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Licensee Event Report (LER) Compilation

For month of April 1984

Oak Ridge National Laboratory

Prepared for
U.S. Nuclear Regulatory
Commission

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Oak Ridge National Laboratory
Nuclear Safety Information Center
Oak Ridge, TN 37830

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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, keyword, and component vendor indexes follow the summaries. The components, systems, and vendors are those identified by the utility when the LER form is initiated; the keywords are assigned by the computer using correlation tables from the Sequence Coding and Search System. Questions concerning this report or its contents should be directed to

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[1] ARKANSAS NUCLEAR 1 DOCKET 50-313 LER 83-023 REV 7
UPDATE ON INADEQUATE FIRE BARRIERS.
EVENT DATE: 091683 REPORT DATE: 011084 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188332) OBSERVATIONS OF FIRE PROTECTION DEFICIENCIES HAVE BEEN LISTED IN THE ATTACHMENT TO THIS LER. THE ATTACHMENT CONSISTS OF A LIST WHICH INCLUDES THE DISCOVERY DATE, FACILITY STATUS CODE, METHOD OF DISCOVERY CODE, DISCOVERY DESCRIPTION, CAUSE CODE, CAUSE AND CORRECTIVE ACTIONS. THESE OCCURRENCES ARE REPORTABLE PER TECH SPEC 6.12.3.2. OTHER OCCURRENCES REGARDING FIRE PROTECTION DEFICIENCIES WERE REPORTED IN LER'S (50-313) 81-003 AND 82-018. THE CAUSES AND CORRECTIVE ACTIONS FOR THE INDIVIDUAL OCCURRENCES ARE LISTED IN THE ATTACHMENT. A COMPLETE FIRE PROTECTION SYSTEM WALKDOWN INSPECTION IS IN PROGRESS AS VALIDATION OF THE "ANO FIRE PROTECTION PROGRAM MANUAL". INTERIM CONTROLS HAVE BEEN PLACED ON CONSTRUCTION ACTIVITIES TO ASSURE RESTORATION OF FIRE SYSTEMS AFTER WORK IS PERFORMED. IN THE INTERIM, AP&L HAS ESTABLISHED A ROVING FIRE INSPECTOR PROGRAM FOR THE PURPOSE OF MONITORING ACTIVITIES AFFECTING FIRE SYSTEMS. FUTURE ACTION TO PREVENT RECURRENCE IS THE DEVELOPMENT OF AN INTEGRATED PROGRAM TO PROVIDE ASSURANCE THAT FIRE SYSTEMS ARE MAINTAINED AS REQUIRED.

[2] ARKANSAS NUCLEAR 1 DOCKET 50-313 LER 83-026
EDG FUEL TANKS IMPROPERLY SAMPLED.
EVENT DATE: 111883 REPORT DATE: 120283 NSSS: BW TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188137) ON 11/28/83, DURING SURVEILLANCE REVIEWS BEING CONDUCTED AS A RESULT OF CORRECTIVE ACTIONS TAKEN IN REGARD TO LER 368-83-044/01T-0, IT WAS DETERMINED THAT DIESEL FUEL OIL ANALYSIS FOR 6/7/83 DID NOT MEET THE REQUIREMENTS OF TECH SPEC 4.8.1.1.2.B FOR OPERABILITY OF UNIT 2 DIESEL GENERATOR 2DG1. AS A RESULT OF FAILING TO RECOGNIZE EXCEEDING THE REQUIREMENTS OF TECH SPEC 4.8.1.1.2.B, THE ACTION REQUIREMENTS OF TECH SPEC 3.8.1.1.A WERE NOT TAKEN WITHIN THE REQUIRED TIME FRAME. FURTHER INVESTIGATION OF BOTH ANO-1 AND ANO-2 FUEL STORAGE TANK DATA SHEETS REVEALED SEVERE DISCREPANCIES. THERE WERE NO SAFETY IMPLICATIONS IN THAT FOLLOW-UP SAMPLE ANALYSES VERIFIED THAT THE FUEL WAS IN FACT WITHIN SPECIFICATIONS AND THE OUT-OF-SPEC INDICATIONS WERE A RESULT OF SAMPLING ERRORS. CHEMISTRY PERSONNEL DID NOT RELATE THE OUT-OF-SPEC CONDITION OF THE FUEL OIL ANALYSIS WITH A LIMITING CONDITION OF OPERATION (LCO) ON THE DIESEL GENERATORS, ALTHOUGH THEY DID RECOGNIZE THAT THERE WAS AN OUT-OF-SPEC CONDITION. AS A RESULT, THE ACTIONS REQUIRED BY THE LCO WERE NOT TAKEN WITHIN THE ALLOWABLE TIME FRAME, ALTHOUGH A RESAMPLE WAS CONDUCTED AS WORK LOAD PERMITTED. THE PROCEDURE USED FOR THE ANALYSIS DID NOT GIVE EXPLICIT INSTRUCTIONS OR ACTIONS REQUIRED WHEN OUT-OF-SPEC RESULTS WERE FOUND. THE DIESEL FUEL STORAGE TANK SAMPLING PROCEDURES HAVE BEEN REVISED.

[3] ARKANSAS NUCLEAR 1 DOCKET 50-313 LER 83-027
FILTERS NOT TESTED ON TIME.
EVENT DATE: 112883 REPORT DATE: 122883 NSSS: BW TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: FILTERS
VENDOR: C.V.I.

(NSIC 188333) ON 11/28/83, WITH UNIT 1 AT 100% FULL POWER (FP) AND UNIT 2 IN MODE 6, A WEEKLY SURVEILLANCE OF THE CONTROL ROOM VENTILATION SYSTEM REVEALED THAT CONTROL ROOM VENTILATION SYSTEM FAN 2VSF-9 HAD OPERATED FOR GREATER THAN 720 HOURS SINCE THE LAST FILTER TEST. 2VSF-9 HAD OPERATED FOR 877 HOURS AT THE TIME THE DISCREPANCY WAS DETECTED. REDUNDANT FAN VSF-9 WAS OPERABLE. THIS OCCURRENCE IS REPORTABLE PER UNIT 1 TECH SPEC 6.12.3.2.B AND UNIT 2 TECH SPEC 6.9.1.9.B. A SIMILAR OCCURRENCE WAS REPORTED IN LER 50-313 76-019/03L-0. THE PREDICTION FROM THE PREVIOUS WEEK'S READINGS DID NOT INDICATE THAT THE LIMIT WOULD BE EXCEEDED DUE TO AN ERRONEOUS READING. THE WEEKLY SURVEILLANCE PROCEDURE DOES NOT CONTAIN

A METHOD OF DATA COLLECTION THAT HAS PROVISIONS FOR CROSS-CHECK OF DATA FROM PREVIOUS READINGS DURING THE DATA COLLECTION. AS REQUIRED BY TECH SPEC 4.10.3.A, A SAMPLE OF CARBON FROM THE FILTER OF 2VSF-9 WAS TAKEN AND SENT TO THE LABORATORY FOR DETERMINATION OF IODINE REMOVAL EFFICIENCY. A PROCEDURE REVISION WILL BE MADE TO PROVIDE A METHOD TO ALLOW CROSS-CHECKING OF THE DATA.

