENT IS CONTRARY TO TECH SPEC SECTION 3.3.6.2.A. THE BALANCE OF SEISMIC MONITORING INSTRUMENTATION (IDENTIFIED IN UNIT II TECH SPECS TABLE 3.3.6.2-1) REMAINED OPERABLE. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO COMPONENT FAILURE DUE TO SOME OF THE COMPONENT'S SWITCHES BEING DAMAGED. THE COMPONENT HAS BEEN SHIPPED TO THE EQUIPMENT MANUFACTURER SO THAT THE NECESSARY REPAIRS CAN BE MADE. AFTER REPAIRS ARE MADE BY THE MANUFACTURER AND THE EQUIPMENT IS RETURNED TO THE PLANT SITE, THE COMPONENT WILL BE RE-INSTALLED AND RETURNED TO NORMAL OPERABLE STATUS.

[190] HUMBOLDT BAY DOCKET 50-133 LER 82-008
 STACK GAS IODINE PUMP FAILS.
 EVENT DATE: 121282 REPORT DATE: 011083 NSSS: GE TYPE: BWR
 SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: PUMPS
 CAUSE: SHEARED OFF CARBON VANE.

(NSIC 180413) THE STACK GAS IODINE SAMPLE PUMP WAS FOUND TO HAVE SEIZED. THIS IS REPORTABLE UNDER TECH SPEC IX.I.2.B.(2). UPON REMOVING THE IODINE MONITOR SAMPLE PUMP FOR INSPECTION, ONE OF THE FOUR CARBON VANES WAS FOUND TO HAVE SHEARED OFF AND HAD DESTROYED ANOTHER VANE. THE SAMPLE PUMP WAS REPLACED WITH ONE FROM SPARE STORAGE.

[191] INDIAN POINT 2 DOCKET 50-247 LER 82-048
 FLOW THROUGH CFCU CHARCOAL FILTER IS LOW.
 EVENT DATE: 110582 REPORT DATE: 120582 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: FILTERS
 CAUSE: UNKNOWN.

(NSIC 179977) DURING TESTING, THE AIR FLOW THROUGH NO. 24 REACTOR CONTAINMENT FAN COOLER UNIT CHARCOAL FILTER WAS FOUND TO BE APPROXIMATELY 7% LESS THAN REQUIRED BY TECH SPEC 4.5.D.2.A. THE CHARCOAL FILTERS ARE INTENDED FOR USE DURING AN INCIDENT TO REMOVE RADIOACTIVE IODINE IN THE CONTAINMENT ATMOSPHERE. FRESH CHARCOAL WILL BE PLACED IN THE CHARCOAL TRAYS AND THE SYSTEM FLOW RETESTED. THE CAUSE OF THE LOW FLOW IS UNDER INVESTIGATION, THE RESULTS OF WHICH WILL BE PROVIDED IN A REVISION TO THIS LER.

[192] KEWAUNEE DOCKET 50-305 LER 82-034
 MAIN STEAM VALVE INOPERABLE.
 EVENT DATE: 111182 REPORT DATE: 121082 NSSS: WE TYPE: PWR
 SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: STICKING TORQUE SWITCH.

(NSIC 180081) WHILE PERFORMING A SURVEILLANCE TEST ON THE APW SYSTEM, VALVE MS-100A MAIN STEAM TO TURBINE DRIVEN APW PUMP, TORQUED OUT WHEN CLOSING. THE VALVE HAD OPENED SUCCESSFULLY TO MEET ITS SAFETY-RELATED REQUIREMENTS; HOWEVER, THE VALVE HAD TO BE TAKEN OUT OF SERVICE FOR CORRECTIVE MAINTENANCE. THIS PLACED THE PLANT UNDER LCO TECH SPEC 3.4.B AND IS REPORTABLE PER TECH SPEC 6.9.2.B.(2) AS OPERATION PERMITTED IN A DEGRADED MODE. THE TORQUE SWITCH WAS FOUND TO BE STICKING AND THE MANUAL DE-CLUTCH UNIT WAS OUT OF ADJUSTMENT. THE TORQUE SWITCH, GREASE AND TRIPPER ASSEMBLIES WERE REPLACED AND THE OPERATOR WAS REBUILT. THE VALVE WAS RETESTED SATISFACTORILY.

[193] LA SALLE 1 DOCKET 50-373 LER 82-152
 SET POINT DRIFT IN RCIC PRESSURE SWITCH.
 EVENT DATE: 111582 REPORT DATE: 121382 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 179995) DURING THE PERFORMANCE OF LIS-RI-01, DPIS 1E31-N007A SETPOINT WAS FOUND OUT OF TOLERANCE IN THE NON-CONSERVATIVE DIRECTION PER TECH SPEC 3.3.2. THIS WAS AN ISOLATED INCIDENT. THE CAUSE OF THE SETPOINT DRIFT IS UNKNOWN AT THIS TIME. THE DIFFERENTIAL PRESSURE INDICATING SWITCH WAS MANUFACTURED BY ITT BARTON, MODEL 288. DPIS 1E31-N007A WAS RECALIBRATED ON NOVEMBER 15, 1982 AND DECLARED OPERABLE.

[194] LA SALLE 1 DOCKET 50-373 LER 82-151
 CONTROL ROOM VENTILATION FAN FAILS TO START.
 EVENT DATE: 111782 REPORT DATE: 121582 NSSS: GE TYPE: BWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: VALVES
 CAUSE: BENT DAMPER SHAFT.

(NSIC 179997) THE B EMERGENCY MAKEUP CONTROL ROOM VENTILATION FAN FAILED TO START DURING THE PERFORMANCE OF LOS-VC-M1. THE A EMERGENCY VENTILATION FAN WAS STARTED PER TECH SPEC 3.7.2 IN CONJUNCTION WITH THE NORMAL VC HVAC SYSTEM. INVESTIGATION SHOWED THAT THE OUTLET DAMPER SHAFT OF THE B TRAIN WAS BENT AND THE BEARING HOUSING CAP WAS BROKEN. WHEN THE LINKAGE WAS INITIALLY INSTALLED IT APPEARS TO HAVE BEEN MISALIGNED. THE DAMPER WAS REMOVED TO EFFECT REPAIRS AND TEMPORARY DUCT WORK WAS INSTALLED UNTIL THE DAMPER WAS REINSTALLED. B TRAIN PASSED LOS-VC-M1 AFTER BEING REPAIRED.

[195] LA SALLE 1 DOCKET 50-373 LER 82-155
 SECONDARY CONTAINMENT VIOLATED BY 2 OPEN DOORS.
 EVENT DATE: 111882 REPORT DATE: 120382 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: ELECTRIC STRIKE OUT OF ADJUSTMENT.

(NSIC 179993) BOTH DOORS INTO THE UNIT 1 REACTOR BUILDING ON ELEVATION 761 FEET OPENED AT THE SAME TIME ALLOWING AN INFLOW OF AIR TO THE REACTOR BUILDING. ALTHOUGH SECONDARY CONTAINMENT WAS VIOLATED, NEGATIVE PRESSURE WAS MAINTAINED IN THE REACTOR BUILDING. IN ADDITION PRIMARY CONTAINMENT INTEGRITY WAS IN EFFECT AT ALL TIMES. THE CAUSE OF THIS OCCURRENCE WAS THAT DOOR 285 ELECTRIC STRIKE WAS OUT-OF-ADJUSTMENT. THEREFORE THE LATCH BOLT COULD NOT WORK PROPERLY. THE ELECTRIC STRIKE WAS ADJUSTED THAT AFTERNOON SO THAT THE LATCH BOLT WORKED PROPERLY.

[196] LA SALLE 1 DOCKET 50-373 LER 82-153
 RWCU HEAT EXCHANGER RELIEF LINE WELD LEAKS.
 EVENT DATE: 111882 REPORT DATE: 121582 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: PIPES, FITTINGS
 CAUSE: UNKNOWN.

(NSIC 179994) AFTER STARTING RWCU B PUMP A STEAM AND WATER LEAK WAS DISCOVERED ON THE RWCU B REGENERATIVE HEAT EXCHANGER SHELL SIDE RELIEF LINE (2RT89AB-1 1/2") TO HEAT EXCHANGER SOCKET WELD JUNCTION. ALL LEAKAGE WAS CONTAINED WITHIN THE RWCU B REGENERATIVE HEAT EXCHANGER ROOM. CAUSE COULD NOT BE DETERMINED AT THIS TIME. AIR 01-82-583 HAS BEEN ASSIGNED TO LSCS QC DEPT. TO PERFORM INVESTIGATION OF THE FAILURE. WORK REQUEST #L20566 WAS GENERATED TO REPLACE THE DEFECTIVE SECTION OF PIPING ON LINE 1RT89AB-1 1/2".

[197] LA SALLE 1 DOCKET 50-373 LER 82-156
 RCS COOLANT CONDUCTIVITY EXCEEDS LIMIT.
 EVENT DATE: 111982 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: DEMINERALIZERS
 CAUSE: BYPASSING OF CONDENSATE POLISHERS.

(NSIC 179992) WHILE PERFORMING STP-23A, THE CONDENSATE POLISHERS WERE BYPASSED TO MINIMIZE TRANSIENTS ACROSS THE CP'S. AS A RESULT THE REACTOR COOLANT CONDUCTIVITY EXCEEDED 1.0 MICRO-MHOS. THE CP'S WERE BYPASSED TO MINIMIZE PRESSURE TRANSIENTS ACROSS THE CP'S DURING THE PERFORMANCE OF STP-23. AFTER ANALYSIS SHOWED THE CONDUCTIVITY WAS ABOVE 1.0 MICRO-MHOS, STP-23 WAS DISCONTINUED PRIOR TO PUTTING THE CP'S BACK ON LINE. ALL PERSONNEL INVOLVED WERE TOLD THAT A STARTUP TEST WAS INSUFFICIENT REASON TO BYPASS THE CP'S. PRECAUTIONS ARE BEING ADDED TO THE APPLICABLE OPERATING PROCEDURES.

[198] LA SALLE 1 DOCKET 50-373 LER 82-157
 CONTROL ROOM HVAC AMMONIA DETECTOR FAILS.
 EVENT DATE: 112182 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: BROKEN PAPER TAPE.

(NSIC 179991) THE OA CONTROL ROOM HVAC AMMONIA DETECTOR FAILED. THE SYSTEM AUTOMATICALLY WENT INTO THE RECIRCULATION MODE OF OPERATION. FAILED AMMONIA DETECTOR WAS RETURNED TO SERVICE AT 1500 WITH NO VIOLATION OF APPLICABLE TECH SPEC 3.3.7.8. THE CAUSE OF THE FAILURE WAS FOUND TO BE A BROKEN PAPER TAPE IN THE DETECTOR. THE TAPE WAS REPLACED AND THE DETECTOR WAS VERIFIED FUNCTIONAL.

[199] LA SALLE 1 DOCKET 50-373 LER 82-158
 CONTAINMENT ISOLATION VALVE INOPERABLE.
 EVENT DATE: 112282 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: DIRTY CONTACTS IN TORQUE SWITCH.

(NSIC 179990) WHILE CYCLING DRAIN VALVES IN ACCORDANCE WITH STARTUP PROCEDURE IT WAS NOTICED THAT DRAIN VALVE 1B21-F016 WOULD NOT CLOSE. THE VALVE WAS DECLARED INOPERABLE. TECH SPEC 3.6.3 REQUIRES THIS PRIMARY CONTAINMENT ISOLATION VALVE TO BE OPERABLE DURING CONDITIONS 1, 2, AND 3. THE INOPERABLE STATUS OF VALVE 1B21-F016 COULD RESULT IN LOSS OF PRIMARY CONTAINMENT INTEGRITY. THE INBOARD MAIN STEAM LINE DRAIN VALVE 1B21-F016 WAS INOPERABLE DUE TO DIRTY CONTACTS IN THE CLOSING TORQUE SWITCH. THIS PREVENTED THE CLOSING SEAL IN CIRCUIT FROM OPERATING. A FULL CLOSED POSITION COULD BE ACHIEVED ONLY BY HOLDING THE HANDSWITCH IN CLOSE. TORQUE SWITCH CONTACTS WERE CLEANED AND TORQUE SETTINGS WERE VERIFIED TO BE IN COMPLIANCE WITH TORQUE SPECIFICATIONS.

[200] LA SALLE 1 DOCKET 50-373 LER 82-160
 CONDENSATE BOOSTER SYSTEM INOPERABLE.
 EVENT DATE: 112482 REPORT DATE: 122182 NSSS: GE TYPE: BWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: PIPES, FITTINGS
 CAUSE: PIPE WELD LEAK.

(NSIC 179965) A LEAK WAS DETECTED ON THE HIGH POINT VENT LINE (1CB19AB 3/4 IN) FOR THE DISCHARGE LINE FROM CONDENSATE BOOSTER PUMP '1B'. THE LEAKAGE WAS CONTAINED WITHIN THE B CONDENSATE PUMP ROOM AND ITS FLOOR DRAINS. THIS AREA WAS ALREADY BEING CONSIDERED AS A POTENTIALLY CONTAMINATED REGION. THE EXACT CAUSE OF THE LEAK COULD NOT BE DETERMINED, BUT IT IS KNOWN THAT THE FAILURE OCCURRED DIRECTLY ABOVE THE SOCKET WELD IN THE HEAT AFFECTED ZONE BETWEEN PIPE LINES 1CB01BB AND 1CB19AB. ON DECEMBER 1, 1982 AN OUTAGE WAS TAKEN ON THE CONDENSATE

BOOSTER SYSTEM SO THAT MAINTENANCE COULD BE PERFORMED. LINE 1CB19AB WAS SATISFACTORILY REPAIRED ON DECEMBER 3, 1982.

[201] LA SALLE 1 DOCKET 50-373 LER 82-166
TWO DRYWELL CAM PUMPS TRIP.
EVENT DATE: 112682 REPORT DATE: 122182 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: VALVES
CAUSE: LEAKY VALVE AND ELECTRONIC INTERFERENCE.

(NSIC 179963) BOTH DRYWELL CAM'S 1PL15J AND 1PL75J SAMPLE PUMPS CONTINUOUSLY TRIPPED OFF. THE PRIMARY CONTAINMENT SUMP FLOW MONITORING SYSTEM AND THE P.C. AIR COOLERS CONDENSATE FLOW RATE MONITORING SYSTEMS WERE MONITORING LEAKAGE IN ACCORDANCE WITH TECH SPEC 3.4.3.1. THE CAUSE WAS APPARENTLY DUE TO THE COMBINATION OF A LEAKING CROSS-TIE VALVE (1CM036) AND INTERNAL ELECTRONIC INTERFERENCE. THE CROSS-TIE VALVE (1CM036) IS PRESENTLY IN THE PROCESS OF BEING REPLACED UNDER WORK REQUEST L20763. THREE RADIATION PROCEDURES (LRP 1350-20, 21, 24) ARE CURRENTLY BEING REVISED TO HELP PREVENT ELECTRONIC INTERFERENCE PROBLEMS.

[202] LA SALLE 1 DOCKET 50-373 LER 82-163
FOUR RCIC TEMPERATURE SWITCH CALIBRATIONS ARE INADEQUATE.
EVENT DATE: 112982 REPORT DATE: 122782 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 179964) DURING THE PERFORMANCE OF LIS-RI-03, TEMPERATURE SWITCHES 1E31-N612A, 1E31-N612B AND TEMPERATURE DIFFERENTIAL SWITCHES 1E31-N613A, 1E31-N613B WERE FOUND TO BE OUT OF ALLOWABLE TOLERANCE IN THE NON-CONSERVATIVE DIRECTION. THE AFFECTED TEMPERATURE SWITCHES WERE IMMEDIATELY RE-CALIBRATED WITHIN ALLOWABLE TOLERANCES AND TECH SPEC 3.3.2 WAS SATISFIED. CAUSE APPEARS TO BE INCONSISTENCIES IN PROCEDURE FOR CALIBRATING TEMPERATURE SWITCHES. PROCEDURE WAS REVISED TO CORRECT ANY VAGUE AMBIGUOUS STEPS IN THE SURVEILLANCE. ALL INSTRUMENTS ARE BEING RE-CALIBRATED AND AIR (1-82-589) WAS WRITTEN TO TREND INSTRUMENTS FOR ANY INSTRUMENT DRIFT OCCURRENCES.

[203] LA SALLE 1 DOCKET 50-373 LER 82-169
SEVEN SIGHTLESS ISOLATION VALVES FOUND OPEN.
EVENT DATE: 120182 REPORT DATE: 123082 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: NONLICENSED OPERATOR ERROR.

(NSIC 179969) SUPPRESSION POOL NARROW RANGE SIGHTGLASS ISOLATION VALVES 1CM039 THROUGH 1CM045 WERE FOUND LOCKED OPEN ALTHOUGH THESE VALVES ARE REQUIRED TO BE LOCKED CLOSED PER LAP 240-1. NO SIGNIFICANT AIRBORNE ACTIVITY EXISTED DURING THE TIME THAT THE SIGHTGLASSES WERE VALVED IN, AND THE SIGHTGLASSES HAVE DEMONSTRATED THEIR ABILITY TO WITHSTAND CONTAINMENT DESIGN PRESSURE DURING ILRT. APPARENT COMMUNICATION BREAKDOWN BETWEEN UNIT NSO AND EQUIPMENT ATTENDANT PREVENTED VALVES FROM BEING RETURNED TO THE LOCKED CLOSED POSITION. VALVES WERE CORRECTLY ALIGNED UPON DISCOVERY, OPERATOR TRAINING IS BEING PERFORMED AND AN OPERATING PROCEDURE TO PROVIDE FOR TEMPORARY VALVE CHANGES IS BEING DRAFTED.

[204] LA SALLE 1 DOCKET 50-373 LER 82-168
RCIC PRESSURE SENSING LINE LEAKS.
EVENT DATE: 120182 REPORT DATE: 123082 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: PIPES, FITTINGS
CAUSE: COMPRESSION FITTING FAILURE.

(NSIC 179970) A STEAM LEAK WAS DISCOVERED ON A PRESSURE SENSING LINE FOR THE RCIC

INSTRUMENTS DPIS 1E31-N007B AND PS 1E31-N022B&D. REDUNDANT DPIS 1E31-N013B WOULD HAVE PERFORMED ITS DESIGN FUNCTION HAD A STEAM LINE ISOLATION BEEN REQUIRED. REDUNDANT PS 1E31-N022A&C WOULD HAVE ISOLATED THE RCIC OUTBOARD STEAM LINE ISOLATION VALVE ON LOW PRESSURE AS DESIGNED. THE CAUSE OF THE STEAM LEAK APPEARED TO BE THE FAILURE OF A COMPRESSION FITTING ON THE INSTRUMENTATION STEAM PRESSURE LINE. THE CAUSE OF THE FAILURE COULD NOT BE DETERMINED. THIS WAS AN ISOLATED INCIDENT. THE LEAK WAS REPAIRED ON 12/1/82 AND THE SWITCHES WERE RETURNED TO SERVICE. RCIC SYSTEM WAS TESTED SATISFACTORILY ON 12/20/82 FOLLOWING A 17 DAY OUTAGE.

[205] LA SALLE 1 DOCKET 50-373 LER 82-167
 DRYWELL OXYGEN CHANNELS INOPERABLE.
 EVENT DATE: 120182 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LOW CALIBRATION GAS BOTTLE PRESSURE.

(NSIC 179971) TECH SPEC 3.3.7.5 REQUIRES THE DRYWELL OXYGEN MONITORING CHANNELS TO BE OPERABLE DURING CONDITIONS 1&2. ON 12/1/82 THE SYSTEM FAILURE ALARM CAME UP IN THE CONTROL ROOM WHICH RESULTED FROM A LOCAL LOW CALIBRATION GAS PRESSURE ALARM. ALSO, THE DIV II POST LOCA OXYGEN CHANNEL BEGAN READING ERRATICALLY. THE DIV II CHANNEL WAS SUBSEQUENTLY DECLARED INOPERABLE. AT THE TIME, LSCS WAS AT 1474 MWT AND 450 MWE. THE DRYWELL WAS NOT INERTED. SYSTEM FAILURE ALARMS CAME UP AS A RESULT OF LOW CALIBRATION GAS BOTTLE PRESSURE. PRESENTLY THESE BOTTLES ARE NOT MONITORED FOR LEVEL. THE ERRATIC READINGS RESULTED FROM A FAULTY ANALYZING CELL. IT IS ALSO SUSPECTED THAT THE FLOW REGULATOR WAS DEFECTIVE. THE CALIBRATION GAS BOTTLE WAS REPLACED AND ITS LEVEL WILL NOW BE MONITORED ON A ROUTINE BASIS. FAULTY PARTS WERE REPLACED AND CALIBRATION WAS PERFORMED.

[206] LA SALLE 1 DOCKET 50-373 LER 82-180
 TECH SPEC SNUBBER TABLES ARE INCORRECT.
 EVENT DATE: 123082 REPORT DATE: 012783 NSSS: GE TYPE: BWR
 SYSTEM: OTHER SYSTEMS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 CAUSE: ADMINISTRATIVE ERROR.

(NSIC 180361) DURING REVIEW OF TECH SPEC TABLE 3.7.9-2, IT WAS NOTICED THAT SEVERAL ADMIN/CLERICAL ERRORS EXISTED INCLUDING SNUBBERS LISTED TWICE, LISTING OF RESTRAINTS OTHER THAN SNUBBERS, LISTING OF SNUBBERS WHICH HAD BEEN DELETED BY PREVIOUS DESIGN CHANGES, OMISSIONS AND LOCATION ERRORS. INSTALLATION WAS IN ACCORDANCE WITH PLANT DESIGN. PREVIOUS TECH SPEC SUBMITTALS WERE GENERATED PRIOR TO INCORPORATION OF FINAL LINEWALK INFORMATION INTO A/E DOCUMENTS. REVISION OF TECH SPEC TABLE 3.7.9-2 IS PRESENTLY IN PROGRESS DUE TO REMOVAL OF SNUBBERS WITH SMALL THERMAL MOVEMENTS. DISCREPANCIES WILL BE CORRECTED IN THIS SUBMITTAL.

[207] LACROSSE DOCKET 50-409 LER 82-005 REV 1
 UPDATE ON CORE SPRAY PIPING STRESS ANALYSIS DISCREPANCY.
 EVENT DATE: 041382 REPORT DATE: 121682 NSSS: AC TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PIPES, FITTINGS
 CAUSE: CONTRACTOR PERSONNEL ERROR.

(NSIC 180145) DISCREPANCY DISCOVERED IN SEISMIC AND STRESS ANALYSIS OF HIGH PRESSURE CORE SPRAY PIPING. MAINLY INVOLVED DIFFERENCES IN AS-INSTALLED MATERIAL AND CONFIGURATION OF 10 INCH SECTION OF 1-1/2 INCH DIAMETER PIPING VERSUS ANALYTICAL MODEL. MINOR DISCREPANCIES ALSO DISCOVERED IN ANALYSES OF MAIN STEAM AND FEEDWATER LINES. EVALUATION OF DISCREPANCIES SHOWED MARGIN OF SAFETY STILL ADEQUATE. ANALYTICAL MODELS BASED ON ORIGINAL PIPING, NOT AS-MODIFIED IN 1969-70 AND 1973. INVESTIGATION WAS CONDUCTED ON SIGNIFICANCE OF DISCREPANCIES. UPDATED EVALUATIONS ARE BEING SUBMITTED TO OFFICE OF NUCLEAR REACTOR REGULATION. ANALYSIS SHOWED MARGIN OF SAFETY TO STILL BE ADEQUATE.

[208] LACROSSE DOCKET 50-409 LER 82-020
 STACK MONITORS LOSE VACUUM PUMP FLOW.
 EVENT DATE: 111982 REPORT DATE: 121682 NSSS: AC TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: PUMPS
 CAUSE: PUMP TRIPPED ON HIGH TEMPERATURE.

(NSIC 180050) ON 3 OCCASIONS ON NOVEMBER 19-20, THE VACUUM PUMP WHICH MAINTAINS ISOKINETIC FLOW RATE TO STACK ACTIVITY MONITORS TRIPPED. WHILE PUMP WAS TRIPPED, STACK MONITORS CONTINUED TO OPERATE, BUT AIR STREAMS BEING MONITORED WERE NOT ISOKINETIC WITH STACK DISCHARGE. STACK AND OTHER AIR MONITORS INDICATED NORMAL. PUMP AND MOTOR OVERHEATED, CAUSING MOTOR TO TRIP. PUMP RESTARTED. AIR BLOWER SET UP WHICH COOLED MOTOR.

[209] MAINE YANKEE DOCKET 50-309 LER 82-031 REV 1
 UPDATE ON INOPERABLE MAIN STEAM LINE SNUBBER.
 EVENT DATE: 092482 REPORT DATE: 120782 NSSS: CE TYPE: PWR
 SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 CAUSE: SEAL LEAKAGE.

(NSIC 180083) SCHEDULED INSERVICE INSPECTION OF SHOCK SUPPRESSORS REQUIRED TO BE OPERABLE BY TECH SPEC REVEALED AN EMPTY HYDRAULIC RESERVOIR ON SNUBBER NUMBER 72, SHP-HSS-110, REQUIRING IT TO BE DECLARED INOPERABLE. THE SNUBBER IS LOCATED ON THE NO. THREE MAIN STEAM LINE IMMEDIATELY DOWNSTREAM OF THE EXCESS FLOW CHECK VALVE. THE EMPTY HYDRAULIC FLUID RESERVOIR OF THE SIX INCH SNUBBER RESULTED PRIMARILY FROM LEAKAGE THRU THE ETHYLENE TOMKINS-JOHNSON MODEL NUMBER SH-9B CYLINDER SEALS AND MINOR SEEPAGE AROUND SNUBBER VALVE FITTINGS. THE DEGREE OF SEAL WEAR IS NOT CONSIDERED UNUSUAL SINCE THIS SNUBBER HAS NOT BEEN REBUILT SINCE 1976. THE MINOR SEEPAGE IS AN EXPECTED RESULT OF INSERVICE CONDITIONS. THE SNUBBER HAS BEEN REBUILT WITH NEW SEALS. UNDER THE INSERVICE TESTING PROGRAM THE SHOCK SUPPRESSOR WAS ORIGINALLY SCHEDULED TO BE REBUILT DURING THE SHUTDOWN. OTHER SNUBBERS ARE ALSO BEING REBUILT DURING THIS OUTAGE UNDER THE INSERVICE TESTING PROGRAM DUE TO SERVICE HISTORY. THE SNUBBER SURVEILLANCE INSPECTION FREQUENCY HAS BEEN INCREASED IN ACCORDANCE WITH TECH SPEC AS A RESULT OF THIS DISCREPANCY. PREVIOUS EVENT NUMBERS ADDRESSING SNUBBER SEAL WEAR ARE 76-13, 76-14 AND 76-15. THE SOLUTION TO THESE ABNORMAL DEGRADATION PROBLEMS WAS REBUILDING WITH ETHYLENE PROPYLENE SEALS. SNUBBER NUMBER 72 HAD ETHYLENE PROPYLENE CYLINDER SEALS.

[210] MAINE YANKEE DOCKET 50-309 LER 82-039 REV 1
 UPDATE ON INOPERABLE EXCORE NEUTRON DETECTORS.
 EVENT DATE: 120982 REPORT DATE: 122482 NSSS: CE TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 180242) A PLANT ENGINEER RECOGNIZED THAT THE EXCORE NEUTRON DETECTORS INDICATION OF CORE POWER LEVEL WOULD BE LOWER THAN ACTUAL CORE POWER LEVEL. THIS IS REPORTABLE UNDER TECH SPEC 5.9.1.B.I BECAUSE THE NEUTRON DETECTORS AND ASSOCIATED POWER MEASUREMENT AND INDICATION SYSTEM WERE IN A CONFIGURATION THAT REQUIRED REMEDIAL ACTION TO PREVENT THEIR OPERATION IN A MANNER LESS CONSERVATIVE THAN ASSUMED IN SAFETY ANALYSES. THE CAUSE OF THIS EVENT WAS FAILURE TO ADJUST THE EXCORE POWER LEVEL INDICATORS TO ACCOUNT FOR THE NEW CORE DESIGN INSTALLED DURING REFUELING. TO PREVENT RECURRENCE, A PROCEDURAL CONTROL WILL BE INSTITUTED TO ENSURE AN ADJUSTMENT WILL BE DEVELOPED AND APPLIED IF NECESSARY IN STARTUPS FOLLOWING REFUELING.

[211] MCGUIRE 1 DOCKET 50-369 LER 82-074
 NUMEROUS PERSONNEL AIR LOCK SEALS FAIL.
 EVENT DATE: 101482 REPORT DATE: 113082 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: VARIOUS REASONS.

(NSIC 180043) VARIOUS DOOR SEALS FAILED ON BOTH THE UPPER AND LOWER PERSONNEL AIR LOCKS (PAL) ON 10/14/82, 10/19/82, 10/25/82 AND 10/28/82. ALL OF THESE FAILURES RESULTED IN THE PALS BEING DECLARED INOPERABLE PER TECH SPEC 3.6.1.3 WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.13(D). SIMILAR TO PREVIOUS RO'S 369/81-176, 81-190, 82-05, AND 82-61. THE ABILITY TO MAINTAIN CONTAINMENT INTEGRITY WAS NEVER LOST. THE SEAL (SEALMASTER AND PRESREY) FAILURES INVOLVED A BLISTER (10/14/82), DOOR OUT OF ALIGNMENT (10/19/82), SEALS INFLATED WHILE DOOR OPEN (10/25/82), AND SURFACE OF SEAL PEELING OFF FOR UNKNOWN REASONS (10/18/82). THE SEALS WERE REPLACED, PASSED LEAK RATE TESTS, AND THE PALS DECLARED OPERABLE. DUKE WILL MEET WITH THE AIR LOCK'S MANUFACTURER TO DETERMINE FUTURE CORRECTIVE ACTIONS, AND WILL USE BETTER PERFORMING SEALMASTER SEALS AS REPLACEMENTS FOR ANY FUTURE PRESREY FAILURES.

[212] MCGUIRE 1 DOCKET 50-369 LER 82-078
 2 CHARGING PUMPS INOPERABLE DUE TO BREAKER OPENING.
 EVENT DATE: 110882 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: PUMPS
 CAUSE: DEFICIENT PROCEDURE.

(NSIC 180002) DURING THE DRAINING OF THE REACTOR COOLANT SYSTEM, BOTH CENTRIFUGAL CHARGING PUMPS (CCP'S) WERE RENDERED INOPERABLE. THIS VIOLATES TECH SPEC 3.1.2.1 AND TECH SPEC 3.1.2.3 WHICH ARE REPORTABLE PURSUANT TO TECH SPEC 6.9.1.13(B). THE INITIAL CONDITIONS IN THE DRAINING PROCEDURE CONTAINED A CONFUSING STATEMENT WHICH LED TO AN ERRONEOUS ASSUMPTION THAT BOTH CCP BREAKERS HAD TO BE RACKED OUT AND TAGGED. THE TAG ON CCP 1A WAS REMOVED AND THE BREAKER WAS RACKED INTO THE CONNECTED POSITION. THE PROCEDURE WILL BE REVISED SO THAT THE REQUIREMENTS ARE MADE CLEAR, AND PERSONNEL WILL BE COUNSELED.

[213] MCGUIRE 1 DOCKET 50-369 LER 82-079
 BOTH CHARGING PUMPS INOPERABLE.
 EVENT DATE: 111882 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVES
 CAUSE: MODIFICATION; VALVE LEAKAGE.

(NSIC 180001) AFTER CENTRIFUGAL CHARGING PUMP (CCP) 1A WAS STARTED TO BEGIN THE HEATUP OF THE REACTOR COOLANT SYSTEM IT WAS DECLARED INOPERABLE BECAUSE OF APPARENTLY EXCESSIVE LEAKAGE FROM THE PUMP SEALS. SINCE CCP 1B HAD BEEN PREVIOUSLY DECLARED INOPERABLE IN ORDER TO COMPLETE A MODIFICATION, THIS VIOLATED TECH SPEC 3.1.2.1 AND TECH SPEC 3.1.2.3 WHICH ARE REPORTABLE PER TECH SPEC 6.9.1.13(B). ALTHOUGH WATER OBSERVED SPRAYING OUT OF THE INBOARD AND OUTBOARD SEAL AREA WAS INITIALLY BELIEVED TO BE EXCESSIVE SEAL LEAKAGE, INVESTIGATION REVEALED THAT THE SEALS WERE WORKING PROPERLY AND THE SPRAYING WATER WAS CAUSED BY THE PUMP SHAFT SLINGING WATER OUT OF THE SEAL LEAKAGE BASIN. THE WATER ACCUMULATED THERE BECAUSE A DRAIN VALVE HAD BEEN PARTIALLY CLOGGED AND/OR NOT OPEN COMPLETELY. THE DRAIN LINE WAS CLEARED AND CCP 1A WAS RETURNED TO SERVICE.

[214] MCGUIRE 1 DOCKET 50-369 LER 82-080
 2 RPS CALIBRATION PROCEDURES ARE INACCURATE.
 EVENT DATE: 112282 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PROCEDURAL DEFICIENCY.

(NSIC 179999) DURING WORK ON UNIT 2, DISCREPANCIES IN THE INTERMEDIATE RANGE (I/R) INTERNAL PICOAMPERE SOURCE (CALIBRATION MODULE) AND LOG CURRENT AMPLIFIER CALIBRATION PROCEDURES WERE DISCOVERED, INDICATING THAT 2 PAST CALIBRATIONS ON UNIT 1 I/R CHANNELS (10/22/80, 3/11/82) USING THE SAME PROCEDURES WERE INADEQUATE TO PROPERLY SATISFY TECH SPEC 4.3.1.1 REQUIREMENTS. THIS IS REPORTABLE PER TECH SPEC 6.9.1.13(C). THE CALIBRATIONS DID NOT PROPERLY VERIFY THE ACCURACY OF THE LOG CURRENT AMPLIFIERS ON I/R CHANNELS N35 AND N36 DUE TO IMPROPER OPTIONS IN THE PROCEDURES, ALLOWING THE INTERNAL PICOAMPERE SOURCE TO BE USED FOR CALIBRATION OF THE LOG CURRENT AMPLIFIER. THE UNIT 1 I/R CHANNELS WERE PROPERLY RECALIBRATED PRIOR TO STARTUP. PROCEDURES WILL BE REVISED BY JULY 1983 IN TIME FOR THE UNIT 1 RECALIBRATION.

[215] MILLSTONE 1 DOCKET 50-245 LER 82-020 REV 2
 UPDATE CN 4 SNUBBER FAILURES.
 EVENT DATE: 093082 REPORT DATE: 010583 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 CAUSE: VARIOUS REASONS.

(NSIC 180374) WHILE PERFORMING A HYDRAULIC SNUBBER FUNCTIONAL TEST IN ACCORDANCE WITH TECH SPEC 4.6.1.3 ON A SAMPLE OF 10 SNUBBER, 4 ITT GRINNELL SNUBBER FAILED TO FALL WITHIN THEIR RECOMMENDED RANGES. FURTHER ANALYSIS ON THE 4 FAILURES REVEALED THAT THREE DID MEET THEIR DESIGN ACCEPTANCE RANGES. ONE SNUBBER FAILED. VISUAL EXAMINATION OF THE SNUBBER AS REQUIRED BY TECH SPEC 4.6.1.1 INDICATED 3 POSSIBLE FAILURES. FUNCTIONAL TESTING ON THESE 3 IN THE AS FOUND CONDITION REVEALED ONLY 1 SNUBBER FAILURE. INVESTIGATION INTO THE CAUSE OF THE FIRST SNUBBER FAILURE REVEALED A LACK OF HYDRAULIC FLUID IN ITS RESERVOIR DUE TO AN IMPROPER FIT OF THE FLUID RESERVOIR CYLINDER. THE SINGLE CONFIRMED VISUAL EXAMINATION FAILURE WAS ATTRIBUTED TO OIL LEAKAGE THROUGH THE CRACKED RESERVOIR GLASS. THE TWO SNUBBER WERE REPAIRED, TESTED FOR FUNCTIONAL ACCEPTABILITY AND PLACED BACK IN SERVICE.

[216] MILLSTONE 1 DOCKET 50-245 LER 82-028
 CABLE VAULT FIRE BARRIER MISSING.
 EVENT DATE: 112982 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: INSTALLATION ERROR.

(NSIC 180403) WHILE PERFORMING A FIRE PROTECTION SURVEILLANCE, A MISSING FIRE BARRIER WAS DISCOVERED IN THE CABLE VAULT AREA WHERE PLUMBING AND STORM DRAINS PASS THROUGH. A CONTINUOUS FIRE WATCH WAS IMMEDIATELY ESTABLISHED. TECH SPEC 3.12.F.1 REQUIRES ALL PENETRATION FIRE BARRIERS TO BE FUNCTIONAL WHEN SAFETY-RELATED EQUIPMENT IN THE AREA IS OPERABLE. DURING THE INITIAL FIRE PROTECTION SURVEY THIS PIPE CHASE PENETRATION WAS EVALUATED AND DISPOSITIONED AS NOT REQUIRING A FIRE BARRIER. DURING A RECENT FIRE INSPECTION, HOWEVER, THE PIPE CHASE WAS RE-EVALUATED WITH ADDITIONAL FACTS AND DISPOSITIONED AS NEEDING A FIRE BARRIER. THE OPENING WAS SEALED WITH 9 INCHES OF SILICONE RTV.

[217] MILLSTONE 1 DOCKET 50-245 LER 82-029
 2 FIRE WATER STORAGE TANK LEVELS FALL BELOW LIMIT.
 EVENT DATE: 120782 REPORT DATE: 010783 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: LEAKAGE PAST 2 VALVES.

(NSIC 180375) WHILE PERFORMING ROUTINE ROUNDS, FIRE WATER STORAGE TANK A AND B LEVELS WERE FOUND TO BE AT 190,153 GALLONS AND 190,074 GALLONS RESPECTIVELY. THE TANKS WERE IMMEDIATELY FILLED TO ABOVE THE TECH SPEC LIMIT. TECH SPEC 3.12.A.1.A REQUIRES TWO FIRE SUPPRESSION WATER SUPPLIES, EACH WITH A MINIMUM CONTAINED VOLUME OF 200,000 GALLONS. DISASSEMBLY OF 'A' MAKE-UP VALVE OPERATOR REVEALED A

STRIPPED GEAR. 'B' MOTOR OPERATOR WAS FOUND TO HAVE A STICKING BRAKE. ADDITIONALLY 'B' VALVE WAS BINDING. THE GEAR IN 'A' MAKE-UP VALVE OPERATOR WAS RCTATED AWAY FROM THE STRIPPED TEETH AND LUBRICATED. THE STICKING BRAKE IN 'B' VALVE OPERATOR WAS REMOVED AND THE VALVE WAS LUBRICATED.

[218] MILLSTONE 1 DOCKET 50-245 LER 82-030
 ISOLATION CONDENSER INOPERABLE WHEN VALVE FAILS TO CLOSE.
 EVENT DATE: 121382 REPORT DATE: 011383 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: STICKING VALVE OPERATOR.

(NSIC 180376) WHILE PERFORMING ISOLATION CONDENSER INSTRUMENT FUNCTIONAL TEST, 1-IC-4 WOULD NOT FULLY CLOSE ON AN ISOLATION SIGNAL OR REMOTELY FROM CONTROL ROOM PANEL 903. THE ISOLATION CONDENSER WAS DECLARED INOPERABLE AND AN INVESTIGATION WAS INITIATED. TECH SPEC 3.5.E.1 REQUIRES THE ISOLATION CONDENSER TO BE OPERABLE WHENEVER REACTOR PRESSURE IS GREATER THAN 90 PSIG AND IRRADIATED FUEL IS IN THE REACTOR VESSEL. DURING THE INVESTIGATION THE VALVE WAS CYCLED. APPARENTLY CYCLING THE VALVE LOOSENED A STICKING CONDITION IN THE OPERATOR MECHANISM WHICH HAD CAUSED THE TORQUE SWITCH TO OPERATE PREMATURELY. AT THE NEXT SCHEDULED COLD SHUTDOWN THAT PERMITS DRYWELL ENTRY, 1-IC-4 WILL BE INSPECTED AS A PRECAUTIONARY MEASURE.

[219] MILLSTONE 2 DOCKET 50-336 LER 82-044 REV 1
 UPDATE ON INCORRECT INCORE ALARM VALUES.
 EVENT DATE: 110482 REPORT DATE: 120382 NSSS: CE TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: OPERATOR ERROR.

(NSIC 180127) WHILE PERFORMING AN INCORE DETECTOR ALARM UPDATE ON 4 NOVEMBER 1982, THE ALARM VALUES WERE UPDATED INCORRECTLY, RESULTING IN NON-CONSERVATIVE ALARM VALUES FOR THE INCORE DETECTORS. AS A RESULT, THE 15.6 KW/FT LINEAR HEAT RATE LCO (TECH SPEC 3.2.1) COULD NOT BE VERIFIED. THE INCORRECT ALARM VALUES REMAINED IN PLACE FOR APPROXIMATELY 32 HOURS BEFORE BEING DISCOVERED, AT WHICH TIME THE ALARM VALUES WERE CORRECTED. OTHER DATA INDICATED THAT DURING THE 32 HOURS THAT THE ALARMS WERE NON-CONSERVATIVE, GREATER THAN 20% MARGIN EXISTED TO THE 15.6 KW/FT LINEAR HEAT RATE LIMIT. AT THE TIME OF THE ALARM UPDATE, THE PLANT CALORIMETRIC WAS TEMPORARILY OUT OF SERVICE, CAUSING ERRONEOUS ALARM VALUES TO BE CALCULATED BY THE PLANT COMPUTER. ALL PERSONNEL WHO WILL BE PERFORMING THE ALARM UPDATES WERE INFORMED OF THE ERROR, AND RE-INSTRUCTED ON THE PROCEDURES TO BE FOLLOWING WHEN UPDATING THE INCORE DETECTOR ALARMS. THIS REINSTRUCTION IS DOCUMENTED IN TRAINING RECORDS.

[220] MILLSTONE 2 DOCKET 50-336 LER 82-046
 2 CHARGING PUMPS INOPERABLE.
 EVENT DATE: 113082 REPORT DATE: 122282 NSSS: CE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: PUMPS
 CAUSE: PACKING LEAKAGE.

(NSIC 180193) THE A AND B CHARGING PUMPS WERE REMOVED FROM SERVICE AND MANUALLY ISOLATED. THE UNIT OPERATED UNDER TECH SPEC ACTION STATEMENTS 3.5.2 & 3.1.2.4 FOR 1 HOUR AND 33 MIN. THE ATTEMPT TO QUANTIFY CHARGING PUMP PACKING LEAKAGE WAS MADE, IN ACCORDANCE WITH A.L.A.R.A. CONSIDERATIONS, BY ISOLATING THE CHARGING PUMPS AND PERFORMING A LEAK RATE CALCULATION.

[221] MILLSTONE 2 DOCKET 50-336 LER 82-047
 BOTH BORIC ACID PUMPS INOPERABLE.
 EVENT DATE: 120182 REPORT DATE: 122292 NSSS: CE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISON SYS COMPONENT: PUMPS
 CAUSE: INSTALLATION OF NOISE SUPPRESSION DEVICES.

(NSIC 180192) BOTH BORIC ACID PUMPS WERE DE-ENERGIZED TO INSTALL NOISE SUPPRESSION DEVICES ON THE VCT MAKEUP AND REJECT RELAYS. THE TWO GRAVITY FEED VALVES WERE OPERABLE AND THE PLANT OPERATED IN ACCORDANCE WITH TECH SPEC ACTION STATEMENT 3.5.2.A FOR 1/4 OF AN HOUR. THE BORIC ACID PUMPS WERE DE-ENERGIZED TO INSURE PLANT AND PERSONNEL SAFETY WHILE INSTALLING THE NOISE SUPPRESSION DEVICES ON THE VCT MAKEUP AND REJECT RELAYS. THE BORIC ACID PUMPS WERE RE-ENERGIZED AFTER NOISE SUPPRESSION INSTALLATION.

[222] NINE MILE POINT 1 DOCKET 50-220 LER 82-015
 RESERVE POWER TRANSFORMER DELUGE VALVES INOPERABLE.
 EVENT DATE: 111782 REPORT DATE: 121682 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: PRESSURE SWITCH INSTALLATION.

(NSIC 179981) ON NOVEMBER 17 AND 18, DURING A PLANNED EVENT, DELUGE VALVES 101N AND 101S PROTECTING THE RESERVE POWER TRANSFORMER WERE INTENTIONALLY MADE INOPERABLE TO REPLACE PRESSURE SWITCHES PER A MODIFICATION (N180.58) TO UPGRADE THE FIRE PROTECTION SYSTEM. THE DELUGE SYSTEM WAS INOPERABLE FOR 10 HOURS ON THE 17TH AND 5 HOURS ON THE 18TH. DURING THE HOURS STATED, A FIRE WATCH WAS STATIONED WITH BACKUP FIRE SUPPRESSION EQUIPMENT FOR THE UNPROTECTED AREAS. THE CORE WAS OFF LOADED AT THE TIME. THE DELUGE SYSTEM WAS REMOVED FROM SERVICE IN ORDER TO INSTALL PRESSURE SWITCHES WITH A SUFFICIENT NUMBER OF ELECTRICAL CONTACTS TO HANDLE THE REQUIREMENTS OF A MODIFIED FIRE PROTECTION SYSTEM. THE OLD SWITCHES DID NOT FAIL. THE DELUGE SYSTEM WAS RETURNED TO OPERABLE STATUS ON THE 18TH WITH THE MODIFICATION INSTALLED.

[223] NINE MILE POINT 1 DOCKET 50-220 LER 82-016
 LOW LEVEL RADIOACTIVE WATER RELEASED DURING CONDENSER TEST.
 EVENT DATE: 112282 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: MAIN CONDENSER SYS & CONT COMPONENT: HEAT EXCHANGERS
 CAUSE: LEAKY WATER BOX TUBES.

(NSIC 180372) DURING A HYDROTEST OF THE MAIN CONDENSER, AN INADVERTENT DISCHARGE OF LOW LEVEL RADIOACTIVE WATER TOTALLING AN ESTIMATED 7200 GALLONS AND 2 MILLICURIES (GAMMA EMITTERS) OCCURRED AT NMP UNIT #1. LOW LEVEL RADIOACTIVE WATER WAS ADDED TO THE MAIN CONDENSER FROM TWO SOURCES: (1) CONDENSATE STORAGE TANK (CST) AND (2) SPENT FUEL POOL FILTER DISCHARGE. MAINTENANCE PERSONNEL ENTERED THE SOUTH CONDENSER WATER BOXES AND DISCOVERED SEVERAL LEAKING TUBES. THESE TUBES WERE SUBSEQUENTLY PLUGGED AND THE RELEASE TERMINATED. AT TIME OF SHUTDOWN, THE OPERATING DATA (WATER QUALITY) INDICATED NO TUBE LEAKAGE PRESENT. A NEW CONDENSER CLEANING PROGRAM WAS PERFORMED TO INCREASE CONDENSER EFFICIENCY. AFTER THIS PROGRAM WAS COMPLETED, A HYDROTEST WAS PERFORMED TO DETERMINE IF ANY TUBE LEAKS WERE PRESENT. TO ENSURE THAT SUCH RELEASES DO NOT OCCUR IN THE FUTURE, CONDENSER TUBE LEAK INVESTIGATION WILL REQUIRE CONSTANT WATERBOX SURVEILLANCE DURING WATER LEVEL INCREASE OVER THE TUBE BUNDLE SO THAT LEAKING TUBES CAN BE DISCOVERED AND PLUGGED PROMPTLY.

[224] NORTH ANNA 1 DOCKET 50-338 LER 82-068
 BORON INJECTION PATH INOPERABLE.
 EVENT DATE: 110282 REPORT DATE: 113082 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
 CAUSE: VALVE MAINTENANCE.

(NSIC 180053) THE NORMAL SUCTION VALVE TO THE C CHARGING PUMP WAS OPENED FOR MAINTENANCE. THIS RENDERED THE CHARGING PUMPS AND BORIC ACID FLOWPATHS INOPERABLE CONTRARY TO TECH SPEC 3.1.2.1 AND 3.1.2.3. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THIS EVENT WAS CAUSED BY THE MAINTENANCE ON THE C CHARGING PUMP NORMAL SUCTION VALVE (MOV-1270A) WHICH REQUIRED THE REMOVAL OF THE VALVE BONNET. THIS DISABLED THE REQUIRED BORON INJECTION PATH. THE VALVE BONNET WAS REPLACED AND THE SYSTEM WAS RETURNED TO SERVICE IN LESS THAN 8 HOURS.

[225] NORTH ANNA 1 DOCKET 50-338 LER 82-071
 RECIRCULATION SPRAY PUMP FAILS TO START.
 EVENT DATE: 110582 REPORT DATE: 120182 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: RELAYS
 CAUSE: DRIFT IN TIMER SETTING.

(NSIC 180111) THE B INSIDE RECIRCULATION SPRAY PUMP (1-RS-P-1B) DID NOT OPERATE WITHIN THE REQUIRED TIME DURING FUNCTIONAL TESTING. THIS IS CONTRARY TO TECH SPEC 3.6.2.2. THESE EVENTS ARE REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.A. THIS EVENT WAS CAUSED BY A DRIFT IN THE ACTUATION TIMER SETTING. THE TIMER WAS READJUSTED AND RETESTED.

[226] NORTH ANNA 1 DOCKET 50-338 LER 82-069
 PRESSURIZER PORV FOUND OPEN.
 EVENT DATE: 111082 REPORT DATE: 120982 NSSS: WE TYPE: PWR
 SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
 CAUSE: PORV BLOCK NOT ADEQUATELY SECURED.

(NSIC 180106) A PRESSURIZER PORV THAT WAS PREVIOUSLY BLOCKED OPEN WAS FOUND CLOSED. BOTH PRESSURIZER PORV'S WERE INOPERABLE. THE RCS OVERPRESSURIZATION PROTECTION SYSTEMS REQUIRED BY TECH SPEC 3.4.9.3 WERE INOPERABLE. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. NO OVERPRESSURIZATION OF THE RCS OCCURRED AND THE ACTION STATEMENT OF THE APPLICABLE LCO, TECH SPEC 3.4.9.3, WAS MET. IT APPEARS THAT PORV BLOCK WAS NOT ADEQUATELY SECURED WHEN INSTALLED. DURING MAINTENANCE OF THE BLOCKED OPEN PORV, THE BLOCK FELL OUT. INADEQUATE ADMINISTRATIVE CONTROL ALLOWED THE EVENT TO OCCUR. THE BLOCK WAS IMMEDIATELY REINSTALLED. A PROCEDURE DESCRIBING PORV BLOCK INSTALLATION WILL BE WRITTEN.

[227] NORTH ANNA 1 DOCKET 50-338 LER 82-072
 FUEL OIL PUMP HOUSE HEAT DETECTORS NOT TESTED.
 EVENT DATE: 111582 REPORT DATE: 120182 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PERSONNEL ERROR.

(NSIC 180077) IT WAS DISCOVERED THAT THE FUEL OIL PUMP HOUSE HEAT DETECTORS (BOTH ROOMS 1 AND 2) HAD NOT BEEN FUNCTIONALLY TESTED WITHIN THE PAST 6 MONTHS, A REQUIREMENT OF TECH SPEC 4.3.3.7.1. WHILE TESTING THE HEAT DETECTORS, THE HIGH PRESSURE CO(2) SYSTEM AUTOMATIC ACTUATED VALVES FAILED TO OPERATE. A FIRE WATCH WAS IMMEDIATELY POSTED. THESE EVENTS ARE REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B AND C. THE REASON THE HEAT DETECTORS WERE NOT FUNCTIONALLY TESTED WAS PERSONNEL ERROR. THE PNEUMATIC ACTUATION DEVICES FAILED BECAUSE THEY WERE MECHANICALLY BOUND. THE SCHEDULING ERROR WAS CORRECTED ON THE PERIODIC TEST SCHEDULE AND THE CO(2) ACTUATION RELEASE DEVICES WERE DISASSEMBLED, CLEANED, REASSEMBLED AND SATISFACTORILY RETESTED.

[228] NORTH ANNA 1 DOCKET 50-338 LER 82-070
 BIT HEAT TRACING FAILS.
 EVENT DATE: 111682 REPORT DATE: 121682 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: HEATERS, ELECTRIC

CAUSE: LOOSE INSULATION; HEATER FAILURE.

(NSIC 180128) HEAT TRACING CIRCUIT ET-117N (BORON INJECTION TANK OUTLET PIPING) FAILED. THE PIPING TEMPERATURE WAS VERIFIED TO BE GREATER THAN 145F. SEVEN HOURS LATER THE TEMPERATURE WAS LESS THAN 145F. AGAIN ON NOVEMBER 28, 1982, THE TEMPERATURE WAS LESS THAN 145F. THE PIPE WAS RETURNED TO GREATER THAN 145F WITHIN 6 HOURS IN BOTH INSTANCES. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE NORMAL HEAT TRACE CIRCUIT FAILED OPEN ON 11-16-82. THE REDUNDANT CIRCUIT WAS ENERGIZED. THE PIPING WAS RETURNED TO GREATER THAN 145F USING HEAT LAMPS. CIRCUIT ET-117N WAS REPLACED AND TEMPORARY INSULATION WAS INSTALLED. ON 11-28-82 THE PIPE TEMPERATURE DROPPED BELOW 145F DUE TO LOOSE TEMPORARY INSULATION. THE INSULATION WAS TIGHTENED AND 145F WAS RESTORED.

[229] NORTH ANNA 1 DOCKET 50-338 LER 82-073
RPS BREAKER FAILS TO OPEN.
EVENT DATE: 111882 REPORT DATE: 121382 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: STICKING TRIP MECHANISM.

(NSIC 180132) THE B REACTOR TRIP BREAKER FAILED TO AUTO OPEN ON A SIMULATED REACTOR TRIP SIGNAL WHILE PERFORMING A FIRST STAGE PRESSURE CALIBRATION PROCEDURE PRIOR TO INITIATING STARTUP OR PHYSICS TESTING. THIS EVENT IS CONTRARY TO TECH SPEC 3.3.1 AND IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE B REACTOR TRIP BREAKER DID NOT OPEN BECAUSE THE UNDERVOLTAGE (UV) TRIPPING MECHANISM WAS STICKING. THE MANUAL REACTOR TRIP SWITCHES IN THE CONTROL ROOM AND LOCALLY WERE NOT AFFECTED. THE UV MECHANISM WAS REMOVED FROM THE BREAKER, CLEANED, LUBRICATED AND REINSTALLED. SUBSEQUENT TESTING OF THE BREAKER PROVED SATISFACTORY.

[230] NORTH ANNA 1 DOCKET 50-338 LER 82-077
PRESSURIZER PORV INOPERABLE WHEN MOV FAILS CLOSED.
EVENT DATE: 111982 REPORT DATE: 121382 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVE OPERATORS
CAUSE: LOOSE CONTROL CABLE.

(NSIC 180144) MOV-1536 WAS INCAPABLE OF BEING REOPENED AFTER BEING CLOSED FOR A PERIODIC TEST. THIS RENDERED PRESSURIZER PORV PCV-1455C INOPERABLE. THE REDUNDANT PORV, PCV-1456, REMAINED OPERABLE. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE EVENT WAS CAUSED BY A LOOSE CONTROL CABLE CONNECTION AT THE MOTOR OPERATOR OF MOV-1536. THE CONTROL CABLE CONNECTS THE CONTROL ROOM VALVE CONTROL SWITCH OPENING CONTACT AND THE MOTOR OPERATOR OF MOV-1536. THE LOOSE CONNECTION WAS SUBSEQUENTLY TIGHTENED AND ALL OTHER CONNECTIONS WERE VERIFIED TIGHT.

[231] NORTH ANNA 1 DOCKET 50-338 LER 82-078
VITAL BUS LOSES POWER WHEN INVERTER FAILS.
EVENT DATE: 112582 REPORT DATE: 121582 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: GENERATORS
CAUSE: FAILED OSCILLATOR BOARD, TRANSFORMER AND FUSE.

(NSIC 180146) 120-VOLT A.C. VITAL BUS 1-IV LOST VOLTAGE DUE TO THE FAILURE OF ITS NORMAL POWER SUPPLY INVERTER 1-VB-I-04. THE ALTERNATE SUPPLY TO VITAL BUS 1-IV VIA VOLTAGE REGULATING TRANSFORMER, TRANS-80, WAS STILL AVAILABLE AND WAS USED. THIS EVENT IS CONTRARY TO TECH SPEC 3.8.2.1 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. 120 VOLT A.C. VITAL BUS 1-IV LOST VOLTAGE DUE TO A FAILURE OF ITS NORMAL SUPPLY INVERTER 1-VB-I-04. POWER SUPPLY TO VITAL BUS 1-IV WAS MANUALLY SWITCHED TO THE VOLTAGE REGULATING TRANSFORMER. THE INVERTER WAS EXAMINED AND FOUND TO HAVE A FAILED OSCILLATOR BOARD, TRANSFORMER AND FUSE. THESE COMPONENTS WERE SUBSEQUENTLY REPLACED AND THE INVERTER TESTED SATISFACTORYLY.

[232] NORTH ANNA 1 DOCKET 50-338 LER 82-079
 FLOW PATH TO RCS FROM BORIC ACID TANKS INOPERABLE.
 EVENT DATE: 112682 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVES
 CAUSE: VALVE DIAPHRAGM RUPTURED.

(NSIC 180148) THE FLOW PATH FROM THE BORIC ACID TANKS TO THE REACTOR COOLANT SYSTEM WAS INOPERABLE. THE REDUNDANT BORIC ACID FLOW PATH (RWST) WAS AVAILABLE AND THE INOPERABLE FLOW PATH WAS RESTORED TO OPERABLE STATUS WITHIN THE TIME REQUIRED BY THE ACTION STATEMENT. THIS EVENT IS CONTRARY TO TECH SPEC 3.1.2.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE DIAPHRAGM OF BORIC ACID TRANSFER PUMP SUCTION HEADER ISOLATION VALVE, 1-CH-80 RUPTURED LEAVING THE UNIT 1 BORIC ACID TRANSFER PUMPS UNAVAILABLE FOR SERVICE. THE OPERABLE UNIT 2 BORIC ACID TRANSFER PUMP WAS REQUIRED TO MAINTAIN THE FLOW PATH TO UNIT 2 (MODE 1). THE VALVE DIAPHRAGM WAS REPLACED, AND THE VALVE WAS TESTED AND RESTORED TO OPERABILITY.

[233] NORTH ANNA 1 DOCKET 50-338 LER 82-080
 CONTAINMENT ISOLATION SERVICE AIR VALVE FOUND OPEN.
 EVENT DATE: 112882 REPORT DATE: 122082 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
 CAUSE: OPERATOR ERROR.

(NSIC 180149) A CONTAINMENT ISOLATION SERVICE AIR VALVE (MANUAL VALVE LOCATED OUTSIDE THE CONTAINMENT) WAS FOUND OPEN AND UNATTENDED. THE REDUNDANT SERVICE AIR ISOLATION VALVE (LOCATED INSIDE THE CONTAINMENT) WAS CLOSED AND LOCKED. THIS EVENT IS CONTRARY TO TECH SPEC 3.6.3.1 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE REASON FOR THE SERVICE AIR CONTAINMENT ISOLATION VALVE BEING OPEN COULD NOT BE DETERMINED. THE VALVE IN QUESTION WAS CLOSED AND LOCKED. THE REDUNDANT SERVICE AIR ISOLATION VALVE WAS CHECKED AND FOUND CLOSED AND LOCKED.

[234] NORTH ANNA 1 DOCKET 50-338 LER 82-081
 SW HEADER INOPERABLE DUE TO PINHOLE LEAK.
 EVENT DATE: 120382 REPORT DATE: 122182 NSSS: WE TYPE: PWR
 SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PIPES, FITTINGS
 CAUSE: AGGRESSIVE WATER.

(NSIC 180155) THE A SERVICE WATER SUPPLY HEADER TO THE UNIT 1 AND 2 CHARGING PUMP TUBE OIL COOLERS AND AIR COMPRESSORS WAS ISOLATED TO REPAIR A PINHOLE LEAK. THE HEADER WAS RESTORED TO OPERABLE STATUS IN LESS THAN 72 HOURS. THIS EVENT IS WITHIN THE ACTION STATEMENT OF TECH SPEC 3.7.4.1 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. A STUDY COMPLETED BY LEHIGH UNIVERSITY DETERMINED THE CAUSE OF THE PINHOLE LEAKS TO BE AGGRESSIVE WATER AND, TO A LESSER DEGREE, BACTERIAL REDUCTION OF THE MILD STEEL PIPING. ON DECEMBER 3, 1982 THE PIPING WAS ISOLATED AND A TEMPORARY PATCH WAS INSTALLED. ON DECEMBER 8, 1982, THE AFFECTED PIPING WAS CUT OUT AND REPLACED.

[235] NORTH ANNA 1 DOCKET 50-338 LER 82-083
 REACTOR SHUTDOWN DUE TO TURBINE CONTROL SYSTEM FAILURE.
 EVENT DATE: 120482 REPORT DATE: 123182 NSSS: WE TYPE: PWR
 SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: D TO A CONVERTER FAILURE.

(NSIC 180191) A MALFUNCTION OF THE TURBINE CONTROL SYSTEM CAUSED IT TO SUDDENLY INCREASE LOAD. A REACTOR TRIP AND SI RESULTED. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.2 AND TECH SPEC 6.9.1.9.B. A MALFUNCTION OF A DIGITAL TO ANALOG CONVERTER IN THE TURBINE ELECTRO-HYDRAULIC CONTROL (EHC) SYSTEM CAUSED THE EVENT. THE PLANT WAS QUICKLY STABILIZED AND ALL PARAMETERS RESTORED TO NORMAL. ALL

EQUIPMENT WAS RETURNED TO NORMAL STATUS. THE TURBINE EHC SYSTEM HAS BEEN REPAIRED.

[236] NORTH ANNA 1 DOCKET 50-338 LER 82-090
 AFWS PUMP INOPERABLE DUE TO OVERCURRENT.
 EVENT DATE: 120582 REPORT DATE: 122182 NSSS: WE TYPE: PWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 CAUSE: UNKNOWN.