[4] ARKANSAS NUCLEAR 1 DOCKET 50-313 LER 83-029
CARBON FILTERS FOR PENETRATION ROOM VENTILATION FANS WET.
EVENT DATE: 112983 REPORT DATE: 122983 NSSS: BW TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: FILTERS
VENDOR: BUFFALO FORGE COMPANY

(NSIC 188335) ON 11/29/83, DURING THE 18 MONTHS SURVEILLANCE TEST FOR THE PENETRATION ROOM VENTILATION SYSTEMS, THE BOTTOMS OF THE CARBON FILTERS (VFC-5A AND VFC-5B) FOR PENETRATION ROOM VENTILATION FANS (VEF-38A AND VEF-38B) WERE FOUND TO BE WET. THE HEPA FILTERS AND PRE-FILTERS SHOWED NO SIGNS OF MOISTURE. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.12.3.2.B. NO SIMILAR OCCURRENCES HAVE BEEN REPORTED REGARDING WATER IN FILTERS IN THE PENETRATION ROOM VENTILATION SYSTEM. SIMILAR OCCURRENCES IN THE HYDROGEN PURGE SYSTEM WERE REPORTED IN LERS (50-313) 77-018, 79-001, 80-037, AND 82-010. WATER IN THE HYDROGEN PURGE SYSTEM CARRIED OVER INTO THE PLANT VENT DURING HYDROGEN PURGE SYSTEM OPERATION. THIS WATER COLLECTED IN THE DISCHARGE OF THE PENETRATION VENTILATION FILTERS WHICH IS THE LOWEST POINT IN THE SYSTEM. BOTH THE HYDROGEN PURGE SYSTEM AND THE PENETRATION VENTILATION SYSTEM DISCHARGE INTO A COMMON VENT. THE FILTERS IN THE PENETRATION ROOM VENTILATION SYSTEM WERE REPLACED. EVALUATION IS ONGOING AND DESIGN MODIFICATIONS ARE ANTICIPATED FOR CORRECTION OF THE WATER CARRYOVER PROBLEM.

[5] ARKANSAS NUCLEAR 1 DOCKET 50-313 LER 83-028
LIQUID RADWASTE PIPE LEAK.
EVENT DATE: 113083 REPORT DATE: 123083 NSSS: BW TYPE: PWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: PIPES,FITTINGS

(NSIC 188334) ON 11/30/83, DURING RADWASTE PROCESSING, A CRACK WAS DISCOVERED IN PIPING ON THE DISCHARGE PIPING OF CLEAN WASTE TRANSFER PUMP P-47B. THE PUMP WAS SECURED AND THE LEAKING SECTION OF PIPING WAS ISOLATED IMMEDIATELY UPON DISCOVERY. THE LEAKAGE DRAINED TO THE RADWASTE SYSTEM. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.12.3.2.D. THERE HAVE BEEN NO PREVIOUS OCCURRENCES REGARDING PIPING CRACKS IN THE CLEAN RADWASTE SYSTEM. OTHER OCCURRENCES REGARDING PIPING LEAKS WERE REPORTED IN LERS (50-313) 74-002, 74-009, 74-010, 74-011, 74-012, 74-014, 75-003, 75-007, 75-008, 76-010, 76-012, 76-013, 76-015, 76-021, 76-024, 76-025, 76-026, 76-028, 76-029, 76-034, 77-002, 77-005, 77-012, 77-023, 77-024, 77-027, 78-003, 78-028, 79-003, 80-003. THE CRACK WAS IN THE HEAT AFFECTED ZONE ON THE PIPE ADJACENT TO VALVE CZ-53B WHICH IS THE NEXT VALVE AFTER THE DISCHARGE CHECK VALVE FOR PUMP P-47B. IT IS SUSPECTED THAT THE CRACK WAS CAUSED BY OVERHEATING OF THE PIPE DURING INSTALLATION OF CZ-53B COUPLED WITH PIPING STRESSES. THE SECTION OF PIPE CONTAINING THE CRACK WAS REPLACED. THE DISCHARGE PIPING FOR THE REDUNDANT PUMP P-47A WAS INSPECTED, AND THE VIBRATION LEVELS OF P-47A AND P-47B WERE CHECKED. NO PROBLEMS WERE NOTED.

[6] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 81-007 REV 1
UPDATE ON CONTROL ROOM EMERGENCY CHILLER INOPERABLE.
EVENT DATE: 020681 REPORT DATE: 041781 NSSS: CE TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: HEAT EXCHANGERS
VENDOR: CVI CORP.

(NSIC 188830) DURING MODE 1 OPERATION, WHILE PERFORMING MONTHLY SURVEILLANCE TESTING OF CONTROL ROOM EMERGENCY CHILLERS, 2VE-1B WAS DECLARED INOPERABLE ON

2/6/81 AND 2VE-1A ON 3/18/81. THE ALTERNATE EMERGENCY CHILLER REMAINED OPERABLE IN EACH CASE. OTHER OCCURRENCES INVOLVING THE EMERGENCY CONTROL ROOM CHILLERS ARE: LER'S 50-368/79-050, 79-053, 79-076, 80-026, 80-054, 80-070 AND 80-092. REPORTABLE PER TECH SPEC 6.9.1.9.B. INVESTIGATION REVEALED THE UNIT HAD TRIPPED DUE TO LOW OIL PRESSURE. THE 2/6/81 LOW PRESSURE TRIP RESULTED FROM AN EXPANSION VALVE WHICH HAD DEVELOPED A LEAK. THE LEAK WAS REPAIRED. THE 3/18/81 TRIP OCCURRED DURING NO-LOAD TESTING. ADJUSTMENTS WERE MADE TO THE OIL UNLOADER RELIEF TO PREVENT OIL LOSS UNDER NO-LOAD CONDITIONS. THE CHILLER FAILURES ARE BEING INVESTIGATED.

[7] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-003 REV 1
UPDATE ON ASIATIC CLAM SHELLS IN LPSI PUMP SEAL COOLER.
EVENT DATE: 012082 REPORT DATE: 120783 NSSS: CE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: HEAT EXCHANGERS
VENDOR: BORG-WARNER CORP.