(NSIC 180102) THE 3A AUXILIARY FEEDWATER PUMP WAS REMOVED FROM SERVICE CONTRARY TO TECH SPEC 3.7.1.2. THIS WAS DONE TO DETERMINE THE CAUSE OF THE INSTANTANEOUS OVERCURRENT FLAG DROPS ON A AND C PHASE. THE REDUNDANT AUXILIARY FEEDWATER TRAINS WERE AVAILABLE AND THE AFFECTED PUMP WAS RETURNED TO SERVICE WITHIN THE TIME FRAME REQUIREMENT. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CAUSE OF THE FLAG DROPS COULD NOT BE DETERMINED. THE FLAGS WERE RESET, AND THE MOTOR WAS BRIDGED AND MEGGERED WITH NO DISCREPANCIES. THE PUMP WAS STARTED AND OPERATED WITH SATISFACTORY RESULTS AND RETURNED TO SERVICE.

[237] NORTH ANNA 1 DOCKET 50-338 LER 82-087
 DRIFT IN CONTROL ROD IRPI.
 EVENT DATE: 120582 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT.

(NSIC 180151) THE INDIVIDUAL ROD POSITION INDICATION (IRPI) FOR ROD H-02 IN CONTROL BANK D DEVIATED FROM THE GROUP DEMAND POSITION BY GREATER THAN 12 STEPS WITH NO ROD MOTION. THE IRPI CHANNEL WAS SATISFACTORILY CALIBRATED WITHIN 8 HOURS. THIS EVENT IS CONTRARY TO TECH SPEC 3.1.3.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CAUSE OF THE INDICATOR DISAGREEMENT WAS INSTRUMENT DRIFT. THIS IS A RECURRING PROBLEM AND IS GENERIC TO WESTINGHOUSE ANALOG POSITION INDICATION SYSTEMS. THE ROD POSITION INDICATOR CHANNEL FOR ROD H-02 WAS PROPERLY RECALIBRATED AND RETURNED TO SERVICE.

[238] NORTH ANNA 1 DOCKET 50-338 LER 82-084
 TWO STEAM GENERATOR STEAM FLOW CHANNELS INOPERABLE.
 EVENT DATE: 120582 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: TRANSMITTER OUT OF CALIBRATION.

(NSIC 180153) CHANNELS FI-1475 AND FI-1485 FOR STEAM GENERATOR A AND B STEAM FLOW, RESPECTIVELY, WERE INDICATING BELOW THE ACTUAL FLOW. THE REDUNDANT CHANNELS WERE OPERABLE AND BOTH CHANNELS WERE PLACED IN THE TRIPPED CONDITION WITHIN ONE HOUR. THIS EVENT IS WITHIN THE ACTION STATEMENT OF TECH SPEC 3.3.2.1 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.A AND B. THE TRANSMITTER FOR FI-1475 WAS OUT OF CALIBRATION LOW. THE MULTIPLIER/DIVIDER/SQUARE ROOT CARD WAS OUT OF TOLERANCE LOW FOR FI-1485. BOTH CHANNELS WERE SATISFACTORILY CALIBRATED AND RETURNED TO SERVICE WITHIN 52 HOURS. THERE ARE NO GENERIC IMPLICATIONS ASSOCIATED WITH THIS EVENT.

[239] NORTH ANNA 1 DOCKET 50-338 LER 82-085
 SI ACTUATION OCCURS.
 EVENT DATE: 120582 REPORT DATE: 010483 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: REACTOR SHUTDOWN AND STEAM FLOW SENSOR MAINTENANCE.

(NSIC 180190) AN ECCS ACTUATION OCCURRED ON UNIT 1, FROM HIGH STEAM LINE FLOW COINCIDENT WITH LO-LO T(AVG). THE HIGH STEAM FLOW SIGNAL WAS DUE TO STEAM FLOW

CHANNELS IN TRIP FOR MAINTENANCE AND NOT ACTUAL HIGH STEAM LINE FLOW. THE LO-LO T(AVG) SIGNAL WAS DUE TO A REACTOR TRIP. ONE CONTAINMENT ISOLATION VALVE DID NOT CLOSE. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.2.B AND TECH SPEC 6.9.1.9.B. THE SAFETY INJECTION WAS SECURED WHEN THE PLANT WAS IN A STABLE CONDITION AND THE PROCEDURAL TERMINATING CRITERIA WERE MET.

[240] NORTH ANNA 1 DOCKET 50-338 LER 82-082
 BOTH TRAINS OF AUTO SI BLOCKED.
 EVENT DATE: 120682 REPORT DATE: 122082 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PROCEDURAL ERROR.

(NSIC 180156) IT WAS DISCOVERED THAT BOTH TRAINS OF AUTOMATIC SAFETY INJECTION (SI) WERE BLOCKED FOR 22 HOURS AND 30 MINUTES FOLLOWING AN INADVERTENT SI. THE SI PROCEDURE, 1-EP-5, ALLOWS AUTOMATIC SI SIGNALS TO BE BLOCKED FOR UP TO 30 HOURS FOLLOWING AN SI WHICH IS CONTRARY TO TECH SPEC TABLE 3.3-3 ACTION STATEMENT 13 AND TECH SPEC 3.0.3. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.8.F. MANUAL SI INITIATION REMAINED OPERABLE. THE SAFETY INJECTION EMERGENCY PROCEDURE MISLED OPERATORS AND ALLOWED AUTOMATIC SAFETY INJECTION SIGNALS TO BE BLOCKED FOR 22 HOURS AND 30 MINUTES. THE AUTO SI BLOCK WAS RESET. PROCEDURE CHANGES WILL BE MADE. THE TECH SPECS DO NOT ADDRESS BLOCKING OF BOTH TRAINS OF AUTOMATIC SI AFTER INITIATION OF AN SI. SINCE THE BLOCK IS A NECESSARY DESIGN FEATURE, A TECH SPEC CHANGE WILL BE REQUESTED.

[241] NORTH ANNA 1 DOCKET 50-338 LER 82-091
 PORV INOPERABLE DUE TO LOW NITROGEN RESERVOIR PRESSURE.
 EVENT DATE: 120782 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVES
 CAUSE: RESERVOIR RELIEF VALVE LEAKAGE.

(NSIC 180109) THE PRESSURE IN THE B NITROGEN RESERVOIR FOR THE PRESSURIZER PORV (PCV-1455C) DROPPED BELOW THE MINIMUM PRESSURE REQUIRED TO MAINTAIN THE PORV OPERABLE. THE REDUNDANT PORV REMAINED OPERABLE AND THE AFFECTED PORV WAS RETURNED TO SERVICE WITHIN THE TIME FRAME OF THE TECH SPEC 3.4.9.3 ACTION STATEMENT. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THIS EVENT WAS CAUSED BY EXCESSIVE NITROGEN LEAKAGE THROUGH THE B NITROGEN RESERVOIR RELIEF VALVE (RV-GN-108-B-1). THE RELIEF VALVE WAS REPAIRED AND THE PORV (PCV-1455C) WAS RETURNED TO SERVICE.

[242] NORTH ANNA 1 DOCKET 50-338 LER 82-088
 SI ACTUATION OCCURS DUE TO TRIPPED STEAM FLOW CHANNEL.
 EVENT DATE: 120782 REPORT DATE: 010583 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180189) A ECCS ACTUATION OCCURRED WHILE COOLING DOWN TO MODE 5. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.2.B AND TECH SPEC 6.9.1.9.B. THE SAFETY INJECTION (SI) WAS CAUSED BY A HIGH STEAM LINE FLOW SIGNAL COINCIDENT WITH A LO LO T(AVG). THE LO LO T(AVG) SIGNAL OCCURRED BECAUSE THE OPERATORS COOLED THE RCS BELOW 543F WITH THE HIGH STEAM FLOW PORTION OF SI LOGIC LOCKED IN. SI WAS SECURED AND THOSE INVOLVED WERE MADE AWARE OF THEIR ACTIONS.

[243] NORTH ANNA 2 DOCKET 50-339 LER 82-013 REV 1
 UPDATE ON LOSS OF POWER TO EMERGENCY BUS.
 EVENT DATE: 030882 REPORT DATE: 120182 NSSS: WE TYPE: PWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
 CAUSE: DEFICIENCY IN TEST PROCEDURE.

(NSIC 180080) ONE DIESEL GENERATOR AND ONE OFFSITE POWER SUPPLY FOR THE 2H EMERGENCY BUS BECAME TEMPORARILY INOPERABLE DURING A PERIODIC SURVEILLANCE TEST. THE EMERGENCY BUSES WERE IMMEDIATELY CROSS-TIED AND THE PREFERRED OFFSITE CIRCUIT WAS RESTORED WITHIN THE APPLICABLE ACTION STATEMENTS. THIS IS CONTRARY TO THE LCO FOR TECH SPEC 3.8.1.1 AND 3.8.2.1 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. A DEFICIENCY IN THE PERIODIC TEST PROCEDURE CAUSED AN ATTEMPT TO RESTART THE 2H EMERGENCY DIESEL GENERATOR PRIOR TO THE 60 SECOND SHUTDOWN RELAY ON THE FUEL SUPPLY TIMING OUT. THE EMERGENCY BUSES WERE CROSS-TIED IN ORDER TO RESTORE THE NORMAL SUPPLY TO THE 2H BUS. THE PERIODIC TEST HAS BEEN CHANGED TO PREVENT RECURRENCE. A PROCEDURE FOR RE-ENERGIZING THE BUSES HAS BEEN DEVELOPED.

[244] NORTH ANNA 2 DOCKET 50-339 LER 82-072
 BLOWDOWN TRIP VALVE FAILS TO CLOSE.
 EVENT DATE: 110582 REPORT DATE: 112982 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: OUT OF ADJUSTMENT LIMIT SWITCH.

(NSIC 180082) BLOWDOWN TRIP VALVE TV-BD-200C WOULD NOT REMAIN CLOSED WHEN THE VALVE WAS MANUALLY CLOSED FROM THE CONTROL ROOM. TV-BD-200D WAS OPERABLE TO ISOLATE THE AFFECTED PENETRATION AND TV-BD-200C WAS OPERABLE WITHIN 4 HOURS AS REQUIRED BY THE ACTION STATEMENT. THIS EVENT IS CONTRARY TO TECH SPEC 3.6.3.1 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. VALVE TV-BD-200C WOULD NOT REMAIN SHUT WHEN MANUALLY CLOSED BECAUSE THE CLOSED POSITION LIMIT SWITCH WAS OUT OF ADJUSTMENT. THE LIMIT SWITCH CAM WAS REPOSITIONED, AND TV-BD-200C WAS OPERATIONALLY TESTED AND RETURNED TO SERVICE. THERE ARE NO GENERIC IMPLICATIONS TO THIS EVENT.

[245] NORTH ANNA 2 DOCKET 50-339 LER 82-073
 RCS SUBCOOLING MONITOR FAILS.
 EVENT DATE: 110882 REPORT DATE: 120182 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: UNKNOWN.

(NSIC 180084) CHANNEL A REACTOR COOLANT SYSTEM SUBCOOLING MONITOR WAS DECLARED INOPERABLE AFTER ERRONEOUS READINGS WERE OBSERVED. THIS EVENT IS CONTRARY TO TECH SPEC 3.3.3.6 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CAUSE OF THE SUBCOOLING MONITOR FAILURE COULD NOT BE DETERMINED. THE MONITOR WAS RESET AND FUNCTIONED PROPERLY.

[246] NORTH ANNA 2 DOCKET 50-339 LER 82-074
 DRIFT IN 2 CONTROL ROD POSITICN INDICATORS.
 EVENT DATE: 112282 REPORT DATE: 121382 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SPTY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180101) THE INDIVIDUAL ROD POSITION INDICATION (IRPI) FOR ROD C-7 IN SHUTDOWN BANK 'A' DEVIATED FROM THE GROUP DEMAND POSITION BY GREATER THAN 12 STEPS WITH NO ROD MOTION. THREE HOURS AND 52 MINUTES LATER ON NOVEMBER 23, A SIMILAR EVENT OCCURRED FOR ROD B-8 IN CONTROL BANK D. THE IRPI CHANNELS WERE SATISFACTORILY CALIBRATED WITHIN 8 HOURS. THESE EVENTS ARE CONTRARY TO TECH SPEC 3.1.3.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CAUSE OF THE INDICATOR DISAGREEMENT WAS INSTRUMENT DRIFT. THIS IS A RECURRING PROBLEM AND IS GENERIC TO WESTINGHOUSE ANALOG POSITION INDICATION SYSTEMS. THE ROD POSITION INDICATOR CHANNELS FOR RODS C-7 AND B-8 WAS PROPERLY RECALIBRATED AND RETURNED TO SERVICE.

[247] NORTH ANNA 2 DOCKET 50-339 LER 82-075
 DELTA FLUX EXCEEDS TARGET BAND.
 EVENT DATE: 112382 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CORE COMPONENT: CONTROL RODS
 CAUSE: MOVEMENT OF CONTROL RODS.

(NSIC 180108) THE DELTA FLUX MOMENTARILY EXCEEDED THE \pm 5% TARGET BAND DURING THE PERFORMANCE OF THE CONTROL ROD OPERABILITY PERIODIC TEST. THE DELTA FLUX WAS RESTORED TO INSIDE OF THE TARGET BAND AS REQUIRED BY THE TECH SPEC 3.2.1 ACTION STATEMENT. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THIS EVENT WAS CAUSED BY THE MOVEMENT OF THE CONTROL RODS INTO THE CORE 18 STEPS FOR THE CONTROL ROD OPERABILITY PERIODIC TEST. THIS CAUSED NEUTRON FLUX TO DEPRESS SLIGHTLY TOWARD THE BOTTOM OF THE CORE. THE DELTA FLUX WAS RESTORED TO WITHIN THE BAND WHEN THE PERTUBATION ENDED.

[248] NORTH ANNA 2 DOCKET 50-339 LER 82-078
 CONTAINMENT AVERAGE AIR TEMPERATURE EXCEEDS LIMIT.
 EVENT DATE: 120582 REPORT DATE: 122182 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: HEAT EXCHANGERS
 CAUSE: INOPERABLE MECHANICAL REFRIGERATION UNIT.

(NSIC 180157) THE CONTAINMENT AVERAGE AIR TEMPERATURE EXCEEDED 105F. THE AVERAGE AIR TEMPERATURE WAS RESTORED TO WITHIN THE LIMIT OF TECH SPEC 3.6.1.5 WITHIN 8 HOURS. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE HIGH AVERAGE AIR TEMPERATURE WAS CAUSED BY THE TEMPERATURE INCREASE OF THE CHILLED WATER TO THE CONTAINMENT AIR RECIRCULATION COOLING COILS. THIS WAS CAUSED BY THE TEMPORARY INOPERABILITY OF THE MECHANICAL REFRIGERATION UNIT. THE REFRIGERATION UNIT WAS RETURNED TO SERVICE AND THE CONTAINMENT AVERAGE AIR TEMPERATURE WAS RESTORED.

[249] NORTH ANNA 2 DOCKET 50-339 LER 82-081
 SUPPLY SERVICE WATER VALVE BREAKER FOUND OPEN.
 EVENT DATE: 120682 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES
 CAUSE: PERSONNEL ERROR.

(NSIC 180099) THE BREAKER FOR MOV-SW-201D WAS DISCOVERED OPEN. THIS VALVE IS ONE OF TWO VALVES THAT SUPPLY SERVICE WATER TO TWO RECIRCULATION SPRAY HEAT EXCHANGERS. THE VALVE MOTOR WAS DE-ENERGIZED FOR LESS THAN 6 HOURS AND THE REDUNDANT VALVE WAS OPERABLE. THIS IS REPORTABLE PURSUANT TO TECH SPEC 3.6.2.2 AND TECH SPEC 6.9.1.9.B. THE CIRCUIT BREAKER FOR THE VALVE WAS INADVERTENTLY OPENED. THE BREAKER MAY HAVE BEEN OPENED ACCIDENTALLY AS IT IS IN A NARROW PASSAGEWAY. THE BREAKER WAS IMMEDIATELY CLOSED AND VALVE CONTROL POWER WAS VERIFIED.

[250] NORTH ANNA 2 DOCKET 50-339 LER 82-080
 DRIFT IN CONTROL ROD POSITION INDICATOR.
 EVENT DATE: 120682 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSTRUMENT DRIFT.

(NSIC 180100) THE INDIVIDUAL ROD POSITION INDICATION (IPRI) FOR ROD H-02 IN CONTROL BANK D DEVIATED FROM THE GROUP DEMAND POSITION BY GREATER THAN 12 STEPS WITH NO ROD MOTION. THE IRPI CHANNEL WAS SATISFACTORILY CALIBRATED WITHIN 8 HOURS. THIS EVENT IS CONTRARY TO TECH SPEC 3.1.3.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CAUSE OF THE INDICATOR DISAGREEMENT WAS INSTRUMENT DRIFT. THIS IS A RECURRING PROBLEM AND IS GENERIC TO WESTINGHOUSE ANALOG

POSITION INDICATION SYSTEMS. THE ROD POSITION INDICATOR CHANNEL FOR ROD H-02 WAS PROPERLY RECALIBRATED AND RETURNED TO SERVICE.

[251] NORTH ANNA 2 DOCKET 50-339 LER 82-077
RPS POWER RANGE CHANNEL TESTING MISSED.
EVENT DATE: 120682 REPORT DATE: 121682 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PERSONNEL ERROR.

(NSIC 180107) IT WAS REPORTED TO THE SHIFT SUPERVISOR THAT THE MONTHLY SURVEILLANCE FUNCTIONAL TESTS FOR THE POWER RANGE CHANNELS COULD NOT BE FOUND. THE REQUIRED SURVEILLANCES WERE PERFORMED SATISFACTORILY WITHIN 2 HOURS. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 3.3.1.1 AND TECH SPEC 6.9.1.8.B. THE MONTHLY SURVEILLANCE TESTS WERE INADVERTENTLY MARKED OFF OF THE SCHEDULE BY THE INSTRUMENT SUPERVISOR. A QC REVIEW DISCOVERED THAT THE TESTS WERE MISSING. THE TESTS WERE IMMEDIATELY COMMENCED AND A SEARCH FOR THE MISSING TESTS WAS BEGUN. THE SURVEILLANCE WAS COMPLETED SATISFACTORILY.

[252] NORTH ANNA 2 DOCKET 50-339 LER 82-079
AXIAL FLUX DIFFERENCE EXCEEDS TARGET BAND.
EVENT DATE: 120682 REPORT DATE: 122282 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: CONTROL RODS
CAUSE: OPERATOR ERROR; XENON TRANSIENT.

(NSIC 180160) THE AXIAL FLUX DIFFERENCE (AFD) WENT LESS THAN -5% FROM THE TARGET BAND FOR A DURATION OF 2 MINUTES. THE AFD WAS RESTORED TO WITHIN \pm 5% OF TARGET AS REQUIRED BY THE ACTION STATEMENT OF TECH SPEC 3.2.1. THIS EVENT IS CONTRARY TO TECH SPEC 3.2.1 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE AFD DEVIATION OCCURRED FOLLOWING AN INCREASE IN POWER FROM 30% TO 60% RATED THERMAL POWER DUE TO THE OPERATOR'S FAILURE TO MAINTAIN FLUX WITH THE BAND UTILIZING CONTROL RODS. THE EVENT WAS AMPLIFIED BECAUSE THE FLUX WAS DEPRESSED FURTHER AS A RESULT OF A XENON OSCILLATION CAUSED BY A REDUCTION IN POWER THE PREVIOUS DAY. THE RODS WERE WITHDRAWN AND THE AFD WAS RESTORED TO WITHIN LIMITS.

[253] NORTH ANNA 2 DOCKET 50-339 LER 82-082
TURBINE BUILDING FIRE DOOR FAILS TO LOCK.
EVENT DATE: 121382 REPORT DATE: 122282 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
CAUSE: STICKING LATCH.

(NSIC 180098) FIRE DOOR S71-18 BETWEEN THE 2H EMERGENCY DIESEL GENERATOR ROOM AND THE TURBINE BUILDING WOULD NOT LATCH AND LOCK. A FIRE WATCH WAS IMMEDIATELY POSTED. THIS EVENT IS CONTRARY TO TECH SPEC 3.7.15 AND REPORTABLE PER TECH SPEC 6.9.1.9.B. DEGRADATION OF FIRE DOORS BETWEEN THE EMERGENCY DIESEL ROOM AND THE TURBINE BUILDING IS A RECURRING EVENT DUE TO THE DIFFERENTIAL PRESSURE DURING DIESEL OPERATION. FIRE DOOR S71-18 WOULD NOT LATCH BECAUSE THE LATCH WAS STICKING. THE LATCH WAS ADJUSTED, LUBRICATED AND THE OPERABILITY OF THE FIRE DOOR WAS VERIFIED. DESIGN MODIFICATIONS TO THE FIRE DOORS BETWEEN THE EMERGENCY DIESEL ROOM AND THE TURBINE BUILDING ARE BEING PURSUED.

[254] OCONEE 1 DOCKET 50-269 LER 82-020
2 APWS PUMPS INCAPABLE OF AUTO ACTUATION.
EVENT DATE: 121482 REPORT DATE: 011383 NSSS: BW TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: PUMPS
CAUSE: DEFECTIVE PROCEDURES.

(NSIC 180596) BOTH THE UNIT 1 TURBINE DRIVEN AND THE 1A MOTOR DRIVEN EMERGENCY

FEEDWATER PUMPS (EFWP) WERE INCAPABLE OF AUTOMATIC ACTUATION FOR ABOUT 60 SECONDS. SINCE NEITHER WERE CAPABLE OF AUTOMATIC ACTUATION, THEY WERE CONSIDERED TECHNICALLY INOPERABLE AND CONSTITUTED A DEGRADED MODE. AT THE TIME, THE MDEFWP COULD HAVE BEEN MADE AUTOMATIC, THE TDEFWP COULD HAVE BEEN STARTED AT THE PUMP, AND THE 1B MDEFWP COULD HAVE BEEN USED. THE CAUSE OF THIS INCIDENT WAS DEFECTIVE PROCEDURES. THE PROCEDURE WAS NEWLY WRITTEN AND WAS BEING USED FOR THE FIRST TIME. SOME OF THE WORDING WAS UNCLEAR IN THE INSTRUCTIONS, AND WAS INTERPRETED INCORRECTLY. THE TDEFWP WAS MADE OPERABLE IN LESS THAN 60 SECONDS. THE PERSON INVOLVED WAS COUNSELED AND THE PROCEDURE WILL BE CHANGED.

[255] OCONEE 3 DOCKET 50-287 LER 82-015
CONTAINMENT INTEGRITY VIOLATED WHEN 2 ISOLATION VALVES OPEN.
EVENT DATE: 121282 REPORT DATE: 122882 NSSS: BW TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
CAUSE: PERSONNEL ERROR.

(NSIC 180590) WHILE PREPARING TO LINE UP INSTRUMENT AIR FOR UNIT 3 RB, OPERATORS FOUND TWO MANUAL CONTAINMENT ISOLATION VALVES, 3IA 90 AND 91, ALREADY OPEN. BECAUSE THESE WERE OPEN, CONTAINMENT INTEGRITY WAS VIOLATED WHEN RC PRESSURE GREATER THAN 300 PSIG, RC TEMPERATURE GREATER THAN 200 F, AND NUCLEAR FUEL WAS IN THE CORE (12/6/82 TO 12/12/82). THERE WAS ALWAYS 80-100 PSIG ON THESE INSTRUMENT AIR LINES, AND THE LOCAL VALVES IN THE CONTAINMENT WERE CLOSED DURING THE TIME IN QUESTION. THE CAUSE WAS PERSONNEL ERROR (INCOMPLETE REVIEW OF UNIT'S OUTSTANDING ITEMS AS REQUIRED BY TURNOVER PROCEDURES), AND PROCEDURE ERROR (DELETION OF R&R AUDIT FROM PRECRITICALITY CHECK). THE PERSONS INVOLVED WERE COUNSELED, SEVERAL PROCEDURES AND CHECKLISTS HAVE BEEN REVISED, AND A NEW TRAINING PACKAGE CONCERNING R&R CHECKS HAS BEEN ISSUED. (SEE FULL REPORT.)

[256] OYSTER CREEK DOCKET 50-219 LER 82-055
STACK GAS NOT MONITORED WHEN PUMP BREAKER TRIPS.
EVENT DATE: 111582 REPORT DATE: 122182 NSSS: GE TYPE: BWR
SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
CAUSE: UNKNOWN.

(NSIC 180370) DURING A ROUTINE PUMP SWAP, B STACK GAS SAMPLE PUMP THERMAL OVERLOAD PROTECTOR TRIPPED. THE A PUMP WAS RETURNED TO SERVICE AFTER B PUMP WAS RESTARTED AND FAILED TO PRODUCE NORMAL FLOW. STACK GAS SAMPLE SYSTEM FLOW WAS INTERRUPTED FOR APPROXIMATELY TWENTY MINUTES. AS A RESULT, THE CONTINUOUS MONITORING REQUIREMENT OF TECH SPEC 3.5.A.3 WAS NOT MET. THIS EVENT IS REPORTABLE PER TECH SPEC 6.9.2.A.2. THE APPARENT CAUSE OF THE THERMAL OVERLOAD TRIP OF B STACK GAS SAMPLE IS UNKNOWN AT THIS TIME. THE INABILITY OF B PUMP TO PRODUCE NORMAL FLOW WAS ATTRIBUTED TO WORN IMPELLER VANES. AN INVESTIGATION WILL BE PERFORMED TO DETERMINE THE APPARENT CAUSE OF THE THERMAL OVERLOAD TRIP AND CORRECTIVE ACTION APPROPRIATE TO PREVENT RECURRENCE. B PUMP WAS INSPECTED AND REBUILT.

[257] OYSTER CREEK DOCKET 50-219 LER 82-057
ISOLATION CONDENSER LOOP INOPERABLE WHEN VALVE FAILS.
EVENT DATE: 111882 REPORT DATE: 122082 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS
CAUSE: LOOSE TERMINAL BLOCK SCREW.

(NSIC 180371) DURING BACKSEATING OF VALVE V-14-37, ONE CIRCUIT ON THE TERMINAL BLOCK FAILED DUE TO STRIPPED THREADS ON THE SCREW AND BACKPLATE. THIS CAUSED THE #2 ISOLATION CONDENSER TO BE INOPERABLE. V-14-37 WAS PLACED IN CLOSED POSITION TO ISOLATE THE CONDENSER. AS A RESULT, ONE ISOLATION CONDENSER LOOP WAS NOT OPERABLE PER TECH SPEC 3.8.A. THIS IS A REPORTABLE OCCURRENCE PER TECH SPEC 6.9.2.B.2. CAUSE IS ATTRIBUTED TO FAILURE OF THE THREADS ON THE SCREW AND

BACKPLATE OF ONE CIRCUIT ON THE TERMINAL BLOCK. THE SCREW WAS APPARENTLY TIGHTENED OVER ITS LIMIT SEVERAL TIMES DURING BACKSEATING PROCEDURE CAUSING THE THREADS TO STRIP.

[258] OYSTER CREEK DOCKET 50-219 LER 82-056
 BATTERY CHARGER FOUND TRIPPED.
 EVENT DATE: 112082 REPORT DATE: 120882 NSSS: GE TYPE: BWR
 SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: RELAYS
 CAUSE: SET POINT DRIFT IN OVERVOLTAGE RELAY.

(NSIC 180017) THE OUTPUT BREAKER FOR A2-24VDC BATTERY CHARGER WAS FOUND IN THE TRIPPED POSITION. THIS CAUSED NUCLEAR INSTRUMENTATION ON INSTRUMENT PANEL 3R AND PROCESS RADIATION MONITORS ON PANEL 1R TO OPERATE ON BATTERY POWER ONLY AND EVENTUALLY BECOME INOPERABLE WHEN BATTERY VOLTAGE DEGRADED. AS A RESULT THE STACK GAS WAS NOT CONTINUOUSLY MONITORED PER TECH SPEC 3.6.A.3 AND A 24VDC BATTERY OPERABILITY PER TECH SPEC 3.7.A.1.F WAS NOT MET. REPORTABLE PER TECH SPECS 6.9.2.A.2 AND 6.9.2.B.2. CAUSE IS ATTRIBUTED TO SETPOINT DRIFT OF THE OVERVOLTAGE RELAY FOR A2-24 VDC BATTERY CHARGER. THE OVERVOLTAGE SETPOINT WAS APPARENTLY LOWER THAN THE EQUALIZING VOLTAGE CAUSING THE BREAKER TO TRIP WHEN THE BATTERY CHARGER WAS PLACED ON EQUALIZE MODE. THE BREAKER WAS CHECKED AND CLOSED AND THE RELAY WAS CHECKED AND ITS SETPOINT ADJUSTED.

[259] OYSTER CREEK DOCKET 50-219 LER 82-058
 2 MAIN STEAM LINE DRAIN VALVES FAIL TO CLOSE FULLY.
 EVENT DATE: 112882 REPORT DATE: 122982 NSSS: GE TYPE: BWR
 SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVES
 CAUSE: UNKNOWN.

(NSIC 180407) DURING SURVEILLANCE TESTING, MAIN STEAM LINE DRAIN VALVES V-1-106 AND V-1-110 FAILED TO FULLY CLOSE. THE VALVES WERE DEACTIVATED AND SECURED IN THE ISOLATION POSITION AS REQUIRED BY THE TECH SPECS, PARAGRAPH 3.5.A.3.A.1.B. THIS EVENT IS REPORTABLE PER TECH SPECS, PARAGRAPH 6.9.2.B.2. THE CAUSE IS UNKNOWN AT THIS TIME. THE VALVES WERE CLOSED AND TAGGED OUT OF SERVICE. CHARTS TAKEN DURING SUBSEQUENT CURRENT CHECKS WERE EVALUATED WITH NO ABNORMALITIES NOTED. INVESTIGATION INTO THE CAUSE OF THIS EVENT WILL CONTINUE DURING UPCOMING REFUELING OUTAGE.

[260] OYSTER CREEK DOCKET 50-219 LER 82-008E
 INSUFFICIENT NUMBER OF DILUTION PUMPS OPERABLE.
 EVENT DATE: 120582 REPORT DATE: 011183 NSSS: GE TYPE: BWR
 SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: PUMPS
 CAUSE: SEAL WATER PUMP FAILURE.

(NSIC 180594) A LIMITING CONDITION AS DEFINED IN THE TECH SPEC PARAGRAPH 2.1.4.3 WAS EXCEEDED WHEN AN INSUFFICIENT NUMBER OF DILUTION PUMPS WERE IN OPERATION AS SPECIFIED IN PARAGRAPH 2.1.4.2. LESS THAN TWO DILUTION PUMPS WERE OPERATING FOR GREATER THAN 15 MINUTES, AND AMBIENT WATER TEMPERATURE WAS LESS THAN 60 F. THIS EVENT IS CONSIDERED TO BE A NONROUTINE ENVIRONMENTAL REPORT AS DEFINED IN THE TECH SPECS, APPENDIX B, PARAGRAPH 5.6.2. SHORTLY AFTER DILUTION PUMP 1-3 TRIPPED, THE SEAL WATER PUMP FAILED. THE TRIP OF PUMP 1-3 COULD BE ATTRIBUTED TO LOW SEAL WATER FLOW. IMMEDIATE CORRECTIVE ACTION INVOLVED PUTTING DILUTION PUMP 1-3 IN OPERATION, USING THE FIRE WATER SYSTEM INSTEAD OF THE SEAL WATER SYSTEM. LONG TERM ACTION, PER A SUBMITTAL TO THE NUCLEAR REGULATORY COMMISSION ON JULY 1, 1981, INVOLVES A TOTAL DILUTION PUMP REFURBISHMENT PROGRAM DESIGNED TO IMPROVE THE RELIABILITY AND OPERABILITY OF THE PUMPS. THIS INCLUDES UPGRADING OF THE DILUTION PUMP SEAL WATER AND LUBRICATING OIL COOLING WATER SYSTEMS, PIPE LINE STRAINERS, PIPE AND HEAT TRACING AND OVERHAUL OF DILUTION PUMPS.