(NSIC 188352) ON 1/20/82, WHILE IN MODE 3, THE SERVICE WATER FLOW THROUGH THE 'B' LOW PRESSURE SAFETY INJECTION (LPSI) PUMP SEAL COOLER, 2E-52B, WAS FOUND TO BE LOWER THAN REQUIRED BY THE SERVICE WATER FLOW BALANCE. THIS WAS ASSESSED TO PUT THE 'B' LPSI PUMP, 2P-60B, IN A DEGRADED MODE OF OPERATION. 'A' LPSI PUMP, 2P-60A, WAS OPERABLE. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.B AND IS SIMILAR TO LER 50-368/80-072. A VERY SMALL NUMBER OF ASIATIC CLAM SHELLS HAD LODGED IN THE SUPPLY TUBING TO THE COOLER AND OBSTRUCTED FLOW THROUGH THE COOLER. THE SUPPLY TUBING WAS REMOVED, CLEANED, AND INSPECTED. ALSO, THE COOLER, 2E-52B, WAS CLEANED AND INSPECTED. THE COMPONENTS WERE REASSEMBLED AND ACCEPTABLE FLOW RATE WAS ATTAINED. THIS OCCURRENCE WAS DISCOVERED AT 1200 HOURS ON 1/20/82, AND CORRECTIVE ACTION WAS COMPLETED AT 1500 HOURS ON 1/20/82. THEREFORE, ACTION A OF TECH SPEC 3.5.2, WHICH REQUIRES THE SYSTEM TO BE OPERABLE WITHIN 72 HOURS, WAS MET. FLOW RATES FOR SIMILAR COMPONENTS WERE FOUND TO BE ACCEPTABLE. IN-LINE BASKET STRAINERS HAVE BEEN INSTALLED.

[8] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 82-031 REV 1
UPDATE ON EFP TURBINE'S CHECK VALVE HAS INTERNAL DAMAGE.
EVENT DATE: 100182 REPORT DATE: 010984 NSSS: CE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES
VENDOR: ANCHOR VALVE CO.

(NSIC 188531) ON 10/01/82, WHILE IN MODE 6, THE EMERGENCY FEEDWATER PUMP (EFP) TURBINE STEAM SUPPLY CHECK VALVE (2MS-39B) WAS DISASSEMBLED FOR INSPECTION. THIS INSPECTION REVEALED INTERNAL DAMAGE. THE DISC STUD WAS BROKEN FROM THE DISC AND MISSING. THE DISC STUD NUT, WASHER, AND LOCKING PIN WERE ALSO MISSING. THE COUNTERPART VALVE (2MS-39A) IN THE REDUNDANT STEAM SUPPLY LINE WAS INSPECTED AND REVEALED NO DAMAGE. ISOLATION VALVE 2CV-1050 WHICH IS UPSTREAM OF 2MS-39B WAS OPERABLE. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.8.E AND IS SIMILAR TO LER (50-368) 81-034. THE FAILURE APPEARS TO BE CAUSED BY VIBRATION FATIGUE. A SEARCH INITIATED AFTER THE INSPECTION LOCATED THE MISSING PARTS DOWNSTREAM OF 2MS-39B. VALVE 2MS-39B (A SWING CHECK) WAS REPLACED BY A LIFT CHECK VALVE DURING THE OUTAGE IN WHICH THE DAMAGE WAS DISCOVERED. ITS IDENTICAL COUNTERPART (2MS-39A) WAS LIKEWISE REPLACED DURING A SUBSEQUENT OUTAGE. AFTER SEVERAL MONTHS OF MODE 1 OPERATION, BOTH VALVES WERE DISASSEMBLED AND INSPECTED. NEITHER SHOWED LOSS OF FUNCTION OR SIGNIFICANT WEAR.

[9] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-008 REV 1
UPDATE ON FIRE BARRIERS NOT SEALED.
EVENT DATE: 020783 REPORT DATE: 100683 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188523) FIRE BARRIER DEFICIENCIES WERE DISCOVERED DURING WALKDOWNS

INITIATED AS PART OF THE CORRECTIVE ACTIONS OUTLINED IN LER (50-368) 82-039. THE DEFICIENCIES FOUND DURING THE PERIOD 2/7/83 TO 2/10/83 ARE DELINEATED. INVESTIGATIONS INDICATE NOT ALL OF THESE PENETRATIONS SHOULD BE DESIGNATED AS PENETRATIONS IN FIRE BARRIERS REQUIRED TO PROTECT SAFETY RELATED AREAS; HOWEVER, UNTIL THESE INVESTIGATIONS ARE COMPLETE, THEY ALL ARE BEING TREATED AS REQUIRED FIRE BARRIERS. ON 10/6/83, WITH THE UNIT IN MODE 1 AT 100% POWER, INADEQUATE FIRE BARRIER PENETRATION SEALS WERE IDENTIFIED DURING A WALKDOWN. THESE DEFICIENCIES PROVIDED POSSIBLE PATHS FOR HEAT, SMOKE OR FLAME TO REACH SAFETY RELATED EQUIPMENT. OTHER LER'S INCLUDE: (50-368) 79-025, 79-026, 80-081, 81-029, 81-036, 81-042, 82-029, 82-039, 83-004, 83-020, 83-021, 83-026, 83-032, 83-033, 83-037 AND 83-042. THE CAUSE OF THE UNSEALED PENETRATIONS HAS BEEN INADEQUATE WORK CONTROLS. CORRECTIVE ACTION WAS POSTING OF A FIRE WATCH. ALL DEFICIENCIES WERE SUBSEQUENTLY SEALED WITH THE EXCEPTION OF THE ONE IN CORRIDOR 2109 WHERE A CONTINUOUS FIRE WATCH IS BEING MAINTAINED UNTIL SEAL IS MADE.

[10] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-013
WRONG BREAKER INSTALLED IN ESF MCC.
EVENT DATE: 030483 REPORT DATE: 033183 NSSS: CE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: OTHER COMPONENTS

(NSIC 188632) ON 3/4/83, DURING A PLANT SAFETY COMMITTEE (PSC) MEETING, AN OCCURRENCE PREVIOUSLY THOUGHT TO BE NOT REPORTABLE WAS DETERMINED TO BE REPORTABLE PER TECH SPEC 6.9.1.9.C. ON 8/26/82, IN ORDER TO SUPPORT THE REFUELING OUTAGE, PLANT ELECTRICIANS CONNECTED A PORTABLE HYDRO PUMP UNIT TO A SPARE FEEDER (286INI) IN ENGINEERED SAFEGUARDS FEATURES (ESF) 480 VOLT MOTOR CONTROL CENTER (MCC) 2B61. THE 5 AMP BREAKER IN THE MCC WAS REPLACED WITH A "NON-1" 15 AMP BREAKER TO ACCOMMODATE THE PUMP. THIS CONNECTION WAS MADE WITHOUT ENTRY IN THE JUMPER AND LIFTED LEAD LOG. THERE HAVE BEEN NO SIMILAR OCCURRENCES. THE CAUSE OF THIS OCCURRENCE WAS FAILURE BY THE PERSONNEL INVOLVED TO GIVE PROPER CONSIDERATION TO THE JUMPER AND LIFTED LEAD CONTROL PROCEDURE AND TO "Q" SYSTEM REQUIREMENTS. CORRECTIVE ACTION WAS TO REMOVE THE TEMPORARY CABLE AND BREAKER. THE ORIGINAL BREAKER WAS REINSTALLED. IN ADDITION, AN INSPECTION WAS MADE OF OTHER "Q" MCC'S TO ENSURE THAT THEY COMPLY WITH DRAWINGS (I.E., THAT THEY HAVE NO UNCONTROLLED, EXTRANEOUS EQUIPMENT POWERED FROM THEM). ACTION TO PREVENT RECURRENCE HAS BEEN TO CONDUCT TRAINING ON THIS PROBLEM FOR PERSONNEL INVOLVED.