[261] PALISADES DOCKET 50-255 LER 82-046
 SI TANK LEVEL EXCEEDS LIMIT 7 TIMES.
 EVENT DATE: 112582 REPORT DATE: 122182 NSSS: CE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: ACCUMULATORS
 CAUSE: INLEAKAGE PAST VALVES.

(NSIC 180401) T-82B (B SAFETY INJECTION TANK) LEVEL REACHED THE TECH SPEC LIMIT OF 198 INCHES. THIS OCCURRED 7 TIMES BETWEEN 11-25-82 AND 12-6-82. IN 2 OF THESE CASES, BORON CONCENTRATION IN T-82B FELL BELOW THE TECH SPEC LIMIT OF 1720 PPM. TANK LEVEL AND BORON CONCENTRATION WERE PROMPTLY RESTORED TO THE NORMAL OPERATING RANGE. CONDITION REPORTABLE PER TECH SPEC 3.3.1.B AND 6.9.2.B(2). LEVEL INCREASE DUE TO MINOR LEAKAGE PAST LOOP CHECK VALVE AND SIT CHECK VALVE OR FILL AND DRAIN VALVE. LOSS OF SIT LEVEL INDICATION IS COMPOUNDING THE PROBLEM. PRIMARY COOLANT LEAK RATE IS BEING CLOSELY MONITORED. VALVES WILL BE INSPECTED DURING NEXT REFUELING OUTAGE. LEVEL TRANSMITTER FAILURE TO BE INVESTIGATED DURING NEXT EXTENDED SHUTDOWN.

[262] PALISADES DOCKET 50-255 LER 82-047
 SI TANK BORON CONCENTRATION FALLS BELOW LIMIT.
 EVENT DATE: 112682 REPORT DATE: 122182 NSSS: CE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: ACCUMULATORS
 CAUSE: VALVE LEAKAGE.

(NSIC 180400) A ROUTINE SAMPLE OF T-82D ("D" SAFETY INJECTION TANK) SHOWED BORON CONCENTRATION TO BE BELOW THE TECH SPEC LIMIT OF 1720 PPM. CONDITION REPORTABLE PER TECH SPEC 3.3.1.B AND 6.9.2.B(2). BORON DILUTION DUE TO MINOR LEAKAGE PAST LOOP CHECK VALVE AND SIT CHECK VALVE OR FILL AND DRAIN VALVE. PRIMARY COOLANT LEAK RATE IS BEING CLOSELY MONITORED. VALVES WILL BE INSPECTED DURING NEXT REFUELING OUTAGE.

[263] PALISADES DOCKET 50-255 LER 82-044
 POTENTIAL FOR OVERLOAD OF 2 MOTOR CONTROL CENTERS EXISTS.
 EVENT DATE: 113082 REPORT DATE: 121382 NSSS: CE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS
 CAUSE: INCORRECT FSAR DATA USED IN LOAD STUDY.

(NSIC 180005) DURING A/E REVIEW OF DIESEL GENERATOR LOADING, IT WAS DETERMINED THAT THE FEEDER BREAKERS AND CABLES TO MCC-1 AND MCC-2 MIGHT BE OVERLOADED FOLLOWING A LOCA IF STATION BATTERIES ARE DISCHARGED OR THE HYDROGEN RECOMBINERS ARE PLACED ON LINE. CONDITION REPORTABLE PER TECH SPEC 6.9.2.A(9). CONDITION OCCURRED BECAUSE ORIGINAL LOAD STUDY WAS BASED ON INCORRECT DATA OBTAINED FROM FSAR. PROBLEM ELIMINATED BY ADMINISTRATIVE REQUIREMENTS TO SHED LOADS AND MAINTAIN BATTERIES IN CHARGED CONDITION. ELECTRICAL CIRCUITS WILL BE MODIFIED TO ELIMINATE OVERLOAD CONDITION DURING NEXT EXTENDED SHUTDOWN.

[264] PALISADES DOCKET 50-255 LER 82-048
 RPS TRIP SIGNAL REMOVED FROM INOPERABLE CHANNEL.
 EVENT DATE: 120182 REPORT DATE: 122882 NSSS: CE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180380) WITH THERMAL MARGIN/LOW PRESSURE (TM/LP) "D" INOPERABLE, THE TRIP SIGNAL INSERTED IN TM/LP "A" WAS REMOVED BEFORE DECLARING CHANNEL "A" OPERABLE. TM/LP "A" WAS FULLY FUNCTIONAL SO REDUNDANCY OF RPS WAS NOT REDUCED. CONDITION REPORTABLE PER TECH SPEC 6.9.2.B(3). EVENT CAUSED BY MISINTERPRETATION OF ADMINISTRATIVE REQUIREMENTS RELATED TO EQUIPMENT OPERABILITY. EVENT TO BE REVIEWED WITH SHIFT SUPERVISORS, SHIFT TECHNICAL ADVISORS, AND I & C SUPERVISORS EMPHASIZING COMPLIANCE WITH ADMINISTRATIVE REQUIREMENTS.

[265] PALISADES DOCKET 50-255 LER 82-045
 SIT LEVEL AND BORON CONCENTRATIONS VIOLATE LIMITS.
 EVENT DATE: 120382 REPORT DATE: 121582 NSSS: CE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: ACCUMULATORS
 CAUSE: LEAKY VALVES.

(NSIC 180003) T-82B (B SAFETY INJECTION TANK) LEVEL REACHED THE TECH SPEC LIMIT OF 198 INCHES. T-82B SAMPLE SHOWED BORON CONCENTRATION BELOW TECH SPEC LIMIT OF 1720 PPM. TANK LEVEL WAS PROMPTLY RESTORED, BUT BORON CONCENTRATION COULD NOT BE RESTORED WITHIN THE 1 HOUR TIME LIMIT. CONDITION REPORTABLE PER TECH SPEC 3.3.1.B AND 6.9.2.A(2). LEVEL INCREASE/DECREASE IN BORON CONCENTRATION DUE TO MINOR LEAKAGE PAST LOOP CHECK VALVE AND SIT CHECK VALVE OR FILL-AND-DRAIN VALVE. LOSS OF SIT LEVEL INDICATION IS COMPOUNDING THE PROBLEM. PRIMARY COOLANT LEAK RATE IS BEING CLOSELY MONITORED. VALVES WILL BE INSPECTED DURING NEXT REFUELING OUTAGE. LEVEL TRANSMITTER FAILURE TO BE INVESTIGATED DURING NEXT EXTENDED SHUTDOWN.

[266] PEACH BOTTOM 2 DOCKET 50-277 LER 82-041
 RWCU ISOLATION SIGNAL BYPASSED.
 EVENT DATE: 121082 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180592) THE REACTOR WATER CLEAN-UP (RWCU) HI-TEMPERATURE ISOLATION SIGNAL WAS BYPASSED, AFTER IT HAD TRIPPED, IN VIOLATION OF TECH SPEC 3.2.A (CONTAINMENT ISOLATION). RWCU WAS OPERATING IN THE DUMP MODE. THE JUMPER WAS NOT INSTALLED UNTIL IT HAD BEEN CONFIRMED THAT THE TEMPERATURE WAS LESS THAN THE 200 F SETPOINT. THE PURPOSE OF THIS TRIP IS TO PROTECT THE RWCU DEMINERALIZER RESIN FROM OVER TEMPERATURE, NOT TO ISOLATE A PIPE BREAK; THUS SAFETY SIGNIFICANCE IS MINIMAL. THE SOURCE OF THE FALSE INITIATION SIGNAL WAS TRACED TO A SHORT CIRCUIT IN THE TEMPERATURE SWITCH CAUSED BY FRAYED WIRE. THIS HAS BEEN REPAIRED. AN ALTERNATE MEANS OF CONTROLLING REACTOR WATER LEVEL WAS ESTABLISHED AND THE RWCU SYSTEM WAS RE-ISOLATED WITHIN THREE HOURS.

[267] FILGRIM 1 DOCKET 50-293 LER 82-013 REV 1
 UPDATE ON HPCI HIGH TEMPERATURE SWITCH FAILURE.
 EVENT DATE: 041482 REPORT DATE: 122982 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: IMPROPER TESTING.

(NSIC 180574) DURING FUNCTIONAL TEST OF A HPCI HIGH TEMPERATURE SWITCH, FENWAL CATALOG #17023-6, 2373C, THE SWITCH DID NOT ACTUATE. THESE SWITCHES CONTRIBUTE TO THE TRIP LOGIC OF THE HPCI TURBINE IF A STEAM LINE WERE TO BREAK. AFTER REPEATED BENCH TESTING OF THIS SWITCH AND FURTHER STUDY OF THE EVENT, IT HAS BEEN DETERMINED THAT NO MALFUNCTION OF THE SWITCH OCCURRED. THE CAUSE OF THIS EVENT IS DUE TO A COMBINATION OF A "HEAT GUN" WITH REDUCED OUTPUT AND AIR CURRENTS IN THE AREA WHERE THE SWITCH IS MOUNTED. PERSONNEL HAVE BEEN RE-INSTRUCTED ON THE PROPER USE OF THE "HEAT GUN" AND METHODS OF MINIMIZING THE EFFECTS OF THE AIR CURRENTS.

[268] PILGRIM 1 DOCKET 50-293 LER 82-046 REV 1
 UPDATE ON INOPERABLE HPCI DUE TO POWER SUPPLY SHORT.
 EVENT DATE: 102882 REPORT DATE: 122382 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
 CAUSE: VALVE STEM LEAK.

(NSIC 180566) ON 10/28/82, THE HPCI SYSTEM WAS DECLARED INOPERABLE. A GROUND IN THE B 125 VDC SUPPLY WAS TRACED TO THE LIMIT SWITCH CIRCUITRY FOR MOV 2301-3. ON 11/1/82 A SHORT WAS TRACED TO THE 250V CIRCUITRY FOR THE 2301-3 MOTOR OPERATOR.

ON BOTH DATES, TECH SPEC REQUIRED SURVEILLANCES WERE INITIATED AND TERMINATED WHEN HPCI WAS MADE OPERABLE. THE NRC WAS NOTIFIED VIA ENS. THE VALVE IS A 10" GATE VALVE SUPPLIED BY VELAN CO. THE ROOT CAUSE IS VALVE STEM PACKING LEAKAGE DUE TO A SCORED STEM. THE PACKING WAS REPLACED FOR THE FIRST EVENT AND TIGHTENED FOR THE SECOND. THE STEM WAS REPAIRED (REF. LER 82-053/03L-0) DURING A SCHEDULED PREVENTIVE MAINTENANCE OUTAGE FOR THE HPCI SYSTEM. THE GROUNDS IN THE CIRCUITS WERE CORRECTED BY DRYING OUT THE AFFECTED COMPONENTS.

[269] PILGRIM 1 DOCKET 50-293 LER 82-055
 RCIC INOPERABLE WHEN TURBINE GOVERNOR FAILS.
 EVENT DATE: 111582 REPORT DATE: 121082 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: POWER SUPPLY RESISTOR FAILURE.

(NSIC 180074) WHILE CONDUCTING A SURVEILLANCE TEST FOR THE RCIC SYSTEM, THE SYSTEM ISOLATED DUE TO A HIGH STEAM LINE FLOW. TECH SPEC REQUIRED ACTIONS WERE TAKEN AND AN INVESTIGATION STARTED. THE NRC WAS NOTIFIED VIA ENS. THE CAUSE OF THIS EVENT WAS THE FAILURE OF A RESISTOR (PN 8270-281) IN THE POWER SUPPLY TO THE EGM UNIT OF THE WOODWARD GOVERNOR TURBINE CONTROL. THE RESISTOR WAS REPLACED IN KIND, THE SURVEILLANCE TEST WAS COMPLETED AND THE RCIC WAS RETURNED TO SERVICE. THIS IS THE FIRST KNOWN OCCURRENCE OF THIS RESISTOR FAILING IN THE RCIC SYSTEM SINCE START-UP.

[270] PILGRIM 1 DOCKET 50-293 LER 82-056
 FIRE WALL PANEL QUALIFICATION IS INADEQUATE.
 EVENT DATE: 121382 REPORT DATE: 122382 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: INSTALLATION ERROR.

(NSIC 180586) AN ENGINEERING EVALUATION REPORT WAS RECEIVED BY PNPS THAT DETERMINED THAT THE REQUIRED THREE HOUR FIRE RESISTANT RATED WALL PENETRATION (BLOW-OUT PANEL IN THE STEAM TUNNEL SOUTH WALL) WAS ONLY QUALIFIED FOR A TWO HOUR RATING. THIS CONDITION IS CONSIDERED TO BE A VIOLATION OF TECH SPEC SECTION 3.12.F. ON 12/3/82 A CONTINUOUS FIRE WATCH HAD BEEN INITIATED WHEN VERBAL NOTICE OF THE POTENTIAL TECH SPEC VIOLATION WAS RECEIVED. THE FIRE RESISTANT DESIGN OF THE BLOW-OUT PANEL, SUPPLIED BY THE A/E, IS SIMILAR TO A TWO HOUR LISTED RATING, NOT THREE HOURS AS REQUIRED BY TECH SPEC. A FIRE PATROL HAS BEEN ESTABLISHED IN ACCORDANCE WITH OUR TECH SPEC FOR THE TEMPORARY CORRECTIVE ACTION. BECO WILL SUBMIT A REPORT ON THE PERMANENT CORRECTIVE ACTION AFTER COMPLETING A FIRE HAZARD ANALYSIS FOR THIS BARRIER.

[271] POINT BEACH 1 DOCKET 50-266 LER 82-020
 CONTAINMENT ISOLATION VALVE LEAKAGE EXCEEDS LIMIT.
 EVENT DATE: 110382 REPORT DATE: 122782 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
 CAUSE: CHECK VALVE LEAK.

(NSIC 180355) THE ANNUAL TYPE B & C LEAK RATE TESTS WERE PERFORMED DURING THE OUTAGE AND THE TOTAL AS-MEASURED LEAKAGE EXCEEDED THE TECH SPEC LIMIT OF .6 L(SUB A) BECAUSE OF THE HIGH LEAKAGE THROUGH ONE SPECIFIC VALVE. THE 'B' RCP CCW SUPPLY LINE CHECK HAD LEAKAGE GREATER THAN THAT ALLOWED BY TECH SPEC 15.4.4.II.B & III.B. THIS EVENT IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 15.6.9.2.A.3 AND IS SIMILAR TO LER 82-006/01T. DURING TYPE C TESTING OF VALVE 755B, A 4" 150 LB. CARBON STEEL VELAN CHECK VALVE, THE FULL TEST PRESSURE COULD NOT BE ATTAINED. THE EXTRAPOLATED LEAKAGE THROUGH THIS VALVE WAS 317,400 SCCM. THE VALVE WAS DISASSEMBLED AND THE CLAPPER AND SEAT WERE LAPPED. AFTER MAINTENANCE THE VALVE LEAKAGE WAS 1396 SCCM AND TOTAL B & C LEAKAGE WAS 16,313 SCCM.

[272] POINT BEACH 1 DOCKET 50-266 LER 82-024
 DRIFT IN STEAM FLOW TRANSMITTER.
 EVENT DATE: 111682 REPORT DATE: 120982 NSSS: WE TYPE: PWR
 SYSTEM: ENGRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: ZERO SHIFT.

(NSIC 180056) DURING A REVIEW OF TEST DATA ON 11/16/82, IT WAS DISCOVERED THAT STEAM FLOW TRANSMITTER FT-465 WAS 0.177% NONCONSERVATIVE. THIS IS ONE OF TWO CHANNELS TO PROVIDE STEAM LINE ISOLATION SHOULD A HIGH STEAM FLOW BE COINCIDENT WITH LOW T(AVE) AND SAFETY INJECTION. THIS EVENT IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 15.6.9.2.B.1. THIS EVENT WAS CAUSED BY A NONCONSERVATIVE STATIC ZERO SHIFT. THE AFFECTED INSTRUMENT WAS RECALIBRATED TO WITHIN TOLERANCE AND RETURNED TO SERVICE.

[273] POINT BEACH 1 DOCKET 50-266 LER 82-030
 MAIN STEAM LINE SNUBBER INOPERABLE DUE TO LEAKAGE.
 EVENT DATE: 121782 REPORT DATE: 010483 NSSS: WE TYPE: PWR
 SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 CAUSE: DAMAGED SHAFT SEAL.

(NSIC 180369) WHILE PERFORMING A ROUTINE INSPECTION OF CONTAINMENT, A SAFETY-RELATED SNUBBER LOCATED ON THE "A" STEAM GENERATOR MAIN STEAM LINE WAS FOUND TO BE LEAKING OIL PAST ITS SHAFT SEAL. REACTOR OPERATION WITH A SAFETY-RELATED SNUBBER INOPERABLE FOR LESS THAN 72 HOURS IS A LIMITING CONDITION FOR OPERATION PERMITTED BY TECH SPEC 15.3.13. THE EVENT IS REPORTABLE PER TECH SPEC 15.6.9.2.B.2. THE CAUSE OF THE LEAK WAS DETERMINED TO BE A DAMAGED SHAFT SEAL "O" RING. A NEW SHAFT SEAL KIT WAS INSTALLED AND THE SNUBBER WAS TESTED AND RETURNED TO SERVICE. AS A FUTURE CORRECTIVE ACTION, THE INTERVAL UNTIL THE NEXT REQUIRED SNUBBER INSPECTION WAS REDUCED FROM 18 MONTHS TO ONE YEAR PER TECH SPEC 15.4.13.

[274] POINT BEACH 2 DOCKET 50-301 LER 82-010
 ALL SECONDARY BORIC ACID HEAT TRACING INOPERABLE.
 EVENT DATE: 111082 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 CAUSE: DEFECTIVE BREAKER.

(NSIC 180079) DURING SURVEILLANCE TEST TS-11, ALL SECONDARY BORIC ACID HEAT TRACING CIRCUITS WERE FOUND INOPERABLE. AT 2105 HOURS, THE SECONDARY HEAT TRACE TRANSFORMER SUPPLY BREAKER, 1B52-429A, WAS FOUND IN THE TRIPPED POSITION. THE BREAKER WAS SHUT. THE BREAKER WAS DETERMINED TO HAVE TRIPPED AT ABOUT 2200 HOURS ON 11/09/82. LOSS OF ONE OF THE TWO HEAT TRACING CIRCUITS RESULTED IN THE DEGRADED MODE PERMITTED BY THE LCC DESCRIBED IN TECH SPEC 15.3.2.D.4. SURVEILLANCE TEST TS-11 WAS COMPLETED SATISFACTORILY AFTER THE TRIPPED BREAKER WAS SHUT. DUE TO AN INTERNAL DEFECT, THE BREAKER TRIPPED WHEN TRANSFORMER X17B WAS REENERGIZED FROM MCC 1B42 AFTER THE MCC SUPPLY BREAKER WAS CHANGED OUT AT ABOUT 2200 HOURS ON 11/09/82. THE DEFECTIVE BREAKER, 1B52-429A, WAS REPLACED ON 12/01/82.

[275] POINT BEACH 2 DOCKET 50-301 LER 82-009
 AXIAL FLUX MONITORING PROGRAM HALTED.
 EVENT DATE: 112282 REPORT DATE: 120382 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180054) DURING A REVIEW OF COMPUTER DATA ON 11/22/82, IT WAS DISCOVERED THAT THE AXIAL FLUX DIFFERENTIAL MONITORING PROGRAM AND THE ASSOCIATED ALARM HAD BEEN INADVERTENTLY HALTED DURING THE PERIOD FROM 1508 11/20/82, TO 1008 11/22/82.

WITHOUT MANUALLY LOGGING THE FLUX DIFFERENTIAL AS REQUIRED BY TECH SPEC 15.3.10.B.2.F. HOWEVER, THE FLUX DIFFERENTIAL HAD BEEN CONTINUOUSLY DISPLAYED AND RECORDED IN CONTROL AND EXAMINATION OF THESE RECORDINGS DISCLOSED NO ANOMALIES. LER'S 78-006/01T-0 AND 79-005/01T-0 ARE SIMILAR. WHILE ATTEMPTING TO DIAGNOSE ANOTHER PROBLEM THE OPERATOR STOPPED THE MONITORING PROGRAM. ON 11/22/82 REACTOR ENGINEERING PERSONNEL DISCOVERED THIS ERROR AND IMMEDIATELY REINSTATED THE MONITORING PROGRAM. SOLUTIONS ARE UNDER INVESTIGATION TO PROVIDE A POSITIVE INDICATION OF PROGRAM STATUS AND PREVENT RECURRENCE.

[276] PRAIRIE ISLAND 2 DOCKET 50-306 LER 82-024
 DG INOPERABLE DUE TO LOCKOUT OF SHUTDOWN CIRCUIT.
 EVENT DATE: 112382 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
 CAUSE: STICKY SPEED SWITCH.

(NSIC 180238) DURING SURVEILLANCE TEST, AFTER D1 DIESEL GENERATOR HAD BEEN SHUT DOWN, A LOCKOUT OF THE ENGINE SHUTDOWN CIRCUIT OCCURRED, MAKING THE ENGINE INOPERABLE FOR ABOUT FOUR MINUTES. TECH SPEC 3.7.A.5 APPLIES. MOST PROBABLE CAUSE IS STICKY ACTION OF THE SPEED SWITCH, BUT THE OCCURRENCE COULD NOT BE DUPLICATED IN SUBSEQUENT TEST RUNS. FURTHER EXAMINATION OF THE SHUTDOWN CIRCUITRY WILL BE DONE.

[277] PRAIRIE ISLAND 2 DOCKET 50-306 LER 82-025
 STEAM FLOW CHANNEL INOPERABLE.
 EVENT DATE: 113082 REPORT DATE: 123082 NSSS: WE TYPE: PWR
 SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: OUT OF CALIBRATION TRANSMITTER.

(NSIC 180239) DURING A POWER REDUCTION, ONE STEAM FLOW CHANNEL WAS OBSERVED TO DIFFER FROM REDUNDANT CHANNELS. INVESTIGATION SHOWED THE TRANSMITTER TO BE OUT OF CALIBRATION; TRANSMITTER SPAN HAD COLLAPSED BY ABOUT 15% EQUALLY ON THE HIGH AND LOW ENDS. TECH SPEC TABLES 3.5-2 AND 3.5-4 APPLY. CAUSE NOT KNOWN. TRANSMITTER WAS RESPONSIVE TO RECALIBRATION AND HAS BEEN RETURNED TO SERVICE. APPROPRIATE BISTABLES WERE PLACED IN TRIP DURING RECALIBRATION. ROSEMOUNT MODEL 1153HAG DIFFERENTIAL PRESSURE TRANSMITTER. TRANSMITTER WILL BE OBSERVED AND IF CONTINUED DRIFT OCCURS WILL BE REPLACED.

[278] RANCHO SECO DOCKET 50-312 LER 82-035
 TECH SPEC REPORT NOT WRITTEN.
 EVENT DATE: 121782 REPORT DATE: 011483 NSSS: BW TYPE: PWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE
 CAUSE: OPERATOR ERROR.

(NSIC 180353) REPORT REQUIRED BY TECH SPECS SECTION 4.2.8 WAS NOT WRITTEN FOR THE PERIOD OF JULY 31, 1981 TO JULY 31, 1982. THIS WAS NOTED BY SMUD QA PERSONNEL DURING AN AUDIT. GENERATION ENGINEERING HAS WRITTEN THE REPORT AND SUBMITTED IT TO THE NRC.

[279] RANCHO SECO DOCKET 50-312 LER 83-001
 PLANT EFFLUENT CHLORINE LEVEL EXCEEDS LIMIT.
 EVENT DATE: 123082 REPORT DATE: 011183 NSSS: BW TYPE: PWR
 SYSTEM: OTHER SYSTEMS COMPONENT: PUMPS
 CAUSE: AIR SUPPLY TO PUMP TURNED OFF.

(NSIC 180351) DAILY PLANT EFFLUENT SAMPLES SHOWED HIGH CHLORINE LEVELS OF 1.5 PPM TOTAL CHLORINE. TECH SPEC LIMITS ARE 0.2 PPM. THE AIR SUPPLY TO THE AIR DRIVEN SEWAGE PUMP WAS TURNED OFF, RESULTING IN A CONTINUOUS "RUN" COMMAND TO THE PUMP

ON HIGH LEVEL. THIS IN TURN RESULTED IN A CONTINUOUS "RUN" COMMAND TO THE SEWER CHLORINE PUMP. THE STROKE OF THE CHLORINE PUMP WAS REDUCED AND FURTHER ACTIONS WILL BE INVESTIGATED. THIS MAY BE PERSONNEL OR DESIGN ERROR.

[280] RANCHO SECO DOCKET 50-312 LER 83-002
 PH LIMIT EXCEEDED.
 EVENT DATE: 010783 REPORT DATE: 011983 NSSS: BW TYPE: PWR
 SYSTEM: OTHER SYSTEMS COMPONENT: VALVES
 CAUSE: OPERATOR LEFT VALVE IN OPEN POSITION.

(NSIC 180352) WHILE TRYING TO RESET AN AUTO-DIVERT OF THE BASIN, THE OPERATOR INCORRECTLY LEFT THE VALVE (FV-95103) IN THE OPEN POSITION, ALLOWING HIGH PH WATER TO GO OFF-SITE. THE PH LIMIT WAS EXCEEDED FOR A PERIOD OF APPROXIMATELY 10 MINUTES BEFORE THE OPERATOR RECLOSED THE VALVE. THE OPERATOR WAS PROVIDED WITH ADDITIONAL INSTRUCTION IN WATER QUALITY LIMITS AND IN VALVE OPERATION.

[281] ROBINSON 2 DOCKET 50-261 LER 82-019
 BIT VOLUME FALLS BELOW LEVEL.
 EVENT DATE: 121782 REPORT DATE: 123182 NSSS: WE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: ACCUMULATORS
 CAUSE: MAINTENANCE PERSONNEL ERROR.

(NSIC 180358) IT WAS CALCULATED THAT ON NOVEMBER 22, 1982, THE BIT VOLUME COULD HAVE BEEN BELOW THE 900 GALLONS REQUIRED BY TECH SPEC 3.3.1.1.B BY APPROXIMATELY 9 GALLONS. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.2.A.2. SUBSEQUENT CALCULATIONS, HOWEVER, HAVE SHOWN THAT EVEN THOUGH THE TANK LEVEL MAY HAVE BEEN BELOW THE REQUIRED VOLUME, THE AMOUNT OF BORON (ACTUAL CONCENTRATION X VOLUME) IN THE TANK DURING THIS EVENT MET THE INTENT OF THE TECH SPEC REQUIREMENTS. THE DECREASED LEVEL IN THE BIT IS BELIEVED TO HAVE BEEN CAUSED BY A COMBINATION OF BOILING IN THE BIT AND THE DRAINING OF RECIRCULATION LINES TO THE BIT DURING AN ATTEMPT TO DISSOLVE SOLIDIFIED BORIC ACID IN AN ISOLATION VALVE IN THE INLET RECIRCULATION LINE. THE BORIC ACID IN THE VALVE WAS DISSOLVED WITH EXTERNAL HEAT, AND THE BIT WAS REFILLED AT APPROXIMATELY 1700 HOURS ON NOVEMBER 22, 1982.

[282] ROBINSON 2 DOCKET 50-261 LER 82-0005
 REACTOR TRIP BREAKER FAILS TO TRIP.
 EVENT DATE: 122082 REPORT DATE: 011083 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 CAUSE: IMPROPER LUBRICATION.

(NSIC 180414) WHILE PERFORMING ROUTINE PERIODIC TEST (PT) NO. 19A (REACTOR PROTECTION LOGIC TRAIN A) "A" REACTOR TRIP CIRCUIT BREAKER (TCB) FAILED TO TRIP WHEN THE TRIP SIGNAL WAS INITIATED. SUBSEQUENT INSPECTION AND TESTING OF "A" REACTOR TCB REVEALED THAT THE UNDERVOLTAGE RELAY APPEARED TO BE STICKING. THE RELAY WAS REMOVED FROM THE BREAKER, CLEANED, LUBRICATED, AND FOUND TO OPERATE PROPERLY. HOWEVER, A NEW UNDERVOLTAGE RELAY WAS INSTALLED IN THE BREAKER. IT IS BELIEVED THAT THE REASON THE RELAY FAILED TO OPERATE WAS DUE TO IMPROPER LUBRICATION. ADDITIONALLY, THE INSPECTION OF THE BREAKER MECHANISM REVEALED THAT THE OPERATING LINKS FOR A AND B PHASES WERE CRACKED. THE LINKS WERE ALSO REPLACED AS A PREVENTATIVE MAINTENANCE MEASURE. AN ENGINEERING EVALUATION HAS BEEN INITIATED TO DETERMINE IF PERIODIC REPLACEMENT OF THE REACTOR TCB UNDERVOLTAGE RELAYS IS ADVISABLE AND TO REVIEW THE LUBRICATION AND CLEANING INTERVALS FOR ADEQUACY.

[283] SALEM 1 DOCKET 50-272 LER 82-064 REV 1
 UPDATE ON POTENTIAL SSPS PROBLEM.
 EVENT DATE: 081682 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: REPORT NOT APPLICABLE TO SALEM.

(NSIC 180585) WESTINGHOUSE ISSUED A REPORT TO PUBLIC SERVICE ELECTRIC AND GAS (PSE&G) COMPANY OF A POTENTIAL PROBLEM ASSOCIATED WITH THE SOLID STATE PROTECTION SYSTEM (SSPS) IN SERVICE AT SALEM STATION UNITS 1 AND 2. NUCLEAR ENGINEERING HAS EVALUATED THE WESTINGHOUSE REPORT FOR APPLICABILITY TO SALEM STATION. THE SYSTEM IN USE AT SALEM STATION IS SUFFICIENTLY DIFFERENT FROM THE WESTINGHOUSE DESIGN THAT THE WESTINGHOUSE PROPOSED SOLUTION WOULD BE DIFFICULT TO IMPLEMENT. HOWEVER, A PERMANENT CHANGE WHICH HAS BEEN MADE TO THE SSPS FUNCTIONAL TEST PROCEDURE PRECLUDES THE PROBLEM IDENTIFIED BY WESTINGHOUSE.

[284] SALEM 1 DOCKET 50-272 LER 82-089
 RHR PUMP INOPERABLE DUE TO LEAKAGE.
 EVENT DATE: 121382 REPORT DATE: 010583 NSSS: WE TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: PUMPS
 CAUSE: MECHANICAL SEAL FAILURE.