[11] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-032
UNSEALED FIRE BARRIER PENETRATION.
EVENT DATE: 071483 REPORT DATE: 081283 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 185157) ON 7/14/83, WHILE IN MODE 1, AN UNSEALED ELECTRICAL CABLE CONDUIT WAS IDENTIFIED THROUGH THE FLOOR OF THE CABLE SPREADING ROOM. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.B. OTHER LER'S CONCERNING UNIT 2 FIRE BARRIERS INCLUDE 80-081, 81-029, 81-042, 82-029, 82-039, 83-004, 83-008, 83-020 AND 83-021. THE CAUSE OF THIS OCCURRENCE HAS NOT BEEN DETERMINED. IMMEDIATE CORRECTIVE ACTION WAS TO POST A FIRE WATCH. SUBSEQUENTLY, THE PENETRATION WAS PROPERLY SEALED. SEVERAL MEASURES TO PREVENT RECURRENCE OF FIRE BARRIER DEGRADATION WERE OUTLINED IN LER 50-368, 82-039, AND 50-368, 83-008. THE COMMITMENT CONCERNING THE IMPROVEMENT OF FIRE BARRIER ADMINISTRATIVE CONTROLS AS RELATED TO THE PLANT MODIFICATION PROCESS HAS BEEN ADDRESSED BY REVISION OF THE DESIGN CHANGE PACKAGE (DCP) PROCEDURE TO SPECIFICALLY ADDRESS FIRE BARRIERS DURING BOTH THE INITIAL DESIGN PHASE AND THE INSTALLATION VERIFICATION PROCESS. THE WALKDOWNS, WHICH WERE INITIATED PRIOR TO REVISION OF FIRE BARRIER SURVEILLANCE PROCEDURES, HAVE BEEN COMPLETED AND THE SURVEILLANCE PROCEDURES HAVE NOW BEEN REVISED. IN ADDITION, THE FIRE PLAN COMMITTED TO IS NOW IN DRAFT FORM. PROVISIONS ARE BEING MADE TO CONDUCT AN INSPECTION USING THESE PROCEDURES IN ORDER TO ESTABLISH A CURRENT BASELINE STATUS ON REQUIRED FIRE BARRIERS AND OBTAIN PRACTICAL FIELD INFORMATION TO USE IN FINALIZING THE INSPECTION PROCEDURES.

[12] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-035 REV 1
UPDATE ON SAFETY EQUIPMENT SUBJECT TO FLOODING.
EVENT DATE: 080383 REPORT DATE: 120983 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188452) PRIOR TO RECEIPT OF IE INFORMATION NOTICE 83-41, (OCNA068314), "ACTUATION OF FIRE SUPPRESSION SYSTEM CAUSING INOPERABILITY OF SAFETY-RELATED EQUIPMENT," AP&L HAD INITIATED A STUDY OF POSSIBLE DAMAGE TO SAFETY-RELATED EQUILPMENT RESULTING FROM SUPPRESSION SYSTEM OPERATION. AS A RESULT OF THAT STUDY, THE LICENSEE HAS IDENTIFIED ONE SUPPRESSION SYSTEM TO DATE WHERE SAFETY-RELATED EQUIPMENT MAY BE SUBJECTED TO FLOODING IF THE SUPPRESSION SYSTEM WERE OPERATED FOR PROLONGED PERIODS WITHOUT OPERATOR INTERVENTION. FIRE ZONE 2109-U, WHICH IS THE CORRIDOR OUTSIDE THE CABLE SPREADING ROOM ON ELEVATION 372 FEET OF THE ANO-2 AUXILIARY BUILDING, HAS A SUPPRESSION SYSTEM WHICH IS A DELUGE-ACTUATED, DIRECTIONAL WATER SPRAY SYSTEM ACTUATED BY BOTH SMOKE AND LINE-TYPE. THE FIRE SUPPRESSION SYSTEM FOR FIRE ZONE 2109-U WAS INSTALLED PER THE REQUIREMENTS OF THE 1978 FIRE PROTECTION SAFETY EVALUATION REPORT. THE ORIGINAL DRAINAGE ASSESSMENT PORTION OF THE DESIGN CHANGES WAS BASED ON ENGINEERING JUDGMENT INSTEAD OF DETAILED HYDRAULIC CALCULATION. A RECENT PRELIMINARY HYDRAULIC CALCULATION INDICATED THAT FLOODING COULD OCCUR. UPON NOTIFICATION THAT A PROBLEM COULD EXIST, AP&L DECIDED TO ISOLATE THE 2109-U SUPPRESSION SYSTEM AND TO RELY ON MANUAL OPERATION OF THE SYSTEM UNTIL A MORE REFINED CALCULATION COULD BE MADE.

[13] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-045 REV 9
UPDATE ON INADEQUATE FIRE BARRIERS.
EVENT DATE: 091683 REPORT DATE: 021084 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188877) OBSERVATIONS OF FIRE PROTECTION DEFICIENCIES HAVE BEEN LISTED IN THE ATTACHMENT TO THIS LER. THE ATTACHMENT CONSISTS OF A LIST WHICH INCLUDES THE DISCOVERY DATE, FACILITY STATUS CODE, METHOD OF DISCOVERY CODE, DISCOVERY DESCRIPTION, CAUSE CODE, CAUSE AND CORRECTIVE ACTIONS. THESE OCCURRENCES ARE REPORTABLE PER TECH SPEC 6.9.1.9.B. OTHER OCCURRENCES REGARDING FIRE PROTECTION DEFICIENCIES WERE REPORTED IN LER'S (50-368) 79-025, 79-026, 80-081, 81-029, 81-036, 81-042, 82-029, 82-039, 83-004, 83-008, 83-020, 83-021, 83-026, 83-032, 83-033, 83-034, 83-037 AND 83-042. ALSO REFERENCE LER 83-035. THE CAUSES AND CORRECTIVE ACTIONS FOR THE INDIVIDUAL OCCURRENCES ARE LISTED IN THE ATTACHEMENT. A COMPLETE FIRE PROTECTION SYSTEM WALKDOWN INSPECTION IS IN PROGRESS AS VALIDATION OF THE "ANO FIRE PROTECTION PROGRAM MANUAL." INTERIM CONTROLS HAVE BEEN PLACED ON CONSTRUCTION ACTIVITIES TO ASSURE RESTORATION OF FIRE SYSTEMS AFTER WORK IS PERFORMED. IN THE INTERIM, AP&L HAS ESTABLISHED A ROVING FIRE INSPECTOR PROGRAM FOR THE PURPOSE OF MONITORING ACTIVITIES AFFECTING FIRE SYSTEMS. FUTURE ACTION TO PREVENT RECURRENCE IS THE DEVLOPMENT OF AN INTEGRATED PROGRAM TO PROVIDE ASSURANCE THAT FIRE SYSTEMS ARE MAINTAINED AS REQUIRED.

[14] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-050
ERRATIC OPERATION OF DIESEL GENERATOR.
EVENT DATE: 110983 REPORT DATE: 030784 NSSS: CE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: GENERATORS
VENDOR: COLT INDUSTRIES, INC.

(NSIC 188921) ON 11/9/83, WHILE PERFORMING A ROUTINE SURVEILLANCE DURING THE REFUELING OUTAGE, UNIT 2 DIESEL GENERATOR NUMBER 2 (2DG2) EXHIBITED ERRATIC PERFORMANCE. THIS OCCURRENCE IS BEING REPORTED FOR INFORMATION TO PROVIDE DIESEL GENERATOR RELIABILITY INFORMATION. THIS OCCURRENCE IS NOT REPORTABLE BY TECH SPECS. TECH SPEC 4.8.1.1.3 REQUIRES REPORTING OF DIESEL GENERATOR FAILURES BUT ONLY APPLIES FOR MODES 1, 2, 3, AND 4. REPORTING IS NOT REQUIRED IN THE SPECIFICATIONS FOR MODES 5 AND 6. DIESEL GENERATOR 2DG1 REMAINED OPERABLE. THE

CAUSE WAS NOT CONCLUSIVELY DETERMINED, BUT APPEARED TO BE DUE TO BAD CONTACTS ON A DROOP RELAY IN CONJUNCTION WITH LESS THAN OPTIMUM TUNING OF THE GOVERNOR CONTROLS. INVESTIGATION REVEALED THAT THE SURVEILLANCE TESTING FOR 2DG2 HAD BEEN SATISFACTORILY COMPLETED ON 10/22/83 WHILE IN MODE 6. ALSO THE STATION LOG INDICATED THAT 2DG2 HAD BEEN SUCCESSFULLY STARTED AND LOADED ON 11/1/83. ON 11/9/83, 2DG2 LOAD CONTROL PROBLEMS WERE ENCOUNTERED. THIS PROBLEM ONLY EXISTED WHEN THE GENERATOR UNIT WAS PARALLELED. OPERATION ON AN ISOLATED BUS WHICH WOULD BE ENCOUNTERED DURING ACCIDENT CONDITIONS WAS NOT ATTEMPTED AT THIS TIME. TROUBLESHOOTING EFFORTS CONSISTING OF TESTING, SETTING ADJUSTMENTS, AND PARTS REPLACEMENTS WERE PERFORMED UNTIL 11/15/83 WHEN THE 18 MONTHS PREVENTATIVE MAINTENANCE (PM) WAS BEGUN.

[15] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-049
SURVEILLANCE TEST INADEQUACIES AND ERRORS FOUND.
EVENT DATE: 121283 REPORT DATE: 122683 NSSS: CE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: ITE IMPERIAL CORPORATION

(NSIC 188525) AS A RESULT OF PROCEDURAL AND PERSONNEL ERRORS IDENTIFIED ON STATION BATTERY SURVEILLANCE REQUIREMENTS (REFERENCE LER 50-368/83-044/01T-0), A REVIEW OF ADDITIONAL SURVEILLANCES HAS BEEN CONDUCTED. THIS TECHNICAL AND ADMINISTRATIVE REVIEW HAS IDENTIFIED ADDITIONAL PAST INADEQUACIES DUE TO PROCEDURAL DEFICIENCIES OR HUMAN ERRORS. THE INADEQUACIES INVOLVE FAILURE TO TEST CERTAIN CONTAINMENT PENETRATION OVERCURRENT PROTECTIVE DEVICES DURING OCT. 1982; FAILURE TO PROPERLY EVALUATE REPORTABILITY OF ONE OUT OF TOLERANCE OVERCURRENT PROTECTIVE DEVICE FOUND DURING JUNE 1981, AND ONE OUT OF TOLERANCE 460V UNDERVOLTAGE PROTECTIVE DEVICE FOUND DURING OCT. 1982; IMPROPER SETTING OF 460V UNDERVOLTAGE TIME DELAY SETTINGS DURING THE 1981 AND 1982 REFUELING OUTAGES AND FAILURE TO VERIFY THE ZERO VOLTAGE TRIP TIME FOR THE 4160V UNDERVOLTAGE RELAYS DURING PAST SURVEILLANCES. SIMILAR OCCURRENCES (50-368) 83-044 AND (50-313) 83-026. ERRORS ARE ATTRIBUTED TO INADEQUATE PROCEDURAL DEVELOPMENT AND INSTRUCTIONS AND/OR INADEQUATE REVIEW OF COMPLETED WORK BY SUPERVISORY PERSONNEL. REVIEW OF PAST SURVEILLANCES WAS EXPANDED TO PROVIDE CONFIDENCE THAT THE PROBLEM AREAS ARE CONFINED TO THE ELECTRICAL SURVEILLANCE PROGRAM.

[16] ARNOLD DOCKET 50-331 LER 83-043
TORUS LEVEL TRANSMITTER IS ERRATIC.
EVENT DATE: 112883 REPORT DATE: 122883 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188344) WHILE PERFORMING A DAILY INSTRUMENT TEST, THE "B" TORUS LEVEL TRANSMITTER (LT-2325) WAS ERRATIC. THE ASSOCIATED "B" LEVEL RECORDER (LR-4385B) VARIED APPROX. 10% FROM THE STEADY "A" LEVEL RECORDER. PER TECH SPEC TABLE 3.2-F, A 30 DAY LCO WAS ENTERED. THE REDUNDANT LEVEL RECORDER WAS FULLY OPERABLE. NO PREVIOUS REPORTABLE OCCURRENCES WITH SIMILAR CAUSE. THE TRANSMITTER WAS INSPECTED AND FOUND TO CONTAIN SOME CORROSION AND DIRT BUILDUP ON AN INTERNAL AMPHENOL CONNECTOR. IT APPEARS THAT THE INST. COVER WAS LEFT OFF FOR AN EXCESSIVE TIME WHILE THE UNIT WAS BEING SERVICED. THE LCO WAS TERMINATED WHEN THE TRANSMITTER WAS CLEANED, RECALIBRATED, AND RETURNED TO SERVICE WITHIN 4 DAYS.