(NSIC 180595) DUE TO EXCESSIVE LEAKAGE FROM THE MECHANICAL SEAL, NO. 12 RESIDUAL HEAT REMOVAL (RHR) PUMP WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.9.8.2 WAS ENTERED. THE APPARENT CAUSE WAS MECHANICAL SEAL FAILURE. THE MECHANICAL SEAL IN NO. 12 RHR PUMP WAS REPLACED AND SURVEILLANCE TEST 4.0.5.P WAS SATISFACTORILY PERFORMED. ACTION STATEMENT 3.9.8.2.A WAS TERMINATED.

[285] SALEM 2 DOCKET 50-311 LER 81-089 REV 1
 UPDATE ON LOOSE AFWS PUMP TRIP LINKAGE.
 EVENT DATE: 081781 REPORT DATE: 110382 NSSS: WE TYPE: PWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: PUMPS
 CAUSE: LOOSE BOLTS.

(NSIC 180237) DURING A ROUTINE WEAR AND ALIGNMENT CHECK ON NO. 23 AUXILIARY FEEDWATER PUMP, IT WAS DISCOVERED THAT THE LINKAGE BETWEEN THE TRIP MECHANISM AND THE TRIP VALVE WAS LOOSE. AT 1017 HOURS, AUGUST 17, 1981, NO. 23 AUXILIARY FEEDWATER PUMP WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.7.1.2.A WAS ENTERED. THE LOOSE BOLTS IN THE LINKAGE BETWEEN THE TRIP MECHANISM AND THE TRIP VALVE WERE TIGHTENED. AT 0515 HOURS, AUGUST 18, 1981, NO. 23 AUXILIARY FEEDWATER PUMP WAS TESTED SATISFACTORILY AND RETURNED TO SERVICE, AND ACTION STATEMENT 3.7.1.2.A WAS TERMINATED. ANNUAL VISUAL AND TIGHTNESS INSPECTIONS OF THE LINKAGE HAVE BEEN ENTERED INTO THE INSPECTION ORDER SYSTEM.

[286] SALEM 2 DOCKET 50-311 LER 82-053 REV 1
 UPDATE ON INOPERABLE ECCS HEAT TRACING.
 EVENT DATE: 061682 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PERSONNEL DAMAGED THERMOCOUPLE JUNCTION.

(NSIC 180240) DURING ROUTINE SURVEILLANCE, AN OPERATOR DISCOVERED 4 PRIMARY EMERGENCY CORE COOLING SYSTEM HEAT TRACING CIRCUITS READING LESS THAN REQUIRED BY THE TECH SPEC. THE CHANNEL WAS DECLARED INOPERABLE, AND ACTION STATEMENT 3.5.4.2 WAS ENTERED. THE SECONDARY CIRCUITS WERE ALL OPERABLE, AND THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. THE SUPPLY BREAKER TO THE HEAT TRACING WAS FOUND TO BE IN THE TRIPPED POSITION. THE BREAKER WAS RESET AND CIRCUIT CURRENTS WERE DETERMINED TO BE NORMAL. A THERMOCOUPLE JUNCTION WHICH HAD BEEN DAMAGED BY PERSONNEL STANDING ON THE PIPING WAS REPLACED. DISCUSSION OF THE INCIDENT HAS BEEN INCORPORATED INTO THE STATION TRAINING

PROGRAM AS AN EXAMPLE OF THE POSSIBLE SAFETY SIGNIFICANCE OF DAMAGE CAUSED BY PERSONNEL STANDING ON PIPING AND CONDUIT.

[287] SALEM 2 DOCKET 50-311 LER 82-055 REV 1
 UPDATE ON CONTAINMENT AIR LOCK DOOR BEING BLOWN OPEN.
 EVENT DATE: 062182 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: OPERATOR LEFT SEAL AIR SUPPLY ON.

(NSIC 180270) AN INVESTIGATION OF PROBLEMS WITH OPERATION OF THE 100 FOOT ELEVATION CONTAINMENT AIR LOCK REVEALED THAT THE INNER DOOR LATCH MECHANISM HAD FAILED AND THE DOOR HAD SWUNG OPEN RAPIDLY, BREAKING THE SWING CHAIN AND BENDING THE MECHANICAL STOP. THE AIR LOCK WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.6.1.3.A WAS ENTERED. THE OUTER DOOR WAS OPERABLE AND WAS LOCKED CLOSED TO INSURE CONTAINMENT INTEGRITY. THE OCCURRENCE CONSTITUTED INADEQUACY IN THE IMPLEMENTATION OF PROCEDURAL CONTROLS IN ACCORDANCE WITH TECH SPEC 6.9.1.9.C. SEE LERS: 82-051, 82-047, 82-045, 82-044, 82-023. THE AIR SUPPLY TO THE SEAL INTERSPACE HAD BEEN INADVERTENTLY LEFT OPEN, AND THE LATCH HAD NOT FULLY ENGAGED DUE TO THE LINKAGE FAILURE. LEAKAGE PAST THE INNER SEAL RESULTED IN PRESSURIZATION OF THE AIR LOCK AND FINALLY IN THE DOOR BEING BLOWN OPEN. THE DOOR WAS REPAIRED, AND THE ACTION STATEMENT TERMINATED. PROPER OPERATION OF THE AIR LOCK IS BEING EMPHASIZED IN STATION TRAINING. A DCR HAS BEEN SUBMITTED TO RELOCATE THE AIR VALVE TO A MORE VISIBLE LOCATION.

[288] SALEM 2 DOCKET 50-311 LER 82-139
 AFWS STORAGE TANK LEVEL FALLS BELOW LIMIT.
 EVENT DATE: 111982 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
 CAUSE: PERSONNEL ERROR.

(NSIC 180092) WHILE RUNNING NO. 23 AUXILIARY FEEDWATER PUMP IN ORDER TO VERIFY OPERABILITY, THE AUXILIARY FEEDWATER STORAGE TANK (AFST) DROPPED BELOW THE TECH SPEC MINIMUM VOLUME OF 200,000 GALLONS. ACTION STATEMENT 3.7.1.3.A WAS ENTERED, AND AFST FILLING WAS COMMENCED. THE CAUSE OF THE OCCURRENCE WAS PERSONNEL ERROR. THE OPERATOR DID NOT OPEN DEMINERALIZED WATER MAKE-UP VALVE 2DR6 FAR ENOUGH TO MAINTAIN THE MINIMUM VOLUME. THE AFST VOLUME WAS RESTORED TO GREATER THAN 200,000 GALLONS, AND ACTION STATEMENT 3.7.1.3.A WAS TERMINATED. THE OPERATOR INVOLVED WAS COUNSELLED AS TO THE IMPORTANCE OF PROPER OPERATION OF THE AFST AND THE SIGNIFICANCE OF THE MINIMUM REQUIRED VOLUME.

[289] SALEM 2 DOCKET 50-311 LER 82-138
 ECCS ACCUMULATOR SIGHTGLASS LEVELS NOT CHECKED.
 EVENT DATE: 111982 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180095) THE SHIFT SUPERVISOR REALIZED THAT THE SURVEILLANCE REQUIREMENT TO CHECK THE LOCAL SIGHTGLASS LEVELS OF NOS. 23 AND 24 ACCUMULATORS WAS OVERDUE. THE PREVIOUS CHECK HAD BEEN PERFORMED AT 1705 HOURS, NOVEMBER 18, WITH THE NEXT ONE DUE AT 0505 HOURS, NOVEMBER 19. ADDING THE 25% ALLOWABLE EXTENSION, IT WAS ULTIMATELY DUE AT 0805 HOURS. UPON DISCOVERY OF THE OVERSIGHT, AN OPERATOR WAS SENT INTO CONTAINMENT TO OBTAIN THE LEVELS. AT 1441 HOURS, THE LEVELS ON NOS. 23 AND 24 ACCUMULATORS WERE VERIFIED AS SATISFACTORY. NON-COMPLIANCE WITH SURVEILLANCE REQUIREMENT 4.5.1.A(1) EXCEEDED THE LIMITS OF LCO 3.5.1.B. THE CAUSE OF THE MISSED SURVEILLANCE WAS PERSONNEL OVERSIGHT. THE SHIFT PERSONNEL INVOLVED WERE COUNSELLED AS TO THE IMPORTANCE OF PROMPT COMPLETION OF REQUIRED SURVEILLANCE PROCEDURES.

[290] SALEM 2 DOCKET 50-311 LER 82-141
 RCS SUBCOOLING MONITOR INOPERABLE DUE TO COMPUTER FAILURE.
 EVENT DATE: 112182 REPORT DATE: 120882 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: HIGH AMBIENT TEMPERATURE IN COMPUTER ROOM.

(NSIC 180090) ON TWO SEPARATE OCCASIONS, ON NOVEMBER 21 AND DECEMBER 4, 1982, DURING ROUTINE OPERATION, THE CONTROL ROOM OPERATOR DISCOVERED THAT THE P-250 COMPUTER WAS INOPERABLE DUE TO A PARITY ERROR. SINCE IT UTILIZES THE COMPUTER FOR INPUTS AND CALCULATIONS, THE REACTOR COOLANT SYSTEM (RCS) SUBCOOLING MONITOR WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.3.3.7A WAS ENTERED. WIDE RANGE RCS TEMPERATURE AND PRESSURE INDICATIONS AND STEAM TABLES WERE AVAILABLE THROUGHOUT THE OCCURRENCE. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. THE MALFUNCTIONS OF THE COMPUTER WERE APPARENTLY RELATED WITH PERIODIC INCREASES IN AMBIENT TEMPERATURE DUE TO INSUFFICIENT VENTILATION. IN EACH CASE, THE COMPUTER WAS REPROGRAMMED AND THE ACTION STATEMENT WAS TERMINATED. A TEMPORARY FAN WAS INSTALLED, AND IMPROVEMENT OF THE VENTILATION SYSTEM IS BEING INVESTIGATED.

[291] SALEM 2 DOCKET 50-311 LER 82-140
 CONTAINMENT AIR LOCK LEAK RATE EXCEEDS LIMIT.
 EVENT DATE: 112182 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: SEAL OUT OF POSITION.

(NSIC 180337) WHILE PERFORMING SURVEILLANCE PROCEDURE SP(O)4.6.1.3 ON THE 130 FOOT ELEVATION CONTAINMENT AIRLOCK, IT WAS DETERMINED THAT THE LEAKAGE RATE EXCEEDED THE LIMIT OF 0.05 L(SUB A) AT THE DESIGN PRESSURE OF 27.0 PSIG, AS REQUIRED BY TECH SPEC 3.6.1.3.B. THE AIR LOCK WAS DECLARED INOPERABLE, AND ACTION STATEMENT 3.6.1.3.A WAS ENTERED. THE CAUSE OF THE CONTAINMENT AIR LOCK LEAKAGE WAS EXCESSIVE AIR FLOW PAST THE INNER DOOR SEAL. THE AIR LOCK OUTER DOOR WAS MAINTAINED IN A CLOSED POSITION. THE INTERIOR DOOR SEAL WAS REPOSITIONED IN THE GROOVE AND SURVEILLANCE PROCEDURE SP(O)4.6.1.3 WAS PERFORMED SATISFACTORILY. THE AIR LOCK WAS DECLARED OPERABLE, AND ACTION STATEMENT 3.6.1.3.A WAS TERMINATED.

[292] SALEM 2 DOCKET 50-311 LER 82-136
 CFCU INOPERABLE DUE TO LEAKAGE.
 EVENT DATE: 112482 REPORT DATE: 120182 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: HEAT EXCHANGERS
 CAUSE: TUBING ERODED BY SILT.

(NSIC 180243) DURING ROUTINE SURVEILLANCE, AN OPERATOR DISCOVERED A SMALL SERVICE WATER LEAK OF APPROXIMATELY 0.5 GPM ON A COOLING COIL OF NO. 23 CONTAINMENT FAN COIL UNIT (CFCU). THE LEAK WAS ISOLATED AND PROMPT NOTIFICATION OF THE NRC WAS PERFORMED. THE UNIT WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.6.2.3A WAS ENTERED. REDUNDANT CFCU'S AND BOTH CONTAINMENT SPRAY SYSTEMS WERE OPERABLE. THE EVENT CONSTITUTED ABNORMAL DEGRADATION OF CONTAINMENT IN ACCORDANCE WITH TECH SPEC 6.9.1.8.C. SEE LERS: 82-135, 82-128, 82-122, 82-120, 82-119. THE LEAKAGE RESULTED FROM THE EROSION OF THE COOLING COIL BY SILT IN THE SERVICE WATER. THE LEAK WAS REPAIRED BY BLANKING OFF THE AFFECTED COIL, THE UNIT WAS SATISFACTORILY TESTED, AND THE ACTION STATEMENT WAS TERMINATED. NEW DESIGN COOLERS ARE SCHEDULED FOR INSTALLATION DURING THE NEXT REFUELING.

[293] SALEM 2 DOCKET 50-311 LER 82-144
 CONTAINMENT INTEGRITY VIOLATED BY OPEN NITROGEN VALVE.
 EVENT DATE: 112682 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
 CAUSE: BINDING OF VALVE.

(NSIC 180338) UPON ATTEMPTING TO OPEN NITROGEN SUPPLY HEADER VALVE 2NT32, THE OPERATOR FOUND THAT THE OPEN INDICATION DID NOT LIGHT UP ON THE CONTROL CONSOLE. UPON INVESTIGATION, AN OPERATOR REPORTED THAT THE VALVE INDICATED CLOSED. IMMEDIATELY AT 1315 HOURS, THE VALVE WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.6.3.C WAS ENTERED. AN OPERATOR WAS DISPATCHED TO CLOSE THE VALVE 2NT903 IN ORDER TO ISOLATE THE HEADER. AT 1326 HOURS, NOVEMBER 26, 1982, AN OPERATOR CLOSED VALVE 2NT903, RESTORING CONTAINMENT INTEGRITY, AND ACTION STATEMENT 3.6.3.C WAS TERMINATED. A LEAK RATE TEST WAS SATISFACTORILY PERFORMED ON VALVE 2NT903 TO VERIFY CONTAINMENT INTEGRITY. IT REMAINS TAGGED SHUT UNDER ADMINISTRATIVE CONTROL. VALVE 2NT32 IS EXPECTED TO BE REPAIRED DURING THE UNIT 2 REFUELING OUTAGE.

[294] SALEM 2 DOCKET 50-311 LER 82-150
 ROD POSITION INDICATOR INOPERABLE.
 EVENT DATE: 120382 REPORT DATE: 122982 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT.

(NSIC 180341) THE CONTROL ROOM OPERATOR DISCOVERED THAT NO. 2B4 ROD POSITION INDICATOR WAS READING 14 STEPS LOWER THAN THE BANK DEMAND POSITION INDICATOR. THIS IS GREATER THAN THE MAXIMUM OF 12 STEPS ALLOWED BY THE TECH SPECS. THE CHANNEL WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.1.3.2.1A WAS ENTERED. MOVEMENT OF THE AFFECTED ROD WAS SUSPENDED; IT WAS SUBSEQUENTLY DETERMINED THAT THE ACTUAL CONTROL ROD POSITION WAS IN SPECIFICATION. INVESTIGATION REVEALED THE CHANNEL INDICATOR HAD DRIFTED OUT OF CALIBRATION. NO OTHER PROBLEMS WERE EVIDENT, AND NO PREVIOUS PROBLEMS WITH THE CHANNEL HAD BEEN NOTED. THE INDICATOR WAS RECALIBRATED, THE CHANNEL TESTED SATISFACTORILY, AND THE ACTION STATEMENT WAS TERMINATED.

[295] SALEM 2 DOCKET 50-311 LER 82-147
 VITAL BUS LOSES POWER DUE TO SPURIOUS SEC CABINET ACTUATION.
 EVENT DATE: 120582 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: NOISE IN SYSTEM CONTROL CIRCUIT.

(NSIC 180339) A SPURIOUS ACTUATION OF NO. 2A SAFEGUARDS EQUIPMENT CONTROL (SEC) CABINET RESULTED IN THE DE-ENERGIZATION OF NO. 2A VITAL BUS. WITH THE LOSS OF THE BUS, ACTION STATEMENT 3.8.2.1A APPLIED. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. SPURIOUS ACTUATION OF NO. 2A SEC APPARENTLY RESULTED FROM NOISE IN THE SYSTEM CONTROL CIRCUITRY. THE VITAL BUS WAS RESTORED TO A NORMAL CONFIGURATION AND THE ACTION STATEMENT WAS TERMINATED. NOISE SUPPRESSION CIRCUITRY IS SCHEDULED FOR INSTALLATION IN THE SEC SYSTEM DURING THE NEXT REFUELING OUTAGE. SEE LERS: 82-132, 82-063, 82-031, 82-019.

[296] SALEM 2 DOCKET 50-311 LER 82-148
 STEAM GENERATOR LEVEL CHANNEL FAILS.
 EVENT DATE: 120882 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: VALVES
 CAUSE: LEAKY INSTRUMENT ROOT VALVE.

(NSIC 180340) THE CONTROL ROOM OPERATOR OBSERVED THAT NO. 21 STEAM GENERATOR LEVEL CHANNEL II INSTRUMENT HAD FAILED HIGH. STEAM GENERATOR LEVEL WAS MAINTAINED BY SHIFTING CONTROL TO MANUAL. THE CHANNEL WAS DECLARED INOPERABLE AND LIMITING CONDITION FOR OPERATION 3.3.1 ACTION 7 AND 3.3.2 ACTION 14 WERE ENTERED. THE EVENT INVOLVED A LOSS OF REDUNDANCY IN THE REACTOR TRIP AND ENGINEERED SAFETY FEATURE ACTUATION SYSTEMS. THE OCCURRENCE CONSTITUTED OPERATION IN A DEGRADED MODE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. THE FAILURE OF THE CHANNEL WAS DUE

TO LEAKAGE PAST THE PACKING OF INSTRUMENT ROOT VALVE 21BF23. THE VALVE WAS REPACKED, THE CHANNEL WAS SATISFACTORILY TESTED, AND THE ACTION STATEMENTS WERE TERMINATED. DUE TO A PREVIOUS SIMILAR OCCURRENCE, THE VALVE WILL BE DISASSEMBLED AND INSPECTED DURING THE NEXT REFUELING OUTAGE. APPROPRIATE CORRECTIVE ACTION WILL BE TAKEN AT THAT TIME.

[297] SAN ONOPRE 2 DOCKET 50-361 LER 82-135
EMERGENCY CHILLER INOPERABLE.
EVENT DATE: 101882 REPORT DATE: 111882 NSSS: CE TYPE: PWR
SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: HEAT EXCHANGERS
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180067) OPERATING MODES WERE CHANGED FROM MODE 4 TO MODE 3 WITH ONE TRAIN OF COMPONENT COOLING WATER IMPROPERLY ALIGNED SUCH THAT EMERGENCY CHILLER E-335 WAS RENDERED INOPERABLE. INCOMPLETE DOCUMENTATION OF ABNORMAL SYSTEM ALIGNMENTS RESULTED IN CCW SUPPLY TO EMERGENCY CHILLER NOT BEING RETURNED TO NORMAL PRIOR TO CHANGING MODES. OPERATIONS PERSONNEL HAVE BEEN REINSTRUCTED AND APPLICABLE PROCEDURES ARE BEING REVIEWED AND REVISED AS NECESSARY.

[298] SAN ONOPRE 2 DOCKET 50-361 LER 82-133
HOT LEG SAMPLE ISOLATION VALVE INOPERABLE.
EVENT DATE: 102182 REPORT DATE: 111982 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LOOSE LIMIT SWITCH ACTUATOR BAR.

(NSIC 180065) HOT LEG SAMPLE ISOLATION VALVE 2HV-0509 WAS OBSERVED TO HAVE SIMULTANEOUS OPEN AND CLOSED POSITION INDICATION WHEN IT WAS, IN FACT, CLOSED. THE VALVE WAS DECLARED INOPERABLE. SIMULTANEOUS VALVE POSITION INDICATION WAS DUE TO A LOOSE ACTUATOR BAR ON LIMIT SWITCH ASSEMBLY 2ZSL-0509-1. THE LOOSENED ACTUATOR BAR ALLOWED LATERAL MOVEMENT WHICH RESULTED IN THE BAR NOT MAKING CONTACT WITH THE OPEN LIMIT SWITCH WHEN THE VALVE WAS CLOSED. AFTER READJUSTING AND TIGHTENING THE ACTUATOR BAR, THE VALVE WAS DECLARED OPERABLE. AS CORRECTIVE ACTION, A STARTUP PROBLEM REPORT (SPR) HAS BEEN INITIATED TO EVALUATE THE FEASIBILITY OF PROVIDING A KEY LOCK ASSEMBLY ON THE VALVE STEMS OF THIS TYPE OF VALVE.

[299] SAN ONOPRE 2 DOCKET 50-361 LER 82-134
CONTAINMENT AIRBORNE MONITOR INOPERABLE.
EVENT DATE: 102482 REPORT DATE: 111982 NSSS: CE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DRIFT IN SAMPLE PUMP FLOW CONTROLLER.

(NSIC 180066) CONTAINMENT AIRBORNE MONITOR 2RT-7804-1 WAS DECLARED INOPERABLE DUE TO ITS FAILURE TO MEET SURVEILLANCE REQUIREMENTS OF TECH SPEC 4.4.5.1. HIGH SAMPLE FLOW WAS CAUSED BY INSTRUMENT DRIFT IN THE SAMPLE PUMP FLOW CONTROLLER. THE CONTROLLER WAS ADJUSTED AND THE MONITOR WAS RECALIBRATED.

[300] SAN ONOPRE 2 DOCKET 50-361 LER 82-140
RPS CHANNEL INOPERABLE.
EVENT DATE: 102582 REPORT DATE: 112482 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEM COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DRIFT IN LINEAR AMPLIFIER.

(NSIC 180073) OPERATOR INSPECTION REVEALED A MISMATCH IN POWER INDICATION BETWEEN CHANNEL B AND CHANNELS A, C, AND D, INDICATING A FAILURE OF CIRCUITRY ASSOCIATED WITH CHANNEL B POWER CALCULATION. SUBSEQUENTLY, CHANNEL B LINEAR POWER DENSITY (LPD) AND DEPARTURE FROM NUCLEATE BOILING RATIO (DNBR) WERE DECLARED INOPERABLE

AND PLACED IN THE BYPASSED CONDITION. INVESTIGATION REVEALED THAT THE PROBLEM WAS ATTRIBUTABLE TO GAIN DRIFTING IN THE LINEAR AMPLIFIER THAT PROCESSES THE LOWER EXCORE SIGNAL FOR CHANNEL B CORE PROTECTION CALCULATOR (CPC). THE PRINTED CIRCUIT BOARD CONTAINING THE AMPLIFIER WAS REPLACED. THIS WAS AN ISOLATED EVENT.

[301] SAN ONOPRE 2 DOCKET 50-361 LER 82-143
 APWS PUMP INOPERABLE DUE TO SLOW GOVERNOR VALVE.
 EVENT DATE: 110182 REPORT DATE: 120182 NSSS: CE TYPE: PWR
 SYSTEM: CONDENSATE & FEEDWTR SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: OIL LEAK IN VALVE OPERATOR.

(NSIC 180072) THE AUXILIARY FEEDWATER PUMP 2P-140 WAS DECLARED INOPERABLE. A LOW HYDRAULIC OIL LEVEL CONDITION INTRODUCED AIR INTO THE ELECTRO-HYDRAULIC ACTUATOR RESULTING IN A SLOW RESPONSE OF THE GOVERNOR VALVE CAUSING THE PUMP TO TRIP ON OVERSPEED. A SMALL HYDRAULIC OIL LEAK WAS REPAIRED. TO PREVENT RECURRENCE, PROCEDURE SO23-I-5.27 WILL BE REVISED TO REQUIRE PERIODIC VERIFICATION OF OIL LEVEL AND REMOVAL OF ANY ACCUMULATED CONDENSATE AND TRAPPED AIR.

[302] SAN ONOPRE 2 DOCKET 50-361 LER 82-138
 REACTOR SHUTDOWN DUE TO LOSS OF POWER TO FCS.
 EVENT DATE: 110982 REPORT DATE: 112482 NSSS: CE TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS
 CAUSE: OPERATOR DISLODGED POWER CORD.

(NSIC 180064) MOMENTARY LOSS OF POWER TO THE FEEDWATER CONTROL SYSTEM (FCS) WAS EXPERIENCED. AS A PRECAUTION, THE REACTOR WAS MANUALLY TRIPPED. THE ECCS AUTOMATICALLY INITIATED DURING THE RESULTING COOLDOWN. THE CAUSE OF THIS EVENT WAS DUE TO THE INADVERTENT DISLODGING OF A POWER CORD RESULTING IN THE DEENERGIZATION OF THE FCS AND STEAM BYPASS CONTROL SYSTEM. IMMEDIATE CORRECTIVE ACTION INCLUDED MANUAL TRIPPING OF THE REACTOR. ALL CONTROL CABINETS WITH SIMILAR POWER SUPPLY CONNECTORS WERE SECURED BY "TIE-WRAPPS". A PERMANENT MODIFICATION WILL BE DEVELOPED. OPERATOR AND SHIFT TECHNICAL ADVISER TRAINING WILL BE UPDATED BASED ON THIS EVENT. LER 82-136 (DUE DECEMBER 9, 1982) WILL ADDRESS THE COOLDOWN TRANSIENT. LCO 3.4.8.1B AND A SPECIAL REPORT (DUE FEBRUARY 8, 1983) WILL ADDRESS THE ECCS INITIATION (LCO 3.5.2B).

[303] SAN ONOPRE 2 DOCKET 50-361 LER 82-144
 REACTOR SHUTDOWN DUE TO SLIPPAGE OF 2 CEA'S.
 EVENT DATE: 111182 REPORT DATE: 121082 NSSS: CE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CONTROL ROD DRIVE MECHANISMS
 CAUSE: OVERHEATING IN CEDMCS CABINET.

(NSIC 180115) CONTROL ELEMENT ASSEMBLY (CEA) 68 (GROUP 2) SLIPPED AND DROPPED IN EXCESS OF 19 INCHES THUS LCO ACTION STATEMENT 3.1.3.1.C.1 WAS ENTERED. SHORTLY THEREAFTER, CEA 87 (SHUTDOWN GROUP B) SLIPPED INTO THE FULLY INSERTED POSITION RESULTING IN A REACTOR TRIP DUE TO HIGH LOCAL POWER DENSITY (LPD)/LOW DEPARTURE FROM NUCLEATE BOILING RATIO (DNBR). THE CAUSE OF THE SLIPPAGES WAS ATTRIBUTABLE TO OVERHEATING IN THE CONTROL ELEMENT DRIVE MECHANISM CONTROL SYSTEM (CEDMCS) CABINET ASSOCIATED WITH TWO CEA'S. THE OVERHEATING WAS CAUSED BY REMOVAL OF THE TEMPORARY CABINET HVAC AND PROTECTIVE PLASTIC PLACED OVER THE CABINET DURING ONGOING CONSTRUCTION IN THE CEDMCS ROOM. THE HVAC WAS PUT BACK IN SERVICE AND THE PLASTIC WAS REMOVED. AS FURTHER CORRECTIVE ACTION, THE CEDMCS ROOM WAS LOCKED AND FUTURE CEDMCS WORK WILL BE SCREENED BY EQUIPMENT CONTROL.

[304] SAN ONOFRE 2 DOCKET 50-361 LER 82-139
 CEA DROPS.
 EVENT DATE: 111382 REPORT DATE: 121082 NSSS: CE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CONTROL ROD DRIVE MECHANISMS
 CAUSE: SLOW OPERATION OF GRIPPERS.

(NSIC 180116) CONTROL ELEMENT ASSEMBLY (CEA) #23 SLIPPED AND DROPPED IN EXCESS OF 7 INCHES THUS ENTERING LCO ACTION STATEMENT 3.1.3.1.D.1. WHILE MEETING REQUIREMENTS OF THIS ACTION STATEMENT, CEA 22 WAS OBSERVED TO HAVE SLIPPED RESULTING IN A REACTOR TRIP DUE TO HIGH LOCAL POWER DENSITY (LPD)/LOW DEPARTURE FROM NUCLEATE BOILING RATIO (DNBR). SEE ALSO LER'S 82-084, -085, -086, -088, -091, -092, -115, AND -128. THE CAUSE OF THE SLIPPAGES WAS ATTRIBUTABLE TO SLOW OPERATION OF THE GRIPPERS (UPPER OR LOWER) WHICH PREVENTED THEM FROM MAKING UP TO THE CEA PRIOR TO THE OTHER GRIPPER RELEASING. ALL SIX REGULATING GROUP GRIPPER ACTUATION VOLTAGES WERE INCREASED TO THE MAXIMUM AND THE DURATION OF VOLTAGE APPLICATION FOR CEA 23 WAS INCREASED BY 100MSEC. NO INCREASE IN THE DUKATION OF VOLTAGE APPLICATION FOR CEA 22 WAS DETERMINED TO BE NECESSARY. STARTUP PROCEDURE S023-3-1.1 HAS BEEN REVISED TO ASSURE VERIFICATION OF RESETING OF THE CPC TRIP BUFFER PRIOR TO ATTEMPTING A REACTOR STARTUP.

[305] SAN ONOFRE 2 DOCKET 50-361 LER 82-146
 AFWS TURBINE PUMP INOPERABLE DUE TO VALVE FAILURE.
 EVENT DATE: 111682 REPORT DATE: 121682 NSSS: CE TYPE: PWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES
 CAUSE: LOOSE VALVE SWITCH ASSEMBLY.

(NSIC 180112) THE AUXILIARY FEEDWATER PUMP 2P-140 WAS DECLARED INOPERABLE. THE CAUSE OF THIS EVENT WAS DUE TO THE LOOSENING OF SWITCH ASSEMBLY 2ZL4705-2 FROM THE VALVE STEM. THIS RESULTED IN MISALIGNMENT OF THE LIMIT SWITCH RESULTING IN A LONGER INDICATED STROKE TIME. AFTER THE SWITCH ASSEMBLY WAS RE-ALIGNED AND TIGHTENED, THE VALVE WAS DECLARED OPERABLE. AS A CORRECTIVE MEASURE TO PREVENT RECURRENCE, ALL VALVES OF THIS TYPE WILL BE EXAMINED TO VERIFY PROPER SWITCH ALIGNMENT AND TIGHTNESS.

[306] SAN ONOFRE 2 DOCKET 50-361 LER 82-142
 BOTH CREACUS TRAINS INOPERABLE.
 EVENT DATE: 112882 REPORT DATE: 121382 NSSS: CE TYPE: PWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MAINTENANCE; HIGH CHILLER MOTOR TEMPERATURE.

(NSIC 180113) EMERGENCY CHILLER E-335 WAS DECLARED INOPERABLE. THIS RENDERED CREACUS TRAIN B INOPERABLE. SINCE TRAIN A WAS DOWN FOR CHARCOAL FILTER REPLACEMENT, LCO 3.7.5 WAS THUS EXCEEDED AND LCO 3.0.3 BECAME GOVERNING FOR BOTH UNITS. THIS EVENT WAS CAUSED BY THE FAILURE OF A RESISTANCE TEMPERATURE DETECTOR (RTD) IN THE MOTOR WINDING HIGH TEMPERATURE TRIP CIRCUIT. CORRECTIVE MEASURES TAKEN INCLUDED A TEMPORARY MODIFICATION AND CLEARING OF THE TRIP. ALSO, AN INSTALLED SPARE RTD WILL BE USED IN THE TRIP CIRCUIT AS PERMANENT CORRECTIVE ACTION.