[17] ARNOLD DOCKET 50-331 LER 83-045
BATTERY CHARGER FAILURE CAUSES MULTIPLE ALARMS.
EVENT DATE: 120583 REPORT DATE: 010484 NSSS: GE TYPE: BWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: OTHER COMPONENTS
VENDOR: POWER CONVERSION PRODUCTS, INC.

(NSIC 188775) AT 0013 HRS THE 24 VDC (SYSTEM A) TROUBLE ALARM WAS RECEIVED. AT

0022 HRS, HI-HI ALARMS FROM THE "A" PROCESS RAD MONITORS, A 1/2 GROUP 3 ISOLATION (CHANNEL A) AND AN AUTO INITIATION OF THE "A" SBGTS WAS RECEIVED. THE 1/2 GROUP 3 AND THE SBGTS WERE RESET. AT 0035 HRS THE 24 VDC ALARM CLEARED BUT CAME IN AGAIN AT 0047 AND REMAINED IN. INVESTIGATION REVEALED THE NEGATIVE CHARGER WOULD NOT MAINTAIN THE NECESSARY BATTERY VOLTAGE. ONE PREVIOUS OCCURRENCE OF SIMILAR NATURE: LER 81-043. FAILURE APPEARS TO BE CAUSED BY LOOSE CARD IN CHARGER. CHARGER RESUMED NORMAL VOLTAGE OUTPUT DURING TROUBLESHOOTING. BELIEVE CHARGER FAILURE TRIPPED "A" PROCESS RAD MONITORS AND INITIATED SBGTS. CHARGER OBSERVED CLOSELY FOR 1 WEEK WITHOUT INCIDENT.

[18] ARNOLD DOCKET 50-331 LER 83-047
MAIN STEAMLINE DRAIN VALVE EXCEEDS CLOSING LIMIT.
EVENT DATE: 122083 REPORT DATE: 011984 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: ANCHOR/DARLING VALVE CO.

(NSIC 188577) DURING NORMAL OPERATION, ASME IN-SERVICE TEST REVEALED 15.2 SEC CLOSING OF INBOARD MAIN STEAMLINE DRAIN VALVE (MO-4423), EXCEEDING 15 SEC MAX. ALLOWABLE PER TECH SPEC 3.7.D.1. THIS VALVE IS NORMALLY CLOSED DURING OPERATION. THE VALVE WAS CLOSED BEFORE AND AFTER TEST. MO-4423 HAD BEEN CLOSING IN APPROXIMATELY 14.8 SEC. NO PREVIOUS REPORTABLE EVENTS. THE ROOT CAUSE WAS NOT IMMEDIATELY DETERMINED AS THE VALVE WAS INACCESSIBLE IN INERTED CONTAINMENT. THE OUTBOARD DRAIN VALVE (MO-4424) WAS CLOSED PER TECH SPEC 3.7.D.2 TO ISOLATE THE LINE. MO-4423 WAS STROKE TIME ADJUSTED, TEST CLOSED 14.5 SEC., AND WILL BE RETURNED TO SERVICE DURING THE NEXT SHUTDOWN, WHICH WAS UNRELATED, 1-8-84. NO FURTHER ACTION NECESSARY.

[19] ARNOLD DOCKET 50-331 LER 83-048
CONTAINMENT ATMOSPHERE MONITOR DECLARED INOPERABLE.
EVENT DATE: 123083 REPORT DATE: 012784 NSSS: GE TYPE: BWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: DWYER, F.W. MFG CO., INC.

(NSIC 188912) DURING NORMAL PLANT OPERATION, THE "B" CONTAINMENT ATMOSPHERE MONITOR (CAM), RE-8103B, WAS DECLARED INOPERABLE DUE TO INADEQUATE PROCESS LINE FLOW. REDUNDANT MONITORS PREVIOUSLY WERE INOPERABLE. COMMENCED 7-DAY LCO IN ACCORDANCE WITH TECH SPEC 3.6.C.2 WHICH REQUIRES BOTH THE SUMP AND AIR SAMPLING SYSTEMS BE OPERABLE DURING REACTOR POWER OPERATION. MOISTURE IN THE SAMPLING SYSTEM AIRSTREAM HAS RESULTED IN PREVIOUS REPORTABLE OCCURRENCES: 78-009, 80-039, 81-001. INADEQUATE FLOW WAS DUE TO MOISTURE PROBLEMS WITH A MAGNEHELIC FLOW SWITCH. THE SWITCH WAS CLEANED AND ADJUSTED AND WAS RETURNED TO SERVICE ON 1/6/84 ENDING THE 7-DAY LCO. MAINTENANCE HAS REROUTED HEAT TRACING TO ALLEVIATE THE CONDENSATION PROBLEM. THE PERFORMANCE OF THE CAM SYSTEM WILL BE MONITORED CLOSELY AND FURTHER CORRECTIVE ACTION PLANNED IF NECESSARY.

[20] BEAVER VALLEY 1 DOCKET 50-334 LER 81-048 REV 1
UPDATE ON RHR SYSTEM INOPERABLE.
EVENT DATE: 050381 REPORT DATE: 052083 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: LIMITORQUE CORP.

(NSIC 188827) IN THE PROCESS OF PUTTING THE RESIDUAL HEAT REMOVAL (RHR) SYSTEM IN OPERATION ON MAY 3, 1981, ONE OF THE RHR PUMP SUCTION VALVES WOULD NOT OPEN. THE FAILURE OF THIS VALVE WOULD HAVE PRECLUDED USE OF THE RHR SYSTEM UNTIL REPAIRS COULD BE MADE. THE CONSEQUENCES TO THIS PROBLEM ARE MINIMAL BECAUSE BEAVER VALLEY IS NOT DESIGNED AS A COLD SHUTDOWN PLANT. THE VALVE WAS RETURNED TO SERVICE AFTER AN INSPECTION OF ALL WIRING AND TERMINAL CONNECTIONS AND AN ADJUSTMENT TO THE TORQUE SWITCH BYPASS LIMIT SWITCH. A TASK FORCE ASSEMBLED TO

INVESTIGATE THIS AND OTHER MOTOR OPERATED FAILURES WAS UNABLE TO DETERMINE THE SPECIFIC CAUSE OF FAILURE. THE VALVE HISTORY SINCE THIS INCIDENT HAS BEEN SATISFACTORY.