[307] SAN ONOFRE 3 DOCKET 50-362 LER 82-001
 BOTH CREACUS TRAINS INOPERABLE.
 EVENT DATE: 112882 REPORT DATE: 121382 NSSS: CE TYPE: PWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MAINTENANCE; HIGH CHILLER MOTOR TEMPERATURE.

(NSIC 180114) EMERGENCY CHILLER E-335 WAS DECLARED INOPERABLE. THIS RENDERED CREACUS TRAIN B INOPERABLE. SINCE TRAIN A WAS DOWN FOR CHARCOAL FILTER REPLACEMENT, LCO 3.7.5 WAS THUS EXCEEDED AND LCO 3.0.3 BECAME GOVERNING FOR BOTH

UNITS. THIS EVENT WAS CAUSED BY THE FAILURE OF A RESISTANCE TEMPERATURE DETECTOR (RTD) IN THE MOTOR WINDING HIGH TEMPERATURE TRIP CIRCUIT. CORRECTIVE MEASURES TAKEN INCLUDED A TEMPORARY MODIFICATION AND CLEARING OF THE TRIP. ALSO, AN INSTALLED SPARE RTD WILL BE USED IN THE TRIP CIRCUIT AS PERMANENT CORRECTIVE ACTION.

[308] SEQUOYAH 1 DOCKET 50-127 LER 83-0625
 FIRE DAMPERS INADEQUATE.
 EVENT DATE: NA REPORT DATE: 012783 NSSS: WE E: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: DESIGN ERROR.

(NSIC 180409) SPECIAL TEST SQ-STEAR-INST-83-01 WAS WRITTEN AND PERFORMED AS A RESULT OF NCR SQNMEB8207. THE FUNCTIONAL TEST PERFORMED ON THE RUSKIN MANUFACTURING COMPANY VERTICAL FIRE DAMPERS PROVIDED INFORMATION THAT THIS PARTICULAR TYPE DAMPER MAY NOT COMPLETELY CLOSE WHEN RELEASED WHERE INSTALLED IN DUCTWORK WITH HIGH VELOCITY AIR FLOW. THERE ARE APPROXIMATELY 120 OF THESE DAMPERS LOCATED IN THE CONTROL AND AUXILIARY BUILDING THAT ARE INVOLVED. FIREWATCH COVERAGE AS REQUIRED BY TECH SPEC 3.7.12 WAS INITIATED. RUSKIN MANUFACTURING COMPANY HAS RECOMMENDED THAT A NEGATOR SPRING AND POSITIVE BLADE LATCH BE INSTALLED. THESE PARTS HAVE BEEN ORDERED AND UPON VERIFICATION THAT THIS MODIFICATION WILL RESULT IN THE PROPER OPERATION OF THE DAMPER, THEN ALL THE REMAINING DAMPERS WILL BE MODIFIED. IN THE INTERIM, TECH SPEC ACTION STATEMENT 3/4.7.12.A WILL CONTINUE TO BE IMPLEMENTED.

[309] SEQUOYAH 1 DOCKET 50-327 LER 82-135
 3 UHI LEVEL SWITCHES ARE OUT OF TOLERANCE.
 EVENT DATE: 112282 REPORT DATE: 122182 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT.

(NSIC 180260) DURING THE REVIEW OF SURVEILLANCE INSTRUCTION (SI) 196, THREE OF FOUR LEVEL SWITCHES ON THE UHI SYSTEM WERE FOUND TO BE OUT OF TOLERANCE. THIS CONDITION WAS DISCOVERED IN MODE 5 BUT COULD HAVE EXISTED IN APPLICABLE MODES PER LCO 3.5.1.2. 1-LS-87-21, -22, AND -24 WERE OUT OF TOLERANCE AS SPECIFIED IN SURVEILLANCE REQUIREMENT 4.5.1.2.C.1. THE PROBABLE CAUSE WAS INSTRUMENT DRIFT OF THE BARTON MODEL 288A LEVEL SWITCHES. THE LEVEL SWITCHES WERE CALIBRATED AND RETURNED TO SERVICE. ALL FOUR LEVEL SWITCHES WILL BE CHECKED FOR CALIBRATION DURING THE FIRST OUTAGE OF SUFFICIENT DURATION AFTER 03/01/83.

[310] SEQUOYAH 2 DOCKET 50-328 LER 82-132
 RHR PUMP OVERHEATS WHEN FLOW VALVE FAILS TO OPEN.
 EVENT DATE: 110382 REPORT DATE: 120182 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: FLOW SWITCH FAILURE.

(NSIC 179979) ONE RESIDUAL HEAT REMOVAL PUMP WAS DECLARED INOPERABLE DUE TO THE FAILURE OF THE DISCHARGE FLOW SWITCH TO ACTUATE. THIS WOULD NOT HAVE ALLOWED THE RESIDUAL HEAT REMOVAL (RHR) MINIFLOW VALVE FCV-74-12 TO OPEN WHICH COULD HAVE CAUSED THE PUMP TO OVERHEAT AND FAIL. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT (A) OF LCO 3.5.2. FLOW SWITCH 2-FIS-74-12 WAS FOUND INOPERABLE DURING CALIBRATION SUCH THAT THE CONTACTS WOULD NOT CLOSE. THE BARTON MODEL 288A FLOW SWITCH ACTUATING CAM WAS OUT OF ADJUSTMENT AND PREVENTED THE CONTACTS FROM CLOSING. THE FLOW SWITCH WAS REPAIRED AND RECALIBRATED. PROPER OPERATION WAS VERIFIED AND THE SWITCH AND PUMP WERE DECLARED OPERABLE.

[311] SEQUOYAH 2 DOCKET 50-328 LER 52-129
 CONTAINMENT ISOLATION VALVE INOPERABLE WHEN CONTROL FUSES FAIL.
 EVENT DATE: 110382 REPORT DATE: 120282 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: RELAYS
 CAUSE: SHORTED RELAY COIL.

(NSIC 179980) LETDOWN ORIFICE CONTAINMENT ISOLATION VALVE, 2-FCV-62-73, FAILED SHUT WHEN ITS CONTROL FUSES FAILED. THIS REQUIRED ENTRY INTO THE ACTION STATEMENT OF LCO 3.6.3. INVESTIGATION REVEALED A SHORTED COIL IN RELAY 8149AX. THE COIL AND CONTROL FUSES WERE REPLACED, AND THE VALVE WAS TESTED AND RETURNED TO SERVICE.

[312] SEQUOYAH 2 DOCKET 50-328 LER 82-136
 EGTS INOPERABLE DUE TO HIGH ANNULUS INLEAKAGE.
 EVENT DATE: 111582 REPORT DATE: 121482 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: NUMEROUS LEAKS.

(NSIC 180162) DURING PERFORMANCE OF SURVEILLANCE INSTRUCTION (SI) 264, EMERGENCY GAS TREATMENT SYSTEM (EGTS) VACUUM DRAW DOWN TEST, INLEAKAGE WAS FOUND TO BE 340 CUBIC FEET PER MINUTE (CFM) TO THE ANNULUS. THIS CAUSED ENTRY INTO LCO 3.6.1.8 BECAUSE OF THE TRAIN A EGTS SYSTEM BEING DECLARED INOPERABLE. NUMEROUS LEAKS WERE FOUND THROUGH PERSONNEL ACCESS AND EQUIPMENT DOORS, VENTILATION SYSTEM DRAIN LINES AND DUCTWORK, MAIN STEAM PENETRATIONS AND OTHER AREAS. LEAKAGE PATHS ARE CONTINUING TO BE IDENTIFIED AND CORRECTED. SI-264 WILL BE PERFORMED AGAIN SATISFACTORILY BEFORE ENTERING MODE 4.

[313] SEQUOYAH 2 DOCKET 50-328 LER 82-137
 4 UHI LEVEL SWITCHES ARE OUT OF TOLERANCE.
 EVENT DATE: 112282 REPORT DATE: 122182 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT; BROKEN SWITCH.

(NSIC 180170) WHILE RUNNING SURVEILLANCE INSTRUCTION SI-196.2, FOUR OUT OF FOUR UPPER HEAD INJECTION (UHI) SWITCHES WERE FOUND TO BE OUT OF TOLERANCE AND ONE OUT OF FOUR VALVES FAILED TO CLOSE. THIS CONDITION WAS DISCOVERED IN MODE 5 BUT COULD HAVE EXISTED IN APPLICABLE MODES PER LCO 3.5.1.2. PREVIOUS OCCURRENCES - ONE (SQRO-50-328/82-135). ONE LEVEL SWITCH HAD A BROKEN MICRO SWITCH AND THE OTHER THREE WERE OUT OF TOLERANCE. THE PROBABLE CAUSE WAS INSTRUMENT DRIFT OF THE BARTON 288A LEVEL SWITCHES. THEY WERE REPAIRED, CALIBRATED, AND RETURNED TO SERVICE. THE HYDRAULIC SYSTEM OF VALVE 2-FCV-87-21 WAS REPAIRED AND RETURNED TO SERVICE. THE LEVEL SWITCHES WILL BE CHECKED OR RECALIBRATED DURING THE FIRST OUTAGE OF SUFFICIENT DURATION AFTER 03/01/83.

[314] SEQUOYAH 2 DOCKET 50-328 LER 82-138
 CONTAINMENT AIR LOCK DOOR FAILS LEAK RATE TEST.
 EVENT DATE: 112382 REPORT DATE: 122282 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: LOOSE HANDWHEEL SHAFT NUT.

(NSIC 180171) THE LOWER CONTAINMENT AIRLOCK DOOR FAILED THE AIR LEAK RATE TEST (SURVEILLANCE INSTRUCTION SI-159.1). THIS CONDITION WAS DISCOVERED IN MODE 5 BUT COULD HAVE EXISTED IN APPLICABLE MODES PER LCO 3.6.1.3. PREVIOUS OCCURRENCES - THREE (SQRO-50-327/81-108, 81-027, AND 82-064). LOWER AIRLOCK DOOR (X-2A) LEAKAGE WAS THROUGH THE PACKING ON THE HANDWHEEL SHAFT. INVESTIGATION FOUND THAT THE PACKING NUT HAD BACKED OFF ALLOWING THE PACKING TO LOOSEN. THE NUT WAS RETIGHTENED AND THE DOOR WAS RETESTED SATISFACTORILY. A DESIGN CHANGE REQUEST (P-1304) HAS BEEN SUBMITTED TO INSTALL LOCKING DEVICES ON THE HANDWHEEL SHAFT

PACKING GLAND NUT. A PREVENTIVE MAINTENANCE PROGRAM WILL BE DEVELOPED IN THE INTERIM.

[315] SEQUOYAH 2 DOCKET 50-328 LER 82-141
 ESP LOGIC FOR CONTAINMENT VENTILATION ISOLATION INOPERABLE.
 EVENT DATE: 121482 REPORT DATE: 122782 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
 CAUSE: RELAY LATCH FAILURE.

(NSIC 180222) BOTH TRAINS OF THE ENGINEERED SAFEGUARD AUTOMATIC ACTUATION LOGIC FOR CONTAINMENT VENTILATION ISOLATION WERE DECLARED INOPERABLE. THIS REQUIRED THE UNIT TO COMPLY WITH LCO 3.0.3. DURING PERFORMANCE OF SI-26.2B, THE LATCHING MECHANISM TO THE SLAVE RELAYS (K615 ON TRAIN A AND K615, K622 ON TRAIN B) FAILED TO HOLD THE RELAY IN THE ENERGIZED POSITION. THE FAILURE MECHANISM AND ITS CAUSE HAS NOT BEEN DETERMINED. EVALUATIONS AND TESTS ARE ONGOING AND THE RESULTS WILL BE PROVIDED IN A LATER REPORT. THE LATCHING MECHANISM WAS REPLACED AND THE RELAYS TESTED SATISFACTORILY.

[316] ST. LUCIE 1 DOCKET 50-335 LER 82-052
 AFWS PUMP SUCTION VALVE FAILS TO OPEN.
 EVENT DATE: 110182 REPORT DATE: 120182 NSSS: CE TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVE OPERATORS
 CAUSE: VALVE OPERATOR MALFUNCTIONED.

(NSIC 180052) WHILE PERFORMING A TEST TO CHECK THE ABILITY OF THE 1C AUX. FEEDWATER PUMP TO TAKE A SUCTION ON THE UNIT 2 CONDENSATE STORAGE TANK AND TO DISCHARGE TO THE 1A S/G, MV-09-11 (1C AFW PUMP TO 1A S/G) FAILED TO OPEN. THIS ITEM IS REPORTABLE PER TECH SPEC 6.9.1.9.B. SEE LER'S 78-06 AND 82-32. MV-09-11 FAILED TO OPERATE DUE TO A TORQUE LIMITER SWITCH MALFUNCTION. THE SWITCH WAS INSPECTED AND FOUND TO BE OUT OF ADJUSTMENT. IT WAS READJUSTED, TESTED SATISFACTORILY AND PLACED BACK IN SERVICE WITHIN THE 48 HOURS REQUIRED BY TECH SPEC 3.7.1.2.

[317] ST. LUCIE 1 DOCKET 50-335 LER 82-053
 AFWS TURBINE PUMP INOPERABLE WHEN SUPPLY VALVE FAILS TO OPEN.
 EVENT DATE: 110882 REPORT DATE: 120882 NSSS: CE TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PUMP START SWITCH FAILED.

(NSIC 180104) WHILE PERFORMING A POST MAINTENANCE SURVEILLANCE TEST OF THE 1C STEAM DRIVEN AUXILIARY FEEDWATER PUMP, THE STEAM SUPPLY VALVE (MV-08-13) FROM THE 1A STEAM GENERATOR FAILED TO OPEN. THIS ITEM IS REPORTABLE PER TECH SPEC 3.7.1.2. MV-08-13 FAILED TO OPERATE DUE TO THE FAILURE OF A CONTACT IN THE 1C AUXILIARY FEEDWATER PUMP START SWITCH. THE SWITCH WAS REPLACED, TESTED SATISFACTORILY AND RETURNED TO SERVICE.

[318] ST. LUCIE 1 DOCKET 50-335 LER 82-056
 CEA MOTION INHIBIT CIRCUIT FAILS.
 EVENT DATE: 111182 REPORT DATE: 121382 NSSS: CE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: RELAYS
 CAUSE: LOOSE RELAY CIRCUIT.

(NSIC 180143) THE CEA MOTION INHIBIT CIRCUIT FOR THE CEA OUT OF SEQUENCE DEVIATION SCANNER FAILED. TECH SPEC 3.1.3.1 REQUIRES THE CEA BLOCK CIRCUIT TO BE OPERABLE IN MODES 1 AND 2. ALL CEA'S WERE FULLY WITHDRAWN, PER TECH SPEC REQUIREMENTS, UNTIL REPAIRS WERE EFFECTED. THIS IS THE FOURTH EVENT OF THIS TYPE. SEE LER 335-82-55, 81-30 AND 80-30. THE CAUSE FOR THIS EVENT WAS DISCOVERED TO

BE A LOOSE RELAY SOCKET IN THE CEA OUT OF SEQUENCE CIRCUITRY. THE RELAY WAS RESEATED AND THE CIRCUITRY RETURNED TO SERVICE. THE SOCKET FOR THE ABOVE MENTIONED RELAY WILL BE REPLACED DURING THE NEXT SCHEDULED REFUELING OUTAGE.

[319] ST. LUCIE 1 DOCKET 50-335 LER 82-057
RCS IODINE CONCENTRATION EXCEEDS LIMIT.
EVENT DATE: 111482 REPORT DATE: 121482 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
CAUSE: FUEL LEAKAGE.

(NSIC 180105) AFTER A REACTOR TRIP, DOSE EQUIVALENT (DEQ) I-131 EXCEEDED THE TECH SPEC 3.4.8.A LIMIT OF 1.0 MICRO CI/GM I-131. THE DEQ WAS FIRST MEASURED ABOVE THE LIMIT AT 1615 ON NOVEMBER 14, 1982, AND REMAINED ABOVE THE LIMIT FOR APPROXIMATELY 19 HOURS AND 30 MINUTES. THE ATTACHED SHEETS CONTAIN THE INFORMATION REQUIRED BY TECH SPEC 3.4.8.D. THIS IS THE TWELFTH OCCURRENCE OF THIS TYPE. SEE LER 335-22-41. AFTER AN EXTENDED PERIOD OF OPERATION WITH A NOMINAL LEVEL OF FUEL LEAKAGE, THE POWER TRANSIENT FROM FULL LOAD TO NO LOAD RESULTED IN AN IODINE BUILDUP (IODINE SPIKING PHENOMENON) IN THE PRIMARY COOLANT.

[320] ST. LUCIE 1 DOCKET 50-335 LER 82-059
DG FUEL OIL TANK VALVE FAILS TO OPEN.
EVENT DATE: 111782 REPORT DATE: 121782 NSSS: CE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: STUCK LEVEL FLOAT SWITCH.

(NSIC 180123) DURING SURVEILLANCE TESTING OF 1B DIESEL GENERATOR, THE SOLENOID OPERATED FILL VALVE (SE-17-1B) FOR THE ENGINE MOUNTED FUEL OIL TANK FAILED TO OPEN. THIS DOES NOT PREVENT DIESEL OPERATION. ACTION PER TECH SPEC 3.8.1.1 WAS INITIATED BY TAKING MANUAL CONTROL OF THE BYPASS VALVE AROUND SE-17-1B. THIS IS THE SECOND EVENT OF THIS TYPE. (SEE LER 335-79-13). VALVE SE-17-1B FAILED TO OPEN DUE TO A STUCK LEVEL FLOAT SWITCH WHICH SIGNALS THIS VALVE TO OPEN ON DROPPING TANK LEVEL. THE SWITCH WAS MOVED AND CLEANED AND WAS SUBSEQUENTLY SATISFACTORILY TESTED FOR PROPER OPERATION. THE TANK HAS A LOW LEVEL ALARM THAT NOTIFIES THE OPERATOR TO REFILL THE TANK.

[321] ST. LUCIE 1 DOCKET 50-335 LER 82-060
AFWS FLOW RECORDER INOPERABLE.
EVENT DATE: 111782 REPORT DATE: 121782 NSSS: CE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: DEFECTIVE TRANSMITTER.

(NSIC 180125) THE OPERATOR NOTED 1B AUXILIARY FEEDWATER FLOW RECORDER INDICATING FLOW WHEN ACTUAL FLOW WAS ZERO. (THE 1B APW PUMP WAS NOT OPERATIONAL). THE 1B APW PUMP FLOW TRANSMITTER WAS DECLARED INOPERABLE AND TECH SPEC 3.3.3.8 ACTION STATEMENT WAS IMPLEMENTED. THE 1B APW PUMP FLOW TRANSMITTER WAS DISCOVERED TO HAVE A DEFECTIVE FORCE MOTOR INTERNAL TO THE TRANSMITTER. THE TRANSMITTER WAS REPLACED WITH AN IDENTICAL TRANSMITTER AND THE SYSTEM RETURNED TO SERVICE.

[322] ST. LUCIE 1 DOCKET 50-335 LER 82-058
CONTAINMENT AIR LOCK DOOR INOPERABLE DUE TO INTERLOCK FAILURE.
EVENT DATE: 111782 REPORT DATE: 121782 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
CAUSE: MISALIGNED LOCKING MECHANISM.

(NSIC 180147) THE CONTAINMENT ESCAPE LOCK MECHANICAL INTERLOCK FAILED DURING TECH SPEC SURVEILLANCE TEST 4.6.1.3.C. IMMEDIATE ACTION WAS TO CLOSE THE INNER DOOR OF

THE ESCAPE LOCK. THIS IS THE FOURTH OCCURRENCE OF AN INOPERABLE AIRLOCK DOOR (335-76-14, 76-46, AND 77-18) BUT THIS WAS UNRELATED TO THE PREVIOUS OCCURRENCES. THE MECHANICAL INTERLOCK FOR CONTAINMENT ESCAPE LOCK FAILED DUE TO A MISALIGNED LOCKING MECHANISM. THE MECHANISM WAS REALIGNED AND THE DOOR INTERLOCK TESTED SATISFACTORILY.

[323] ST. LUCIE 1 DOCKET 50-335 LER 82-054
CEA POSITION INDICATION LOST DUE TO DDPS FAILURE.
EVENT DATE: 112382 REPORT DATE: 122282 NSSS: CE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: SOFTWARE PROBLEM.

(NSIC 180141) THE DIGITAL DATA PROCESSING SYSTEM (DDPS) WAS DECLARED INOPERABLE. THIS RESULTED IN A LOSS OF THE CEA PULSE COUNTING BACKUP POSITION INDICATION AND THE LINEAR HEAT RATE MONITOR BY INCORE DETECTORS. ACTION WAS TAKEN IN ACCORDANCE WITH TECH SPEC 3.1.3.3.D. POWER WAS REDUCED TO 82% UNTIL THE DDPS WAS RESTORED 1 HOUR AND 50 MINUTES LATER. THIS IS THE 26TH EVENT INVOLVING THE LOSS OF THE DDPS. THE LOSS OF DDPS WAS SOFTWARE RELATED AND INVOLVED THE LOSS OF A CONSTANT VALUE DURING CORE TO PROGRAM TRANSFER.

[324] ST. LUCIE 1 DOCKET 50-335 LER 82-062
REACTOR SHUTDOWN DUE TO LOSS OF VITAL POWER.
EVENT DATE: 112682 REPORT DATE: 122782 NSSS: CE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
CAUSE: INADVERTENT SAFETY INJECTION.

(NSIC 180196) A SAFETY INJECTION SIGNAL WAS INADVERTENTLY ACTUATED WHILE PERFORMING A MONTHLY PREVENTIVE MAINTENANCE TEST. ALL APPROPRIATE AUTOMATIC ACTIONS OCCURRED; HOWEVER, VITAL POWER SUPPLIES WERE LOST IMMEDIATELY AFTER THE SAFETY INJECTION SIGNAL WAS ACTUATED. THE REACTOR WAS MANUALLY TRIPPED AND AN UNUSUAL EVENT WAS DECLARED AT 2:32 P.M. NORMAL PLANT STATUS WAS RESTORED AT APPROXIMATELY 3:07 P.M. DURING THE RETURN TO POWER, THE DEQ I-131 EXCEEDED THE TECH SPEC LIMIT OF 1.0 MICROCURIES/GM. PLANT MAINTENANCE PERSONNEL INCORRECTLY POSITIONED A TRIP TEST SWITCH CAUSING THE SAFETY INJECTION ACTUATION SIGNAL UPON TESTING. THE SIMULTANEOUS LOADING OF ALL SIAS EQUIPMENT CAUSED AN UNDERVOLTAGE CONDITION. AN INCORRECTLY SET TIMER FOR UNDERVOLTAGE ON THE 480V BUS CAUSED THE RELAY TO TRIP. THE UNDERVOLTAGE RELAY WAS PROPERLY SET AND RETURNED TO SERVICE.

[325] ST. LUCIE 1 DOCKET 50-335 LER 82-061
CONTROL ROD DROPS INTO CORE.
EVENT DATE: 112782 REPORT DATE: 122782 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL ROD DRIVE MECHANISMS
CAUSE: UNKNOWN.

(NSIC 180198) WHILE BEING POSITIONED FOR ROD PROGRAMMING REQUIREMENT TO MINIMIZE CEA GUIDE TUBE WEAR, CEA #43 DROPPED TO FULL INSERTION. CEA #43 WAS RETURNED TO GROUP POSITION IN 10 MINUTES AND NORMAL POWER ASCENSION RESUMED. THIS IS THE THIRTEENTH OCCURRENCE OF A DROPPED CEA FOR WHICH THE CAUSE IS UNKNOWN. SEE LERS 77-6, 78-20, 78-46, 79-2, 79-27, 80-10, 80-52, 81-20, 81-34, 82-28, AND 82-51. NO CAUSE WAS FOUND FOR THE DROPPING OF CEA #43. IT HAS OPERATED NORMALLY SINCE THIS EVENT.

[326] ST. LUCIE 1 DOCKET 50-335 LER 82-063
BOTH FIRE PUMPS FAIL TO START DUE TO PRESSURE SWITCH PROBLEMS.
EVENT DATE: 121582 REPORT DATE: 122982 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: ISOLATED SWITCH.

(NSIC 180194) ROUTINE SURVEILLANCE REVEALED THAT NEITHER FIRE PUMP WOULD START AUTOMATICALLY UPON TEST OF ANY OF FOUR PRESSURE SWITCHES IN THE SYSTEM. IMMEDIATE INVESTIGATION PROVED THAT BOTH PUMPS COULD BE STARTED MANUALLY. TROUBLESHOOTING REVEALED THAT ONE OF FOUR FIREWATER HEADER PRESSURE SWITCHES WAS ISOLATED. HOWEVER, THIS SHOULD NOT HAVE AFFECTED THE CAPABILITY OF THE OTHER THREE PRESSURE SWITCHES TO AUTOMATICALLY START THE FIRE PUMPS.

[327] SUMMER 1 DOCKET 50-395 LER 82-035
 BORIC ACID TANK LEVEL INSTRUMENT FAILS.
 EVENT DATE: 110382 REPORT DATE: 120282 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: ZERO SHIFT ON TRANSMITTER.

(NSIC 180247) THE PLANT ENTERED MODE 3 WITH BORIC ACID TANK B LEVEL INSTRUMENT LI-163A INOPERABLE. TECH SPEC 3.3.3.5 REQUIRES THIS INSTRUMENT TO BE OPERABLE; HOWEVER, SPECIFICATION 3.0.4 IS NOT APPLICABLE. CAUSE OF OCCURRENCE WAS THAT BORIC ACID TANK B LEVEL INSTRUMENT LI-163A WAS OUT OF CALIBRATION DUE TO ZERO SHIFT ON TRANSMITTER. CORRECTIVE ACTION WAS TAKEN TO CALIBRATE THE INSTRUMENT. IT WAS RETURNED TO SERVICE ON NOVEMBER 9, 1982.

[328] SUMMER 1 DOCKET 50-395 LER 82-034
 MAIN STEAM LINE RADIATION MONITOR FAILS.
 EVENT DATE: 110382 REPORT DATE: 120182 NSSS: WE TYPE: PWR
 SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MOISTURE IN CABLE CONNECTORS.

(NSIC 180259) RADIATION MONITOR RM-G19C (MAIN STEAM LINE C MONITOR) FAILED TO THE HIGH RADIATION ALARM SETPOINT. THE MONITOR WAS DECLARED INOPERABLE. THE EVENT WAS CAUSED BY MOISTURE PENETRATION OF THE CABLE CONNECTORS BETWEEN THE DETECTOR AND PREAMP. THE DETECTOR WAS REPLACED, AND THE CABLE CONNECTORS WERE CLEANED AND DRIED. THE MONITOR WAS RETURNED TO OPERABLE STATUS. A MODIFICATION IS IN PROGRESS TO CHANGE THE MAIN STEAM LINE C MONITOR MODELS.

[329] SUMMER 1 DOCKET 50-395 LER 82-037
 TWO SG BLOWDOWN RADIATION MONITORS INOPERABLE.
 EVENT DATE: 110482 REPORT DATE: 120382 NSSS: WE TYPE: PWR
 SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INSUFFICIENT SAMPLE FLOW.

(NSIC 180265) STEAM GENERATOR BLOWDOWN RADIATION MONITOR (RM-L3) AND THE STEAM GENERATOR BLOWDOWN DISCHARGE RADIATION MONITOR (RM-L10) WERE TAKEN OUT OF SERVICE. THERE WERE NO ADVERSE CONSEQUENCES AS GRAB SAMPLES WERE TAKEN EVERY 8 HOURS PER TECH SPEC ACTION STATEMENT. THE EVENT WAS CAUSED BY INSUFFICIENT SAMPLE FLOW TO THE RADIATION MONITORS. THIS WAS CAUSED BY PIPING CONFIGURATION OR ALIGNMENT. THE SYSTEM HAS BEEN ALIGNED TO PROVIDE ADEQUATE SAMPLE FLOW FOR RM-L10. RM-L10 WAS RETURNED TO SERVICE ON 12/03/82. ENGINEERING EVALUATION IS CONTINUING ON RM-L3 WITH A FINAL RESOLUTION EXPECTED BY JANUARY 1, 1983.

[330] SUMMER 1 DOCKET 50-395 LER 82-045
 SHUTDOWN MARGIN CALCULATIONS MISSED.
 EVENT DATE: 111682 REPORT DATE: 121682 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL RODS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180009) THE PLANT ENTERED MODE 1 WITHOUT PERFORMING SURVEILLANCE TEST PROCEDURE (STP) 134.001. THIS IS REQUIRED BY TECH SPEC 4.1.1.1.(D). THERE WERE NO ADVERSE CONSEQUENCES AS A RESULT OF THIS EVENT AS ALL SHUTDOWN MARGIN

CALCULATIONS WERE FOUND TO BE WITHIN TECH SPEC LIMIT WHEN THE STP WAS PERFORMED. THE STP WAS OMITTED FROM THE PLANT STARTUP PROGRAM BY PERSONNEL OVERSIGHT AS A PREREQUISITE FOR EXCEEDING 5% RATED THERMAL POWER. TECH SPECS HAVE BEEN REVIEWED FOR OTHER SIMILAR REQUIREMENTS THAT MAY HAVE BEEN PREVIOUSLY OVERLOOKED. SURVEILLANCE PROGRAM TO BE REVISED TO PROVIDE MORE STRINGENT ADMINISTRATIVE CONTROLS.

[331] SUMMER 1 DOCKET 50-395 LER 82-046
RPS STEAM GENERATOR FEEDWATER FLOW INDICATION LOST.
EVENT DATE: 111782 REPORT DATE: 121682 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: PERSONNEL LEFT TRANSMITTER VALVES OPEN.

(NSIC 180011) THE MAIN CONTROL BOARD INDICATION FOR STEAM GENERATOR FEEDWATER FLOW (FI-477, FI-486, FI-487) WAS DISCOVERED TO BE READING ZERO. FAILURE APPEARS TO BE PERSONNEL ERROR DURING POWER OPERATIONAL TESTING. THE EQUALIZING VALVES ON THE THREE TRANSMITTERS WERE FOUND OPEN. PROPER INDICATION WAS RE-ESTABLISHED UPON VALVE CLOSURE. THE LICENSEE HAS INDOCTRINATED PERSONNEL ON THE REMOVAL AND RESTORATION OF INSTRUMENTS AND OBSERVANCE OF INDICATIONS.

[332] SUMMER 1 DOCKET 50-395 LER 82-048
CONDENSATE POLISHER BACKWASH WATER RELEASED WITHOUT SAMPLING.
EVENT DATE: 111782 REPORT DATE: 121782 NSSS: WE TYPE: PWR
SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: DEMINERALIZERS
CAUSE: INADEQUATE PROCEDURES.