[21] BEAVER VALLEY 1 DOCKET 50-334 LER 83-004
STANDBY POWER LOST.
EVENT DATE: 011483 REPORT DATE: 021083 NSSS: WE TYPE: PWR
SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: RELAYS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188866) WHILE OPERATING AT 99% POWER ON 1/14/83, CIRCUIT BREAKER CCB 83 TRIPPED, RESULTING IN THE LOSS OF THE STANDBY 1B SYSTEM STATION SERVICE TRANSFORMER. THE SOURCE OF THE BREAKER TRIP WAS TRACED TO THE OVEREXCITATION RELAY 59-109 (WESTINGHOUSE TYPE SV). FOLLOWING AN INVESTIGATION, THE BREAKER WAS CLOSED AFTER THE RELAY WAS REMOVED FOR INSPECTION. THE REDUNDANT SOURCE OF OFFSITE POWER REMAINED OPERABLE AS WELL AS BOTH EMERGENCY DIESEL GENERATORS. THE RELAY ACTUATION WAS CAUSED BY BOTH SETPOINT DRIFT AND AN INCREASE IN THE 1B TRANSFORMER SECONDARY SIDE VOLTAGE WHICH OCCURRED DURING PLACEMENT INTO STANDBY SERVICE. THE RELAY HAS BEEN REPLACED. THE DLC ELECTRICAL ENGINEERING DEPARTMENT IS EVALUATING PREVENTATIVE MAINTENANCE ACTIONS TO IMPROVE THE PERFORMANCE OF THIS RELAY.

[22] BEAVER VALLEY 1 DOCKET 50-334 LER 83-024
SUBCOOLING MONITOR READS ERRONEOUSLY.
EVENT DATE: 091883 REPORT DATE: 100783 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: ELECTRICAL CONDUCTORS

(NSIC 186221) ON 9/18/83, DURING THE PERFORMANCE OF SURVEILLANCE TEST OF THE CORE SUBCOOLING MONITOR TO CHECK CHANNEL BEHAVIOR, THE MONITOR WAS FOUND TO BE READING ERRONEOUSLY. AFTER CROSS-CHECKING THE MONITOR WITH THE COMPUTER AND THE INCORE THERMOCOUPLES, THE MONITOR WAS FOUND READING APPROXIMATELY 300 DEGREES LOW. THE MONITOR WAS THEN DECLARED INOPERABLE IN ACCORDANCE WITH TECH SPEC 3.3.3.8. THERE WERE NO SAFETY IMPLICATIONS AS REDUNDANT METHODS OF MEASURING SUBCOOLING MARGIN WERE AVAILABLE. THE CAUSE FOR THE CORE SUBCOOLING MONITOR FAILURE HAS BEEN ATTRIBUTED TO A LOOSE CONNECTOR WITHIN THE UNIT. THIS CONNECTOR WAS REPAIRED. A SUBSEQUENT SURVEILLANCE TEST PERFORMED AFTER MAINTENANCE WAS COMPLETED SATISFACTORILY ON 9/21/83. THE OPERATIONS ASSESSMENT GROUP HAS RECOMMENDED THAT THE INSTRUMENT AND CONTROL DEPARTMENT DEVELOP A PERIODIC INSPECTION AND CLEANING PROGRAM FOR THE UNIT TO INCREASE THE RELIABILITY OF THE UNIT. BVPS IS CURRENTLY AWAITING A FIEDL CHANGE KIT FROM WESTINGHOUSE TO CORRECT A GENERIC PROBLEM WHICH EXISTS WITH THE UNIT. THIS KIT IS ALSO EXPECTED TO IMPROVE THE RELIABILITY OF THE UNIT.

[23] BEAVER VALLEY 1 DOCKET 50-334 LER 83-036
ISOLATION VALVES NOT TESTED.
EVENT DATE: 110483 REPORT DATE: 120383 NSSS: WE TYPE: PWR
SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188580) WHILE REVIEWING THE INSERVICE INSPECTION PROGRAM, IT WAS NOTED THAT THE REACTOR COOLANT PUMP (RCP) THERMAL BARRIER COMPONENT COOLING RETURN (CCR) ISOLATION VALVES (TV-CC-107A, B, C) WERE NOT STROKED AS OUTLINED IN THE ISI PROGRAM. THESE VALVES ARE DESIGNED TO ISOLATE THE THERMAL BARRIER CCR DISCHARGE LINE IN THE EVENT OF A TUBE LEAK IN THE HEAT EXCHANGER. THIS PRIMARY COOLANT BOUNDARY WAS NOT BREACHED. THESE VALVES WERE STROKED A NUMBER OF TIMES SINCE 1980 BUT NOT ENOUGH TO MEET A FULL COMMITTMENT. PRIOR TO SEPT. 1980, THE VALVES WERE STROKED AND TIMED IN ACCORDANCE WITH THE ISI PROGRAM. AFTER THE 1980 ISI REVISION, THE VALVES WERE INADVERTENTLY OMITTED FROM TESTING. THE RCP THERMAL

BARRIER CCR ISOLATION VALVES (TV-CC-107A, B, C) HAVE BEEN ADDED TO THE TESTING PROGRAM. OTHER TESTS ARE BEING REVIEWED AGAINST THE ISI PROGRAM.

[24] BEAVER VALLEY 1 DOCKET 50-334 LER 83-038
RATE TRIP TIME CONSTANT DRIFTS TOO LOW FOR POWER RANGE TRIP.
EVENT DATE: 112583 REPORT DATE: 122383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188433) WHILE PERFORMING MAINTENANCE SURVEILLANCE PROCEDURE 2.04, (POWER RANGE N-N142 QUARTERLY CALIBRATION) ON 11/25/83, THE RATE TRIP TIME CONSTANT WAS FOUND TO BE 1.94 SECONDS. THIS WAS BELOW THE TECH SPEC 2.2.1 REQUIREMENT OF A MINIMUM TIME CONSTANT OF 2 SECONDS. THE OTHER 3 REDUNDANT CHANNELS REMAINED OPERABLE. THIS IS THE SECOND INCIDENT INVOLVING A POWER RANGE RATE TRIP TIME CONSTANT BEING BELOW ITS TECH SPEC VALUE. THE NON-CONSERVATIVE SETPOINT WAS ATTRIBUTED TO INSTRUMENT DRIFT. THE TIME CONSTANT WAS ADJUSTED TO 2.2 SECONDS AND THE CHANNEL WAS RETURNED TO SERVICE AT 1100 HOURS ON 11/25/83.