(NSIC 180014) CONDENSATE POLISHER BACKWASH WATER WAS RELEASED TO THE SITE SETTLING PONDS WITHOUT HAVING BEEN SAMPLED AS REQUIRED BY TECH SPEC SURVEILLANCE REQUIREMENTS. THERE WERE NO ADVERSE CONSEQUENCES AS RADIATION LEVELS WERE NON-DETECTABLE FOR THE SECONDARY SIDE OF THE PLANT. ALSO, A GRAB SAMPLE OF THE BACKWASH RECEIVING TANK YIELDED NO DETECTABLE RADIATION. PROCEDURES ASSOCIATED WITH THE RELEASE PROCESS DID NOT ADEQUATELY ADDRESS THE GROUP INTERFACE INVOLVED IN PERFORMING SAMPLES BEFORE RELEASING. STATION ORDER WAS GENERATED TO TEMPORARILY ADDRESS GROUP INTERFACING PRIOR TO RELEASING. PERMANENT PROCEDURE CHANGES ARE IN THE REVISION PROCESS.

[333] SUMMER 1 DOCKET 50-395 LER 82-047
RCS AVERAGE TEMPERATURE NOT CHECKED WHEN ALARM FAILS.
EVENT DATE: 111882 REPORT DATE: 121682 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180013) OPERATIONS PERSONNEL DISCOVERED THAT THEY HAD FAILED TO DOCUMENT T(AVG) GREATER THAN 551 F ON A 30 MINUTE BASIS WITH T(AVG)- T(REF) DEVIATION ALARM NOT RESET. WITH THE EXCEPTION OF ONE PREVIOUSLY REPORTED EVENT, T(AVG) REMAINED ABOVE 551 F DURING PERIODS OF REACTOR CRITICALITY. THE EVENT WAS ATTRIBUTED TO OPERATOR FAILURE TO RECOGNIZE SURVEILLANCE REQUIREMENT FOR EXISTING PLANT CONDITIONS. NO IMMEDIATE CORRECTIVE ACTION WAS NECESSARY SINCE THE PLANT WAS IN MODE 3. THE OPERATOR LOGS HAVE BEEN REVISED TO REFLECT THE SURVEILLANCE REQUIREMENT.

[334] SUMMER 1 DOCKET 50-395 LER 82-049
FIRE SUPPRESSION WATER SYSTEM TESTING MISSED.
EVENT DATE: 111882 REPORT DATE: 121782 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
CAUSE: NONLICENSED OPERATOR ERROR.

(NSIC 180015) AN NRC INSPECTOR DISCOVERED THAT SURVEILLANCE REQUIREMENT 4.7.9.1.1.(E) HAD NOT BEEN PERFORMED ON THE FIRE SUPPRESSION WATER SYSTEM. A MAJOR FLOW TEST CONDUCTED DURING A ROUTINE ANI SURVEY IN JUNE 1982 ON THE TRANSFORMER DELUGE WATERSPRAY SYSTEM ADEQUATELY DEMONSTRATED THE FULL FLOW CAPABILITY OF THE UNDERGROUND WATER SUPPLY. THE FIRE PROTECTION GROUP REALIZED ON AUGUST 6, 1982, THAT THE SURVEILLANCE REQUIREMENT HAD NOT BEEN PERFORMED BUT WERE UNAWARE OF RESTRICTION ON MODE 6 ENTRY. TEST EQUIPMENT WAS MANUFACTURED AT THE PLANT SITE, AND THE SURVEILLANCE WAS PERFORMED ON NOVEMBER 19, 1982. PERSONNEL WERE COUNSELLED, AND THE TRACKING PROGRAM WAS UPDATED TO REFLECT SURVEILLANCE.

[335] SUMMER 1 DOCKET 50-395 LER 82-044
RHR PUMP TESTED INCORRECTLY.
EVENT DATE: 120282 REPORT DATE: 121682 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PUMPS
CAUSE: LICENSED OPERATOR ERROR.

(NSIC 180007) THE NRC RESIDENT INSPECTOR INFORMED THE LICENSEE THAT A SURVEILLANCE TEST PERFORMED ON OCTOBER 5, 1982, FOR RHR PUMP A WAS SIGNED OFF AS BEING APPROVED WHEN THE ACCEPTANCE CRITERIA WAS NOT MET. THERE WERE NO ADVERSE CONSEQUENCES BECAUSE THERE IS NO INDICATION OF ABNORMAL PUMP PERFORMANCE. INSTEAD, PERSONNEL ERRORS WERE MADE IN THE METHODS OF PERFORMING THE TESTS, AND COLLECTING AND ANALYZING THE DATA. THE CAUSE OF THE OCCURRENCE IS ATTRIBUTED TO PERSONNEL ERROR DUE TO THE LACK OF EXPERIENCE IN THE METHODS THAT THE TESTS WERE BEING PERFORMED AND THE METHODS THAT DATA WAS BEING GATHERED AND ANALYZED. BOTH RHR PUMPS WERE SATISFACTORILY TESTED ON DECEMBER 3, 1982. ADDITIONAL CORRECTIVE ACTIONS ARE DESCRIBED ON THE ATTACHMENT.

[336] SUMMER 1 DOCKET 50-395 LER 82-016 REV 1
UPDATE ON REACTOR BUILDING PRESSURE INDICATOR FAILURE.
EVENT DATE: 120282 REPORT DATE: 123082 NSSS: WE TYPE: PWR
SYSTEM: ENGRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: UNKNOWN.

(NSIC 180028) THE MAIN CONTROL BOARD INDICATOR FOR REACTOR BUILDING PRESSURE (PI-950) FAILED LOW AND WAS SUBSEQUENTLY DECLARED INOPERABLE. THE FAILURE CLEARED PRIOR TO IDENTIFICATION OF FAULTY COMPONENT. THE CHANNEL WAS TESTED AND RETURNED TO SERVICE. SIMILAR FAILURES OCCURRED ON OCTOBER 3, 19, AND 28. THE CAUSE OF THIS OCCURRENCE IS STILL UNDER INVESTIGATION. THE CORRECTIVE ACTION WILL BE DEPENDENT ON THE CAUSE DETERMINATION.

[337] SUMMER 1 DOCKET 50-395 LER 82-051
WASTE EVAPORATOR DISTILLATE PUMP INOPERABLE.
EVENT DATE: 120282 REPORT DATE: 123082 NSSS: WE TYPE: PWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: MOTORS
CAUSE: LEADS PULLED OUT OF JUNCTION BOX.

(NSIC 180245) STP-145.002 WAS PERFORMED UNSATISFACTORILY ON THE WASTE EVAPORATOR. TECH SPEC 4.11.1.3.1 REQUIRES THE SYSTEM TO BE DEMONSTRATED OPERABLE ONCE PER 92 DAYS IF IT HAS NOT BEEN USED WITHIN THE PREVIOUS 92 DAYS. THE LEADS TO A THERMAL CUT-OUT SWITCH WERE PULLED OUT OF THE EVAPORATOR DISTILLATE PUMP JUNCTION BOX. THE SWITCH IS WIRED IN AS A START PERMISSIVE IN THE MOTOR. THE SWITCH ASSEMBLY WAS REPLACED. THE APPLICABLE SURVEILLANCE TEST PROCEDURE WAS PERFORMED SATISFACTORILY ON DECEMBER 13, 1982.

[338] SUMMER 1 DOCKET 50-395 LER 82-052
 MAIN STEAM LINE MONITOR ALARMS SPURIOUSLY.
 EVENT DATE: 120482 REPORT DATE: 010383 NSSS: WE TYPE: PWR
 SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT.

(NSIC 180246) RADIATION MONITOR RM-G19A (MAIN STEAM LINE A MONITOR) GAVE SPURIOUS ALARMS. THE CAUSE OF THE OCCURRENCE IS ATTRIBUTED TO INSTRUMENT DRIFT. RADIATION MONITOR RM-G19A WAS REMOVED FROM SERVICE, AND A SATISFACTORY ISOTOPIC CALIBRATION WAS PERFORMED PRIOR TO A RETURN TO OPERABLE STATUS.

[339] SUMMER 1 DOCKET 50-395 LER 82-050
 FIRE WATCH PATROL NOT EXECUTED.
 EVENT DATE: 120782 REPORT DATE: 122182 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: PERSONNEL ERROR.

(NSIC 180047) A FIRE WATCH PATROL WAS NOT EXECUTED FOR ZONE FF, ROOM 236-01, IN THE INTERMEDIATE BUILDING FROM 1600 HOURS TO 2000 HOURS. THE FIRE WATCH HAD BEEN IMPLEMENTED PER TECH SPEC'S ACTION STATEMENT AS AREA SMOKE DETECTORS WERE INOPERABLE. THE SHIFT FIREWATCH LEADER DEPARTED THE SITE EARLY WITHOUT NOTIFYING THE OPERATIONS SHIFT SUPERVISOR. ANOTHER FIRE WATCH PERSON FAILED TO REPORT TO WORK OR CALL IN. SUBJECT PERSONNEL WERE DISMISSED. THE LICENSEE GENERATED CORRESPONDENCE TO INFORM ALL FIRE WATCH PERSONNEL ON CORRECT ABSENTEE MEASURES.

[340] SURRY 1 DOCKET 50-280 LER 82-116
 CONTAINMENT SPRAY CHEMICAL ADDITION TANK LEVEL FALLS BELOW LIMIT.
 EVENT DATE: 111382 REPORT DATE: 121382 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: VALVES
 CAUSE: LEAKY ISOLATION VALVE.

(NSIC 180063) THE CONTROL ROOM OPERATOR OBSERVED THAT THE CONTAINMENT SPRAY CHEMICAL ADDITION TANK LEVEL HAD DECREASED TO 96%, WHICH IS 22 GALLONS LESS THAN THE TECH SPEC 3.4.A.4 LOW LIMIT. THIS EVENT IS REPORTABLE AS PER TECH SPEC 6.6.2.B.(2). THE TANK LEVEL WAS RESTORED WITHIN THE TIME PERIOD SPECIFIED BY TECH SPEC 3.0.1. THE LOSS OF VOLUME WAS CAUSED BY LEAKAGE PAST THE MANUAL ISOLATION VALVE WHILE MAINTENANCE WAS BEING PERFORMED ON THE CAT TANK DISCHARGE VALVE. THE VALVE WAS TORQUED SHUT, STOPPING THE LEAKAGE, AND THE TANK WAS REFILLED TO ABOVE THE TECH SPEC MINIMUM. THE VALVE WILL BE OVERHAULED DURING THE NEXT REFUELING OUTAGE.

[341] SURRY 1 DOCKET 50-280 LER 82-113
 RADIATION MONITOR RECORDER FAILS.
 EVENT DATE: 112182 REPORT DATE: 121382 NSSS: WE TYPE: PWR
 SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: SLIPPING DRIVE CABLE.

(NSIC 180062) RADIATION MONITOR RECORDER (RR-175) WAS FOUND TO BE INOPERABLE. THIS IS CONTRARY TO TECH SPEC 3.11.B.4 AND 4.9C AND IS REPORTABLE PER TECH SPEC 6.6.2.B(4). ALL RELEASES IN PROGRESS WERE TERMINATED IMMEDIATELY. THE INOPERABILITY WAS CAUSED BY A SLIPPED DRIVE CABLE. THE DRIVE CABLE WAS RE-INSTALLED AND THE RECORDER RETURNED TO SERVICE.

[342] SURRY 2 DOCKET 50-281 LER 82-069
 SERVICE WATER PUMP LOSES SUCTION PRESSURE.
 EVENT DATE: 110482 REPORT DATE: 120382 NSSS: WE TYPE: PWR
 SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PUMPS

CAUSE: INSUFFICIENT NPSH.

(NSIC 180045) CHARGING PUMP SERVICE WATER PUMP 2-SW-P-10B EXPERIENCED A LOSS OF SUCTION PRESSURE. INOPERABILITY OF THIS PUMP IS CONTRARY TO TECH SPEC 3.3.A.8.B AND REPORTABLE PER TECH SPEC 6.6.2.B(2). THE REDUNDANT CHARGING PUMP SERVICE WATER PUMP (2-SW-P-10A) REMAINED OPERABLE. THE LOSS OF SUCTION TO THE PUMP WAS DUE TO INSUFFICIENT NPSH. SERVICE WATER FLOW TO THE AIR CONDITIONING CHILLERS WAS THROTTLED, AND THE PUMP WAS VENTED TO RESTORE NP3H.

[343] SURRY 2 DOCKET 50-281 LER 82-065
 SERVICE WATER PUMP FAILS TO DEVELOP DISCHARGE PRESSURE.
 EVENT DATE: 110682 REPORT DATE: 120382 NSSS: WE TYPE: PWR
 SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PUMPS
 CAUSE: CORRODED STEEL STUD.

(NSIC 180044) WHILE PERFORMING PT 18.8, CHARGING PUMP SERVICE WATER PUMP 2-SW-P-10A FAILED TO DEVELOP SUFFICIENT DISCHARGE PRESSURE. THIS IS CONTRARY TO TECH SPEC 3.3.A.8(B) AND IS REPORTABLE PER TECH SPEC 6.6.2.B(2). THE IMMEDIATE CAUSE OF THIS EVENT WAS A CORRODED CARBON STEEL STUD ON THE PACKING GLAND HOUSING WHICH LED TO COCKING OF THE GLAND. THE ROOT CAUSE IS A LACK OF NPSH. THE PACKING MATERIAL AND BOTH STUDS WERE REPLACED.

[344] SURRY 2 DOCKET 50-281 LER 82-068
 CCW CONTAINMENT ISOLATION VALVE FAILS TO OPERATE.
 EVENT DATE: 111282 REPORT DATE: 120382 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
 CAUSE: STICKING PNEUMATIC OPERATOR.

(NSIC 180046) DURING THE PERFORMANCE OF PT 18.6B, TV-CC-209B WOULD NOT CLOSE WHEN MANUALLY OPERATED FROM THE CONTROL ROOM. 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 SYSTEM IS A CLOSED SYSTEM AND ITS INTEGRITY WAS MAINTAINED DURING THE EVENT. THE CAUSE OF THE EVENT HAS BEEN ATTRIBUTED TO A STICKING PILOT VALVE (PNEUMATIC OPERATOR) THAT CONTROLS AIR FLOW FROM THE VALVE ACTUATOR. THE PILOT VALVE WAS REPLACED AND THE VALVE WAS TESTED SATISFACTORILY.

[345] SURRY 2 DOCKET 50-281 LER 82-070
 OPEN FIRE BARRIER PENETRATION FOUND.
 EVENT DATE: 111982 REPORT DATE: 121382 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 CAUSE: UNKNOWN.

(NSIC 180061) A ROUTINE WALKDOWN OF THE SERVICE BUILDING REVEALED AN OPEN FIRE BARRIER PENETRATION WITH NO FIRE WATCH POSTED. THIS EVENT IS CONTRARY TO TECH SPEC 3.21.G. THE PENETRATION WAS TEMPORARILY SEALED AT THE TIME OF INSTALLATION. HOW THE TEMPORARY SEAL WAS REMOVED CANNOT BE DETERMINED. A FIRE WATCH WAS POSTED UNTIL THE PENETRATION WAS RE-SEALED.

[346] SURRY 2 DOCKET 50-281 LER 82-075
 SG CHANNEL HEAD DRAIN PIPING WELD LEAKS.
 EVENT DATE: 121982 REPORT DATE: 123082 NSSS: WE TYPE: PWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PIPES, FITTINGS
 CAUSE: POOR WELD FUSION.

(NSIC 180591) WHILE CONDUCTING THE RCS INTEGRITY TEST (PT-11), A WELD LEAK ON THE 'A' STEAM GENERATOR CHANNEL HEAD DRAIN PIPING AT 2-RC-159 WAS IDENTIFIED. IMMEDIATE ACTION WAS TAKEN TO RETURN THE UNIT TO CSD. THIS EVENT IS REPORTABLE

PURSUANT TO TECH SPEC 6.6.2.A.(3). THE LEAKAGE WAS WITHIN THE CAPABILITY OF THE NORMAL MAKE UP SYSTEM. THE CAUSE OF THIS EVENT IS BELIEVED TO BE POOR FUSION BETWEEN SUCCESSIVE PASSES IN A SMALL AREA OF THE WELD. THE UNIT WAS RETURNED TO CSD AND THE DEFECTIVE WELD WAS REPAIRED. LIQUID PENETRANT EXAMINATION OF THE FINAL WELD REVEALED NO DEFECTS.

[347] SUSQUEHANNA 1 DOCKET 50-387 LER 82-031 REV 1
 UPDATE ON INADEQUATE SECONDARY CONTAINMENT VACUUM.
 EVENT DATE: 100282 REPORT DATE: 120382 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMENT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: WIND TURBULENCE.

(NSIC 180048) ZONE III OF SECONDARY CONTAINMENT SHOWED INDICATION OF FAILURE TO MAINTAIN THE REQUIRED VACUUM ON 10/2/82, 11/5/82, 11/7/82, 11/8/82 AND 11/9/82. THESE EVENTS WERE THE RESULT OF WIND TURBULENCE OUTSIDE THE REACTOR BUILDING AFFECTING THE DELTA PRESSURE SENSOR FOR ZONE III. THE EXTERNAL ATMOSPHERIC SENSOR TO THE DIFFERENTIAL PRESSURE ELEMENT WAS MOVED TO A DIFFERENT AREA OF THE REACTOR BUILDING WHERE THE PREVAILING WINDS WOULD NOT ADVERSELY AFFECT THE SYSTEM. SINCE THAT TIME NO FURTHER EVENTS OF THIS TYPE HAVE OCCURRED.

[348] SUSQUEHANNA 1 DOCKET 50-387 LER 82-051
 RCIC CONTROLLER FAILS TO TRANSFER TO AUTO MODE.
 EVENT DATE: 110782 REPORT DATE: 120782 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: MISSED CALIBRATION.

(NSIC 179989) WHILE TESTING THE RCIC SYSTEM, THE CONTROLLER WAS FUNCTIONING BUT COULD NOT BE TRANSFERRED TO THE AUTOMATIC MODE. THE RCIC SYSTEM WAS DECLARED INOPERABLE. THIS IS REPORTABLE PER 6.9.1.9.B. THE CONTROLLER COULD NOT BE PUT INTO THE AUTOMATIC MODE BECAUSE IT HAD NOT BEEN TUNED AT RATED CONDITIONS. THE CONTROLLER WAS CALIBRATED AND THE TESTING WAS COMPLETED. NO FUTURE CORRECTIVE ACTION IS NECESSARY BECAUSE THE RCIC CONTROLLER IS CALIBRATED AT RATED CONDITIONS.

[349] SUSQUEHANNA 1 DOCKET 50-387 LER 82-052
 CONTAINMENT PRESSURE INSTRUMENTATION INOPERABLE.
 EVENT DATE: 110782 REPORT DATE: 120782 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMENT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: HIGH WIND CONDITIONS.

(NSIC 180042) THE PRESSURE INSTRUMENTATION INDICATED ZONE I OF SECONDARY CONTAINMENT WAS NOT MAINTAINED AT THE REQUIRED VACUUM. THIS IS REPORTABLE PER 6.9.1.9.B. NO ADVERSE CONSEQUENCES EXISTED IN THAT ZONE I WAS AT A NEGATIVE PRESSURE AS REQUIRED, DESPITE INSTRUMENT READINGS. THE INSTRUMENTATION DETERMINING THE DELTA-P BETWEEN THE ATMOSPHERE AND ZONE I WAS FUNCTIONING PROPERLY. HIGH WIND CONDITIONS CAUSED THE MOMENTARY DEVIATION. ADDITIONALLY, ZONES I AND III HAD A COMMON EXTERNAL SENSOR. THE SENSOR OF ZONE III WAS SEPARATED AND MOVED.

[350] SUSQUEHANNA 1 DOCKET 50-387 LER 82-053
 CONTROL STRUCTURE CHLORINE MONITOR FAILS.
 EVENT DATE: 111182 REPORT DATE: 121082 NSSS: GE TYPE: BWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: CLOGGED WICK.

(NSIC 180041) IT WAS DETERMINED DURING SURVEILLANCE TESTING THAT ONE CONTROL STRUCTURE HEATING AND VENTILATION SYSTEM CHLORINE DETECTOR WAS INOPERABLE. (TECH SPEC 3.3.7.8.) THE APPROPRIATE ACTION STATEMENT WAS ENTERED AND THE CHLORINE

DETECTOR WAS RETURNED TO SERVICE IN 2 HOURS. THE WICK WITHIN THE CHLORINE DETECTOR BECAME CLOGGED THUS PREVENTING PROPER OPERATION OF THE EQUIPMENT. NO SPECIFIC REASON COULD BE DETERMINED FOR THE CLOG. THE EQUIPMENT WAS REPAIRED AND RETURNED TO SERVICE. A CHECK OF THE DETECTOR HAS BEEN ADDED TO THE DAILY OPERATOR ROUNDS TO VERIFY PROPER OPERATION.

[351] SUSQUEHANNA 1 DOCKET 50-387 LER 82-055
 CONTROL ROD MINIMIZER INOPERABLE AFTER LOCKING UP.
 EVENT DATE: 111482 REPORT DATE: 121482 NSSS: GE TYPE: BWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DEFECTIVE REED SWITCH.

(NSIC 180035) THE ROD WORTH MINIMIZER WAS DECLARED INOPERABLE AND REMOVED FROM SERVICE AFTER LOCKING UP SEVERAL TIMES DURING ROD MOVEMENT. THE RWM WAS INDICATING WITHDRAWAL ERRORS. THE ACTION STATEMENT WAS MET BY FOLLOWING THE PRESCRIBED ROD SEQUENCE CONTROL PATTERNS AND PERFORMING ROD MOVEMENTS WITH A TECHNICALLY QUALIFIED INDIVIDUAL. THIS IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THE RWM PREVENTED ROD MOVEMENT BECAUSE A DEFECTIVE REED SWITCH AT THE FULL IN POSITION DID NOT ACTUATE. THIS DATA FAULT CAUSED A LOCK UP OF THE RWM OUTPUT, THUS PREVENTING MOVEMENT OF ROD. THE POSITION INDICATION MECHANISM FOR THAT ROD WAS REPLACED.

[352] SUSQUEHANNA 1 DOCKET 50-387 LER 82-054
 DRYWELL TEMPERATURE EXCEEDS LIMIT WHEN CHILLERS TRIP.
 EVENT DATE: 111582 REPORT DATE: 121482 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: FILTERS
 CAUSE: LOSS OF CONDENSER PUMPS DUE TO STRAINER BLOCKAGE.

(NSIC 180036) DURING THE STARTUP TESTING PROGRAM, IT WAS DETERMINED THAT THE DRYWELL TEMPERATURE EXCEEDED THE TECH SPEC LIMIT OF 135 F (TECH SPEC 3.6.1.7). THIS WAS THE RESULT OF THE INSERVICE DRYWELL CHILLER TRIPPING WHILE THE STANDBY UNIT WAS OUT OF SERVICE FOR MAINTENANCE. THE TEMPERATURE EXCEEDED 135 F AT 0730 AND RETURNED TO WITHIN LIMITS BY 0940. ALL DRYWELL COOLERS WERE TURNED ON AND RBCCW FLOW WAS INCREASED. THESE ACTIONS SLOWED THE TEMPERATURE INCREASE. CHILLERS WERE RETURNED TO SERVICE AND TEMPERATURES RETURNED TO NORMAL. DRYWELL CHILLERS TRIPPED ON LOSS OF THE CONDENSER WATER PUMPS DUE TO STRAINER BLOCKAGE. THE STRAINERS WERE REMOVED AND THE SYSTEM WAS RETURNED TO SERVICE. A DESIGN CHANGE HAS BEEN INITIATED TO REPLACE THE PRESENT STRAINER CONFIGURATION WITH A FLUSHABLE TYPE AND ADD A DELTA PRESSURE INDICATION ON THE PUMP.

[353] SUSQUEHANNA 1 DOCKET 50-387 LER 82-057
 RCIC INOPERABLE WHEN RAMP GENERATOR FAILS.
 EVENT DATE: 112082 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: UNKNOWN.

(NSIC 180030) THE RCIC WAS DECLARED INOPERABLE AFTER THE RAMP GENERATOR FAILED WHILE PERFORMING A TEST FROM THE REMOTE SHUTDOWN PANEL (RSP). THE RAMP GENERATOR WAS JUMPERED OUT AND THE TEST COMPLETED. THIS IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THE RCIC SYSTEM HAD BEEN OPERATING NORMALLY PRIOR TO THE LOSS OF THE RAMP SIGNAL. THE ROOT CAUSE OF THE RAMP GENERATOR FAILURE HAS NOT BEEN DETERMINED. THE GENERATOR BOARD WAS INSPECTED, CLEANED, AND FUNCTIONALLY CHECKED WITH NO APPARENT PROBLEMS. SYSTEM LOGIC WAS EXERCISED AND ALL FUNCTIONS APPEARED NORMAL. A MONITORED REMOTE START FROM THE RSP IS PLANNED. ANY INDICATIONS OF THE PROBLEM WILL BE NOTED IN AN UPDATE.

[354] SUSQUEHANNA 1 DOCKET 50-387 LER 82-056
 DRYWELL VACUUM BREAKER PAIR INOPERABLE.
 EVENT DATE: 112082 REPORT DATE: 122082 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES
 CAUSE: POSITION INDICATOR BULB BLEW; LOOSE VALVE SHAFT COLLAR.

(NSIC 180033) WHILE PERFORMING THE VALVE CYCLING SURVEILLANCE, IT WAS DETERMINED THAT BOTH DRYWELL VACUUM RELIEF BREAKER VALVES IN ONE PAIR WERE INOPERABLE. THIS IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THE BREAKERS WERE INOPERABLE BASED ON INCORRECT POSITION INDICATION. ONE VACUUM BREAKER GAVE NO OPEN INDICATION. ITS BULB WAS REPLACED AND THE PLUNGER WAS LUBRICATED. THE OTHER VACUUM BREAKER GAVE DUAL INDICATION BECAUSE A COLLAR ON VALVE SHAFT WAS LOOSE. THE SET SCREW WAS REPLACED. BOTH VACUUM BREAKERS GAVE CORRECT INDICATIONS, PASSED THE SURVEILLANCE, AND WERE RETURNED TO SERVICE.

[355] SUSQUEHANNA 1 DOCKET 50-387 LER 82-059
 DG INOPERABLE WHEN PRELUBE OIL PUMP FAILS.
 EVENT DATE: 112282 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS
 CAUSE: CRUSHED FIELD INTERCONNECTION WIRES.

(NSIC 179967) DURING THE STARTUP TESTING PROGRAM, THE D DIESEL GENERATOR WAS DECLARED INOPERABLE AFTER IT WAS DETERMINED THE PRELUBE OIL PUMP FAILED. THE LUBE OIL PUMP FAILURE ALLOWED OIL TEMPERATURE TO DECREASE TO APPROXIMATELY 90F. MANUFACTURER WILL NOT GUARANTEE 10 SECOND STARTS WITH LUBE OIL BELOW 120F. THIS IS REPORTABLE PER TECH SPEC 6.9.1.9.B. REMAINING DIESELS WERE STARTED AND OFFSITE POWER SOURCES WERE VERIFIED IN ACCORDANCE WITH ACTION 3.8.1.1.A. PRELUBE OIL PUMP FAILURE WAS THE RESULT OF CRUSHED FIELD INTERCONNECTION WIRES APPARENTLY CAUSED DURING MOTOR CASING INSTALLATION. THE MOTOR WAS NOT DAMAGED. THE WIRES WERE REPLACED, THE MOTOR TESTED, AND THE DIESEL RETURNED TO SERVICE.

[356] SUSQUEHANNA 1 DOCKET 50-387 LER 82-058
 CONTROL ROD POSITION INDICATION LOST.
 EVENT DATE: 112282 REPORT DATE: 122282 NSSS: GE TYPE: BWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: UNKNOWN.

(NSIC 179968) DURING THE STARTUP TESTING PROGRAM, THE FULL-IN POSITION INDICATION WAS LOST ON ROD 46-23. THIS CAUSED A ROD WITHDRAWAL BLOCK, PREVENTING ROD MOVEMENT. THE ROD WAS FULL-IN AT THE TIME. THIS IS REPORTABLE PER TECH SPEC 6.9.1.9.B. THE ROD WAS BYPASSED, WITHDRAWN ONE NOTCH, THEN INSERTED. THE FULL-IN INDICATION DID NOT FUNCTION. THE ROD WAS DECLARED INOPERABLE AND WAS HYDRAULICALLY DISARMED. SIMILAR EVENTS: 82-055. WHEN THE I&C TECHNICIANS WERE CALLED IN TO WORK ON THE ROD, THE DESCRIBED PROBLEM COULD NOT BE DUPLICATED. ROD INDICATION FUNCTIONED PROPERLY. ROD WAS RETURNED TO AN OPERABLE STATUS. THE PLANT MAINTENANCE INFORMATION SYSTEM HAS INCLUDED THIS EVENT IN THE DATA BASE. FUTURE RECURRENCES WILL INITIATE CORRECTIVE ACTIONS.

[357] SUSQUEHANNA 1 DOCKET 50-387 LER 82-060
 INSUFFICIENT NUMBER OF RCS LEAK DETECTION SYSTEMS OPERABLE.
 EVENT DATE: 112482 REPORT DATE: 122382 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: LICENSED OPERATOR ERROR.

(NSIC 179966) THE UNIT WAS OPERATED WITHOUT THE REQUIRED MINIMUM OF 3 REACTOR COOLANT SYSTEM LEAK DETECTION SYSTEMS OPERABLE AS REQUIRED BY TECH SPEC 3.4.3.1. THIS IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.1.9.B. BOTH CHANNELS OF THE FLOOR DRAIN SUMP LEAK DETECTION SYSTEM WERE OPERABLE. THE TECH SPEC REQUIRES

PRIMARY CONTAINMENT ATMOSPHERE MONITORING. THE WETWELL ATMOSPHERE IS TECHNICALLY CONSIDERED PART OF THE PRIMARY CONTAINMENT. THIS INTERPRETATION WAS USED TO JUSTIFY CONTINUED OPERATION WITH THE ATMOSPHERE MONITORS SAMPLING THE WETWELL. HOWEVER, A LATER REVIEW OF THE FSAR REVEALED THAT DRYWELL SAMPLING IS NECESSARY TO DETECT RCS PRIMARY CONTAINMENT LEAKAGE. A TECH SPEC CHANGE HAS BEEN INITIATED TO CLARIFY THE SPECIFICATION. FURTHER, ALL SHIFTS WILL REVIEW THIS EVENT, AND THIS WILL BE NOTED IN THE TECH SPEC INTERPRETATION BOOK MAINTAINED IN THE OPERATIONS SHIFT OFFICE.

[358] SUSQUEHANNA 1 DOCKET 50-387 LER 82-064
 ROD BLOCK MONITOR FAILS TO ACTIVATE.
 EVENT DATE: 112782 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST S'S NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: CIRCUIT DESIGN ERROR.

(NSIC 180012) AS POWER INCREASED ABOVE 30% THE ROD BLOCK MONITOR (RBM) DID NOT ACTIVATE AS REQUIRED. IN ACCORDANCE WITH THE ACTION STATEMENT FOR SPECIFICATION 3.1.4.3, ONE RBM CHANNEL WAS PLACED IN A TRIPPED CONDITION. AFTER A SHUTDOWN, POWER WAS RESTRICTED TO BELOW 30% UNTIL THE RBM COULD BE PLACED IN OPERATION, PREVENTING THE POSSIBILITY OF SINGLE ROD WITHDRAWAL ERRORS IN POWER RANGES PROTECTED BY THE RBM. THIS IS REPORTABLE PER SPECIFICATION 6.9.1.9.B. A MODIFICATION HAD BEEN INSTALLED TO FACILITATE APRM GAIN ADJUSTMENT. THE DESIGN PACKAGE IMPLEMENTING THAT CHANGE (PDDR #KR1-1030 REV. 0) CONTAINED A CIRCUITRY ERROR AFFECTING RBM OPERABILITY. A MODIFICATION (PMR #82-790) WAS IMPLEMENTED TO CORRECT THE LOGIC. THE INVOLVED CIRCUITRY IS BYPASSED DURING TEST, SO THE ERROR ONLY BECAME APPARENT WHEN SYSTEM OPERABILITY WAS REQUIRED.

[359] SUSQUEHANNA 1 DOCKET 50-387 LER 82-063
 SEVEN INSTRUMENT VALVES FOUND CLOSED.
 EVENT DATE: 112782 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: VALVES
 CAUSE: PROCEDURAL ERROR.

(NSIC 180379) DURING THE STARTUP TESTING PROGRAM, WHILE INVESTIGATING THE FAILURE OF AN ANNUNCIATOR TO CLEAR, IT WAS DETERMINED THAT 7 INSTRUMENT VALVES HAD INADVERTENTLY BEEN LEFT CLOSED, ISOLATING THE INSTRUMENTS. THIS IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.1.9.C. THESE INSTRUMENTS, WHICH MEASURE TURBINE PRESSURE, PREVENTED THE EOC/RPT FROM COMING OUT OF BYPASS AND PREVENTED THE RSCS FROM GOING INTO BYPASS AT THE APPROPRIATE POWER LEVELS. THE VALVES WERE OPENED, RETURNING EQUIPMENT TO OPERABLE STATUS. THESE BALANCE-OF-PLANT VALVES HAD NEITHER BEEN NUMBERED NOR BEEN CLEARLY ASSIGNED AS EITHER OPERATIONS OR I&C RESPONSIBILITY. JURISDICTIONAL CONTROL WILL BE ESTABLISHED AND THE APPROPRIATE MECHANISM (CHECK OFF LIST AND/OR PROCEDURE) WILL BE INSTITUTED. A COMPLETE REVIEW OF SYSTEMS WILL BE PERFORMED TO IDENTIFY AND CORRECT ANY SIMILARLY UNCONTROLLED VALVES.

[360] SUSQUEHANNA 1 DOCKET 50-387 LER 82-065
 RECIRCULATION PUMPS TRIP DUE TO VOLTAGE TRANSIENT.
 EVENT DATE: 112882 REPORT DATE: 122882 NSSS: GE TYPE: BWR
 SYSTEM: OTHER AUX SYSTEMS & CONTROLS COMPONENT: HEAT EXCHANGERS
 CAUSE: AUXILIARY BOILER FLASH OVER.

(NSIC 180027) A PLANT VOLTAGE TRANSIENT OCCURRED CAUSED BY FLASH-OVER OF THE AUXILIARY BOILERS. THE TRANSIENT RESULTED IN LOSS OF VARIOUS PIECES OF PLANT EQUIPMENT, INCLUDING THE REACTOR RECIRCULATION PUMPS. ENTRY INTO THE ACTION STATEMENTS FOR SPECIFICATION 3.4.1.1 (AND COMPLIANCE WITH THOSE ACTIONS) IS REPORTABLE PER SPECIFICATION 6.9.1.9.B. FLASH-OVER OF THE ELECTRIC AUXILIARY BOILERS OCCURS DUE TO THE HIGH CONDUCTIVITY WATER. DUE TO KNOWN INEFFECTIVENESS

OF INSTALLED CONDUCTIVITY METERS, THE OPERATING PROCEDURE REQUIRED AN INDEPENDENT CONDUCTIVITY CHECK. A MEMO WAS ISSUED TO OPERATIONS STRESSING IMPORTANCE OF THIS REQUIREMENT, ISOLATION TRANSFORMERS WILL BE INSTALLED ON THE BOILERS, AND ACQUISITION OF MORE ACCURATE CONDUCTIVITY METERS IS BEING INVESTIGATED.

[361] SUSQUEHANNA 1 DOCKET 50-387 LER 82-068
 CARBON DIOXIDE STORAGE TANK LEVEL TESTING MISSED.
 EVENT DATE: 120182 REPORT DATE: 123082 NSSS: GE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: ACCUMULATORS
 CAUSE: OPERATOR ERROR.

(NSIC 180368) DURING THE STARTUP TEST PROGRAM, IT WAS DISCOVERED THAT TECH SPEC SURVEILLANCE REQUIREMENT 4.7.6.3.2.A (CO(SUB 2) STORAGE TANK LEVEL) WAS NOT INCLUDED IN ANY SURVEILLANCE PROCEDURE. NO SIGNIFICANT OCCURRENCES TOOK PLACE AS A RESULT OF THIS EVENT. FIRE EXTINGUISHERS AND HOSE REELS ARE AVAILABLE IN THE AREAS PROTECTED BY THE CO(SUB 2) SYSTEMS. LATER SURVEILLANCE OF THE TANK SHOWED THE LEVEL TO BE AT 60% (FIRE PROTECTION REQUIREMENT ONLY 25% LEVEL). THE EVENT WAS CAUSED BY HUMAN ERROR AS THE RESULT OF FAILING TO INCLUDE THE SURVEILLANCE IN WEEKLY SURVEILLANCE OPERATING LOG (SO-00-008). THE PROCEDURE WAS REVISED TO INCLUDE THE APPROPRIATE CHECKS ON THE CO(SUB 2) STORAGE TANK LEVEL. SHIFTLY, DAILY AND WEEKLY SURVEILLANCE PROCEDURES WERE REVIEWED AGAINST TECH SPEC REQUIREMENTS TO VERIFY NO OTHER ITEMS WERE MISSED.

[362] SUSQUEHANNA 1 DOCKET 50-387 LER 82-066
 ROD BLOCK MONITOR CHANNEL FAILS.
 EVENT DATE: 120182 REPORT DATE: 123082 NSSS: GE TYPE: BWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: POWER SUPPLY MALFUNCTION.

(NSIC 180377) DURING THE STARTUP TEST PROGRAM, ROD BLOCK MONITOR (RBM) CHANNEL B WAS BYPASSED DUE TO IMPROPER INDICATION OF REACTOR POWER AND FAILURE TO SET UP TO ITS NEW POWER LIMIT. THIS CAUSED INTERMITTENT ROD BLOCKS. THIS IS REPORTABLE PER TECH SPEC 6.9.1.9.B. A 5 VDC POWER SUPPLY TO THE RBM BYPASS/RESET LOGIC HAD ACTIVATED ITS CROWBAR FUNCTION, WHICH PREVENTED THE "RBM BYPASS DEFEAT" LOGIC FROM OPERATING PROPERLY. THE POWER SUPPLY WAS MANUALLY RESET AND THE CIRCUIT FUNCTIONED NORMALLY.

[362] SUSQUEHANNA 1 DOCKET 50-387 LER 82-000S
 FIRE DETECTOR FAILS.
 EVENT DATE: 120782 REPORT DATE: 012083 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: UNKNOWN.

(NSIC 180410) IT WAS DETERMINED THAT FIRE DETECTOR 113-101 WAS INOPERABLE. THIS SMOKE DETECTOR IS OF THE PHOTOELECTRIC TYPE AND IS LOCATED IN FIRE ZONE 1-5D, THE REACTOR WATER CLEANUP PUMP AND HEAT EXCHANGER ROOM. THERE IS ANOTHER PHOTO-ELECTRIC DETECTOR IN THAT AREA; HOWEVER, THE FAILED ALARM INDICATION FOR DETECTOR 113-101 WOULD MASK A REAL ALARM FROM THE OTHER DETECTOR. LIMITING CONDITION FOR OPERATION 3.3.7.9.B ESTABLISHES A 14 DAY INTERVAL (EXPIRED ON DECEMBER 21, 1982) AFTER WHICH A SPECIAL REPORT MUST BE FILED. THE DETECTOR WHICH FAILED IS NO LONGER IN PRODUCTION AND THE MANUFACTURER'S RECOMMENDED REPLACEMENT DETECTOR IS NOT COMPATIBLE WITH THE EXISTING BASE. THEREFORE, A PLANT MODIFICATION AND ASSOCIATED PAPER WORK IS REQUIRED PRIOR TO INSTALLING A REPLACEMENT DETECTOR. THIS REQUIREMENT NECESSITATED A DELAY IN REPLACING THE INOPERABLE DETECTOR. THE PAPER WORK IS NOW AVAILABLE TO INSTALL THE MODIFICATION, WHICH WILL BE PERFORMED DURING THE NEXT AVAILABLE OUTAGE. TO PREVENT A SIMILAR DELAY FROM OCCURRING SHOULD ANOTHER PHOTOELECTRIC DETECTOR BECOME INOPERABLE, THE NECESSARY TYPICAL DRAWING FOR REPLACEMENT OF EXISTING

DETECTORS WITH THE NEW MODEL TYPE WILL BE AVAILABLE. FUTURE CHANGE-OUTS WILL STILL REQUIRE THE PLANT MODIFICATION PACKAGE BUT SHOULD REQUIRE LESS TIME TO COMPLETE.

[364] SUSQUEHANNA 1 DOCKET 50-387 LER 82-000S
 NUMEROUS LOOSE PART MONITORING CHANNELS INOPERABLE.
 EVENT DATE: 121182 REPORT DATE: 011983 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INCORRECT SET POINTS; BAD SIGNAL CONDITIONER.

(NSIC 180408) SEVERAL CHANNELS OF THE LOOSE PARTS MONITORING SYSTEM WERE INOPERABLE DUE TO EXCESSIVE BAD DATA INDICATIONS, LATER FOUND TO BE ERRONEOUS. ADDITIONAL CHANNELS WERE INOPERABLE DUE TO A FAILED SIGNAL CONDITIONER. THE BAD DATA INDICATIONS ORIGINATED FROM INITIAL SETTINGS OF THE LOW LEVEL ALARMS BEING INCORRECT DUE TO A LACK OF OPERATING HISTORY. THE ALARM LEVELS WERE RESET TO PREVENT SPURIOUS ACTUATION, YET REMAIN CONSISTENT WITH THE ALARM'S INTENT. THE SIGNAL CONDITIONER, WHICH IS LOCAL TO THE CHANNEL SENSOR, WAS REPLACED IN AN OUTAGE EARLY THIS MONTH. DUE TO THE CHANGE OF SETPOINT VALUES, THE SURVEILLANCE PROCEDURE HAD TO BE REVISED AND APPROVED BY THE PLANT OPERATION REVIEW COMMITTEE PRIOR TO PERFORMING THE SURVEILLANCE AND DECLARING THE CHANNELS OPERABLE. SINCE THIS WAS NOT COMPLETED PRIOR TO JANUARY 10, 1983, THE 30 DAY TIME PERIOD REFERENCED IN ACTION 3.3.7.12.A EXPIRED AND THIS SPECIAL REPORT WAS PREPARED. THE PROCEDURE IS SCHEDULED FOR PORC REVIEW IN THE NEAR FUTURE AND THE SURVEILLANCE WILL BE PERFORMED SHORTLY THEREAFTER, RETURNING THE LOOSE PARTS MONITOR TO SERVICE.

[365] SUSQUEHANNA 1 DOCKET 50-387 LER 82-000S
 LIQUID RAD WASTE INADVERTENTLY DISCHARGED.
 EVENT DATE: 122182 REPORT DATE: 012483 NSSS: GE TYPE: BWR
 SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: VALVES
 CAUSE: OPERATOR ERROR.

(NSIC 180412) AN UNAUTHORIZED RELEASE OF LIQUID RADIOACTIVE WASTE WAS DISCHARGED FROM SUSQUEHANNA SES. THE EVENT WAS THE RESULT OF INADVERTENTLY ALIGNING THE C AND D SAMPLE TANKS TO THE DISCHARGE LINE INSTEAD OF THE LAUNDRY DRAIN SAMPLE TANKS, AS STATED ON THE RELEASE PERMIT. THE RELEASE RATE WAS 90 GPM AND WAS STOPPED AFTER THREE MINUTES. IMMEDIATELY AFTER INDIVIDUAL NOTED THE ERROR, THE SHIFT SUPERVISOR WAS INFORMED. THE CHEMISTRY GROUP SAMPLED THE C AND D SAMPLE TANKS AND CALCULATIONS SHOWED THE RELEASE CONTAINED 4.82 MICRO CURIES TOTAL, AT A CONCENTRATION OF 4.7E-6 MICRO CURIES/ML. THE OPERATOR IN THE RADWASTE FACILITY FAILED TO FOLLOW ALL STEPS AS OUTLINED IN THE AD-QA-310, "STATION WATER MANAGEMENT AND LIQUID EFFLUENT RELEASE". SPECIFICALLY, THIS PROCEDURE REQUIRES ONE OPERATOR TO PERFORM THE NECESSARY VALVE LINE-UP TO ACCOMPLISH A RELEASE, A SECOND OPERATOR TO VERIFY THE VALVE LINE-UP, AND THE RADWASTE SUPERVISOR OR SHIFT SUPERVISION TO APPROVE THE VALVE LINE-UP PRIOR TO A RELEASE. IN THIS INSTANCE, THE VALVE LINE-UP WAS MADE AND THE RELEASE COMMENCED WITHOUT EITHER VERIFICATION BEING MADE.

[366] TROJAN DOCKET 50-344 LER 83-000S
 NOBLE GAS RELEASED WHEN BAST LOOP OVERFLOW SEAL BLOWS OUT.
 EVENT DATE: 010883 REPORT DATE: 012183 NSSS: WE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: VALVES
 CAUSE: HIGH NITROGEN PRESSURE.

(NSIC 180411) THIS SPECIAL REPORT IS BEING MADE IN ACCORDANCE WITH TECH SPECS PARAGRAPH 3.5.2.A(3), CONCERNING AN UNPLANNED GASEOUS RELEASE IN EXCESS OF 5 CURIES OF NOBLE GAS. THE RELEASE OF 5.08 CURIES FROM THE AUXILIARY BUILDING OCCURRED ON JANUARY 8, 1983 BETWEEN 1430 AND 2330. THE APPARENT CAUSE OF THE

RELEASE WAS RELATED TO THE OPERATION OF THE BORIC ACID EVAPORATOR. WHEN THE BORIC ACID EVAPORATOR CONCENTRATES WERE PUMPED TO THE SOUTH BORIC ACID STORAGE TANK (BAST), PRESSURE BUILT UP IN THE TANK WHICH WAS NOT RELIEVED QUICKLY ENOUGH BY THE BACK PRESSURE REGULATOR CAUSING THE TANK OVERFLOW LOOP SEAL LIQUID TO BLOW OUT. THIS ALLOWED BAST GAS TO BE RELEASED TO THE AUXILIARY BUILDING DRAIN TANK HEADER AND THE VENT COLLECTION HEADER. NITROGEN SUPPLY PRESSURE CONTINUED PUSHING GAS OUT OF THE SOUTH BAST INTO THE AUXILIARY BUILDING THROUGH THE AUXILIARY BUILDING DRAIN TANK HEADER. LONG-TERM CORRECTIVE ACTION INCLUDES OPERATING THE BAST'S WITH A LOWER BACK PRESSURE REGULATOR SETPOINT AND REDUCED NITROGEN SUPPLY PRESSURE.

[367] TURKEY POINT 3 DOCKET 50-250 LER 82-016
 LAUNDRY ROOM FIRE DOORS INOPERABLE.
 EVENT DATE: 111982 REPORT DATE: 122082 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: ADMINISTRATIVE DEFICIENCY.

(NSIC 179973) DURING A ROUTINE INSPECTION OF THE FIRE PROTECTION SYSTEM, A FIRE BARRIER PENETRATION, WHICH IS COMPOSED OF THE LAUNDRY ROOM WEST DOORS, WAS FOUND TO BE NON-FUNCTIONAL. THIS PENETRATION WAS NOT RETURNED TO FUNCTIONAL STATUS WITHIN 7 DAYS, AND THE PLANT MANAGER WAS ADVISED. THIS IS REPORTABLE PURSUANT TO TECH SPEC 6.9.2.B.2. DUE TO THE LENGTH OF TIME INVOLVED WITH THE PURCHASING OF NEW DOORS AND PARTS, IT NECESSITATED THAT THE FIRE BARRIER PENETRATION BE OUT LONGER THAN 7 DAYS. ONCE THE PARTS AND NEW DOORS ARE RECEIVED, REPAIRS WILL TAKE PLACE.

[368] TURKEY POINT 3 DOCKET 50-250 LER 82-017
 TWO CONTROL ROOM FIRE BARRIERS INOPERABLE.
 EVENT DATE: 111982 REPORT DATE: 122082 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 CAUSE: NONLICENSED OPERATOR ERROR.

(NSIC 179974) WHILE ALTERATIONS WERE BEING MADE IN ACCORDANCE WITH CONTROL ROOM MODIFICATIONS PROJECT, TWO FIRE BARRIER PENETRATIONS WERE INTENTIONALLY DISABLED AS PLANNED. DUE TO THE TIME FRAME REQUIRED FOR THE MODIFICATION, THE TWO FIRE BARRIER PENETRATIONS, CONTROL ROOM DOOR AND FLOOR OPENING, WERE NOT RETURNED TO FUNCTIONAL STATUS WITHIN 7 DAYS, AND THE PLANT MANAGER WAS ADVISED. THIS IS REPORTABLE PURSUANT WITH TECH SPEC 6.9.2.B.2. DUE TO THE IMPLEMENTATION OF APPROVED DESIGN MODIFICATIONS TO THE CONTROL ROOM, IT NECESSITATED THE FIRE BARRIER PENETRATIONS TO BE NON-FUNCTIONAL LONGER THAN 7 DAYS. ADDITIONAL STEPS WERE TAKEN IN ACCORDANCE WITH TECH SPEC 3.14.5.B.

[369] TURKEY POINT 3 DOCKET 50-250 LER 82-018
 LOAD CENTER LOSES POWER WHEN BREAKER TRIPS.
 EVENT DATE: 120182 REPORT DATE: 121582 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 CAUSE: UNKNOWN.

(NSIC 180006) THE 3A LOAD CENTER WAS DE-ENERGIZED FOLLOWING A TRIP OF THE ASSOCIATED 4KV BREAKER, 3AA08. THIS RESULTED IN THE LOSS OF THE 3A MOTOR CONTROL CENTER, WHICH IS REPORTABLE UNDER TECH SPEC 6.9.2.A.2. THE BREAKER WAS CLOSED FIVE MINUTES LATER AND POWER WAS RESTORED. A SIMILAR EVENT WAS REPORTED AS LER-251-82-001. THE ROOT CAUSE COULD NOT BE DETERMINED. AN INSPECTION OF THE BREAKER AND CIRCUITRY FOUND NO APPARENT SIGNS OF EQUIPMENT MALFUNCTION. DURING THE NEXT OUTAGE OF SUFFICIENT DURATION, THE BREAKER'S PROTECTIVE RELAYS WILL BE TESTED FOR PROPER OPERATION TO VERIFY THAT EQUIPMENT MALFUNCTION DID NOT PLAY A PART IN THIS EVENT.

[370] VERMONT YANKEE DOCKET 50-271 LER 82-025
 DRYWELL TEMPERATURE RECORDER FAILS.
 EVENT DATE: 120182 REPORT DATE: 122982 NSSS: GE TYPE: BWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: FAILURE OF SERVO MOTOR CONNECTION.

(NSIC 180589) I & C PERSONNEL OBSERVED THE DRYWELL ATMOSPHERIC TEMPERATURE RECORDER, TR-1-149, TO BE INOPERABLE. THIS IS ONE OF TWO REDUNDANT DRYWELL TEMPERATURE RECORDERS CLASSIFIED AS POST-ACCIDENT INSTRUMENTATION BY TECH SPEC TABLE 3.2.6. THE APPARENT CAUSE FOR THE FAILURE OF THE LEEDS AND NORTHRUP SPEEDMAX RECORDER MODEL 250 WAS THE SERVO MOTOR LOGIC GROUND CONNECTION. PREVENTIVE MAINTENANCE WAS PERFORMED ON THE RECORDER AND THE SERVO MOTOR LOGIC GROUND WAS RESTORED. THE RECORDER WAS CALIBRATED AND PLACED BACK INTO SERVICE.

[371] VERMONT YANKEE DOCKET 50-271 LER 83-001
 TWO CONTAINMENT ISOLATION VALVES FAIL TO CLOSE.
 EVENT DATE: 010783 REPORT DATE: 011083 NSSS: GE TYPE: BWR
 SYSTEM: MNTNMT ISOLATION SYS & CONT COMPONENT: VALVES
 CAUSE: IRON PARTICLES ON MAGNET.

(NSIC 180366) WHEN COMMENCING TO DE-INERT THE PRIMARY CONTAINMENT IN PREPARATION FOR PLANT SHUTDOWN, V-16-19-20 AND 22B FAILED TO CLOSE WHEN THE OPERATOR ATTEMPTED TO SECURE THE NITROGEN FLOW. THESE VALVES ARE CONTAINMENT ISOLATION VALVES AND ARE REQUIRED TO BE OPERABLE PER TECH SPEC 3.7.D.1. THE VALVES WERE CLOSED AFTER SEVERAL ACTUATIONS OF THE REMOTE MANUAL SWITCHES. A SIMILAR EVENT WAS REPORTED AS LER 82-15. THE CAUSE OF THE FAILURES WAS AN ACCUMULATION OF IRON PARTICLES ON THE MAGNET USED TO PROVIDE VALVE POSITION INDICATION. THE VALVES WERE CLEANED, REASSEMBLED, TESTED AND RETURNED TO SERVICE. THE VALVES ARE AUTOMATIC CAT. NO. 31840VP1 MOD.

[372] VERMONT YANKEE DOCKET 50-271 LER 83-002
 REACTOR DRAIN LINE LEAKS DUE TO A CRACK.
 EVENT DATE: 010883 REPORT DATE: 011083 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: PIPES, FITTINGS
 CAUSE: UNKNOWN.

(NSIC 180363) WHILE PERFORMING ROUTINE SURVEILLANCE OF THE DRYWELL DURING SHUTDOWN, INDICATION OF A LEAK IN A 2 IN. SS SCHEDULE 160 ISOLABLE SECTION OF THE REACTOR DRAIN LINE WAS DISCOVERED. THIS LEAK IS CONTRARY TO TECH SPEC 3.6.E. THE EXACT CAUSE OF THE PIPE CRACK IS UNKNOWN AT PRESENT. A FULL REPORT WILL BE MADE WHEN THE INFORMATION IS AVAILABLE. THE LEAKING ELBOW WAS REPLACED WITH A 304L TYPE STAINLESS STEEL MATERIAL WHICH MEETS THE INTENT OF NUREG 0313. ADDITIONAL EXAMINATIONS OF THE VESSEL DRAIN LINE WERE PERFORMED TO VERIFY THE INTEGRITY OF THE PRESSURE BOUNDARY.

[373] YANKEE ROWE DOCKET 50-029 LER 82-040
 VITAL BUS DEENERGIZED WHEN BREAKER OPENS.
 EVENT DATE: 111282 REPORT DATE: 121082 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 CAUSE: CONTRACTOR BUMPED BREAKER SWITCH.

(NSIC 179988) THE VITAL BUS DISTRIBUTION PANEL WAS DEENERGIZED WHEN CIRCUIT BREAKER 1CB, CONNECTING THE 120 VOLT VITAL BUS GENERATOR TO THE DISTRIBUTION PANEL, WAS INADVERTENTLY OPENED (TECH SPEC 3.8.2.2.E). POWER WAS RESTORED IN 15 MINUTES. THE CIRCUIT BREAKER SWITCH WAS OPENED WHEN STRUCK BY A LENGTH OF ELECTRICAL CONDUIT BEING INSTALLED IN THE IMMEDIATE AREA. PERSONNEL WERE INSTRUCTED TO EXERCISE CAUTION IN THE PERFORMANCE OF THEIR WORK. NO FURTHER ACTION IS DEEMED NECESSARY AT THIS TIME.

[374] YANKEE ROWE DOCKET 50-029 LER 82-041
 SET POINT DRIFT IN RCS PRESSURE CHANNEL.
 EVENT DATE: 111682 REPORT DATE: 121682 NSSS: WE TYPE: PWR
 SYSTEM: ENGRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: DRIFT IN INDICATOR.

(NSIC 179987) DURING THE PERFORMANCE OF THE PROCEDURE FOR MAIN COOLANT SYSTEM PRESSURE CHANNEL CALIBRATION, LOOP 1 CHANNEL INITIATION SETPOINT WAS FOUND TO BE OUT OF TECH SPEC LIMITS (TABLE 3.3-3). THE AS FOUND SETPOINT WAS APPROXIMATELY 20 PSIG LOWER THAN THE MINIMUM TECH SPEC VALUE. THIS IS THE FIRST OCCURRENCE OF THIS NATURE. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO DRIFT IN THE MAIN CONTROL BOARD INDICATOR. THE UNIT IS A SIGMA MODEL 1151 EDGEWISE METER. THE INDICATOR WAS REPLACED IN KIND AND THE CHANNEL WAS RECALIBRATED. PROCEDURE OP-4-659, "MAIN COOLANT SYSTEM PRESSURE CHANNEL FUNCTIONAL TEST", WILL BE REVISED TO USE THE TRANSMITTER OUTPUT FOR CALIBRATION INSTEAD OF THE INDICATOR.

[375] YANKEE ROWE DOCKET 50-029 LER 82-042
 SET POINT DRIFT IN RCS LOW PRESSURE SCRAM.
 EVENT DATE: 111782 REPORT DATE: 121782 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: INDICATOR DRIFT.

(NSIC 179983) DURING THE PERFORMANCE OF THE PROCEDURE FOR MAIN COOLANT SYSTEM PRESSURE CHANNEL CALIBRATION, LOOP 2 LOW PRESSURE SCRAM SETPOINT WAS FOUND TO BE OUT OF TECH SPEC LIMITS (TABLE 2.2.1). THE AS FOUND SETPOINT WAS 55 PSIG LOWER THAN THE MINIMUM TECH SPEC VALUE. AN OCCURRENCE OF THIS NATURE WAS REPORTED AS LER 82-41. LOOPS 1 AND 3 WERE WITHIN LIMITS AND AVAILABLE TO THE 2 OF 3 SCRAM LOGIC. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO DRIFT IN THE MAIN CONTROL BOARD INDICATOR. THE INDICATOR IS A SIGMA MODEL 1151 EDGEWISE METER. THE INDICATOR WAS RECALIBRATED. PROCEDURE OP-4659, MAIN COOLANT SYSTEM PRESSURE CHANNEL FUNCTIONAL TEST, WILL BE REVISED TO USE THE MILLIAMPERE VALUE OF THE TRANSMITTER INSTEAD OF THE INDICATOR FOR CALIBRATION.

[376] ZION 1 DOCKET 50-295 LER 82-042
 RHR MINIFLOW CONTROL VALVE SWITCH FAILS.
 EVENT DATE: 111682 REPORT DATE: 120982 NSSS: WE TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 CAUSE: SWITCH OUT OF TOLERANCE.

(NSIC 179934) SURVEILLANCE FOUND RHR MINIFLOW CONTROL VALVE SWITCH 1FIC-610A HAD FAILED AND WOULD NOT CLOSE THE MINIFLOW VALVE AT 1000 GPM AS DESIGNED. HAVING THE MINIFLOW VALVE OPEN DURING A LOCA WOULD DEGRADE THE PUMP INJECTION FLOW BY 10% (450 GPM). THEREFORE, THE A RHR PUMP WAS IN A DEGRADED MODE PER TECH SPEC 3.8.2.B. PREVIOUS LER: 50-295/80-54, 81-4, 16, 82-28. MICRO-SWITCH (BARTON MODEL 288) WAS OUT OF TOLERANCE BECAUSE THESE MICRO-SWITCHES ARE RATED FOR 1500 GPM, AND DURING PERIODS OF EXTENDED SHUTDOWN THEY ARE SUBJECTED TO FLOW RATES IN EXCESS OF 3000 GPM. A MODIFICATION HAS BEEN INITIATED TO REPLACE THESE MICRO-SWITCHES WITH HIGHER RANGE TRANSMITTERS.

[377] ZION 1 DOCKET 50-295 LER 82-046
 BORIC ACID PUMP INOPERABLE DUE TO LEAKY VALVE.
 EVENT DATE: 120382 REPORT DATE: 122382 NSSS: WE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: VALVES
 CAUSE: END OF VALVE LIFE.

(NSIC 180587) 1B BORIC ACID (BA) TRANSFER PUMP WAS TAKEN OUT OF SERVICE FOR MAINTENANCE ON THE DISCHARGE VALVE. WHILE DISASSEMBLING THIS VALVE IT WAS DISCOVERED THAT THE CROSSTIE VALVE BETWEEN 1A & 1B BA TRANSFER PUMPS LEAKED. TO

COMPLETE MAINTENANCE, 1B BA TRANSFER PUMP WAS SECURED FOR A PERIOD OF 35 MINUTES, PUTTING UNIT 1 IN A DEGRADED MODE PER TECH SPEC 3.2.1.F.3. THE DIAPHRAGM ON THE 2" GRINNELL DIAPHRAGM VALVE HAD REACHED ITS NORMAL END OF LIFE AND CAUSED THE LEAKAGE. IMMEDIATE CORRECTIVE ACTION WAS TO COMPLETE REPAIRS ON THE 1A & 1B DISCHARGE CROSSTIE VALVE AND RETURN THE 1A PUMP BACK TO SERVICE.

[378] ZION 1 DOCKET 50-295 LER 82-047
RCS LOOP DELTA T CHANNEL FAILS.
EVENT DATE: 120582 REPORT DATE: 010383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
CAUSE: RTD FAILURE.

(NSIC 180593) RCS LOOP C INDICATION SUDDENLY CHANGED, DELTA T PEGGED LOW AND T(AVG) PEGGED HIGH. THE HIGH T(AVG) CAUSED AUTO ROD CONTROL TO STEP RODS IN. UPON IDENTIFYING FAILURE OF LOOP C COLD LEG RTD, OPERATOR MOVED RODS BACK OUT, AND DEFEATED LOOP C INPUT. REACTOR SAFETY FEATURES WERE IN A DEGRADED MODE UNTIL LOOP C BISTABLES WERE TRIPPED PER PROCEDURES. CATASTROPHIC FAILURE OF A RTD DURING OPERATIONS HAS NOT OCCURRED BEFORE. OPERATOR IDENTIFIED PROBLEM WITHIN 10 SECONDS. THE RTD, ROSEMOUNT 176KF, FAILURE MECHANISM WILL NOT BE KNOWN UNTIL IT CAN BE REPLACED AND EVALUATED. IN RESPONSE TO THE FAILURE THE OPERATOR TRIPPED ASSOCIATED BISTABLES PER PROCEDURES. A SPARE RTD HAS BEEN PLACED IN SERVICE CORRECTING THE PROBLEM. REPLACEMENT WILL TAKE PLACE DURING UNIT SHUTDOWN.

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