[25] BEAVER VALLEY 1 DOCKET 50-334 LER 83-039
PRESSURIZER LEVEL CHANNEL FAILS TEST.
EVENT DATE: 112683 REPORT DATE: 122383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: VALVES
VENDOR: WHITEY COMPANY

(NSIC 188434) ON 11/26/83 AT 1700 HOURS, DURING THE PERFORMANCE OF A CHANNEL CHECK ON THE PRESSURIZER LEVEL CHANNELS, LEVEL CHANNEL L-RC460 FAILED ITS CHANNEL CHECK (>4% DEVIATION BETWEEN LEVEL CHANNELS). L-RC460 WAS THEN DECLARED OUT OF SERVICE AND THE ASSOCIATED BISTABLE WAS PLACED IN THE TRIPPED CONDITION WITHIN ONE HOUR. REDUNDANT LEVEL CHANNELS WERE AVAILABLE TO SATISFY THE MINIMUM LOGIC NEEDED TO INITIATE ANY HIGH LEVEL TRIP PROTECTIVE ACTIONS. THE CAUSE FOR THE ERRONEOUS LEVEL INDICATION WAS DUE TO A PACKING LEAK ON AN INSTRUMENT VALVE, ALLOWING THE UNSEALED PORTION OF THE SEALED LEVEL TRANSMITTER REFERENCE LEG TO DRAIN. THE CORRECTIVE ACTION TAKEN WAS TO REPLACE THE INTERNALS OF THE INSTRUMENT VALVE AND REFILL THE REFERENCE LEG. THE INSTRUMENT VALVE IS A 1/2-INCH GLOBE VALVE SUPPLIED BY WHITEY CO.

[26] BEAVER VALLEY 1 DOCKET 50-334 LER 83-040
CHEMICAL ADDITION PUMP DISCHARGE VALVE FAILS TO CLOSE.
EVENT DATE: 121383 REPORT DATE: 011084 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: LIMITORQUE CORP.

(NSIC 188435) AT 1330 HOURS, DURING THE PERFORMANCE OF OST 1.13.10B (CHEMICAL ADDITION SYSTEM VALVE POSITION AND PUMP OPERABILITY CHECK), THE CONTAINMENT SPRAYS CHEMICAL ADDITION PUMPS DISCHARGE VALVE (MOV-QS-104B) FAILED TO CLOSE ELECTRICALLY AS REQUIRED BY TECH SPEC 3.6.2.3. THE VALVE WAS CLOSED MANUALLY AND THEN REOPENED ELECTRICALLY. A SECOND ATTEMPT WAS MADE TO CLOSE THE VALVE BUT IT WOULD NOT CLOSE. THE VALVE WAS CAPABLE OF PERFORMING ITS DESIGN FUNCTION. THE VALVE WOULD NOT CLOSE ELECTRICALLY DUE TO A FAULTY TORQUE SWITCH. A CONTACTOR COMPRESSION SPRING ON ONE OF THE CLOSE CONTACTS FAILED WHICH PREVENTED THE CONTACT FROM CLOSING. THE COMPRESSION SPRING WAS REPLACED AND THE VALVE RETURNED TO SERVICE AT 1500 HOURS.

[27] BEAVER VALLEY 1 DOCKET 50-334 LER 83-042
FALSE INDICATIONS OF STEAM FLOW.
EVENT DATE: 122583 REPORT DATE: 011684 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

VENDOR: FISHER CONTROLS CO.

(NSIC 188693) ON 12/25/83 DURING A CONTROL BOARD WALKDOWN, THE SHIFT TECHNICAL ADVISOR NOTICED STEAM FLOW INDICATIONS FOR CHANNEL V ON TWO SEPARATE STEAMLINES INDICATING 0.3 MPH HIGHER THAN ALL OTHER STEAM FLOW INDICATIONS. AN INVESTIGATION REVEALED THAT THE SENSING LINES FOR THESE TRANSMITTERS FROZE. SUFFICIENT CHANNELS REMAINED OPERABLE FOR AUTOMATIC PROTECTIVE ACTUATION IF REQUIRED. OPEN ROOF DAMPERS IN THE MAIN STEAM VALVE ROOM ALLOWED AN OUTSIDE AIR DRAFT TO FREEZE CONDENSATION IN THE SENSING LINES RESULTING IN THE ERRONEOUS INDICATIONS. THE DAMPERS WERE CLOSED, THE SENSING LINES THAWED, AND INDICATIONS RETURNED TO NORMAL. A PROCEDURE REVISION TO THE COLD WEATHER LOG DELINEATING THE OPERATION OF THESE ROOF DAMPERS IS COMPLETE.

[28] BEAVER VALLEY 1 DOCKET 50-334 LER 83-041
SUBCOOLING MONITOR DECLARED INOPERABLE.
EVENT DATE: 122683 REPORT DATE: 012584 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: ELECTRICAL CONDUCTORS
VENDOR: WESTINGHOUSE ELEC CORP.-NUCLEAR ENERGY SYS

(NSIC 188778) ON 12/26/83, DURING A SURVEILLANCE TEST, THE SUBCOOLING MONITOR (SCM-RC-100) WAS FOUND TO BE READING UNREALISTIC VALUES OF TEMPERATURE AND PRESSURE. THE MONITOR WAS DECLARED INOPERABLE AT 2315 HOURS AS PER TECH SPEC 3.3.3.8. THIS IS THE SIXTH REPORT ISSUED ON SUBCOOLING MONITORS FAILURES. THE FAILURE WAS DUE TO A LOOSE ELECTRICAL INPUT CONNECTOR TO THE PC CARD. THE LOOSE CONNECTOR WAS REPAIRED AND THE MONITOR SUBSEQUENTLY RETURNED TO SERVICE. THE FAILURE WAS ATTRIBUTED TO NORMAL WEAR. NEW CONNECTORS ARE ON ORDER TO REPLACE THE WORN ONES.

[29] BEAVER VALLEY 1 DOCKET 50-334 LER 83-043
MAIN STEAM SAFETY VALVE EFFLUENT MONITOR FAILS HIGH.
EVENT DATE: 122983 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: OTHER COMPONENTS

(NSIC 188779) AT 1110 HOURS, THE MAIN STEAM SAFETY VALVE EFFLUENT MONITOR (RM-MS-100B) WAS DECLARED OUT OF SERVICE. THE MONITOR WAS SPIKING TO THE HIGH AND HIGH-HIGH ALARM SETPOINTS EVEN THOUGH THERE WAS NO ATMOSPHERIC STEAM DUMP OR SAFETY VALVE ACTUATION. THE MONITOR WAS RETURNED TO SERVICE WITHIN THE 72 HOUR REQUIREMENT OF TECH SPEC 3.3.3.1. ON 12/30/83, MAINTENANCE PERSONNEL RECALIBRATED (RM-MS-100B) BUT COULD NOT DETERMINE THE FAILURE MODE. THE MONITOR WAS LEFT ENERGIZED TO ENSURE PROPER OPERATION AND WAS RETURNED TO SERVICE AT 1230 HOURS ON 12/31/83.

[30] BROWNS FERRY 1 DOCKET 50-259 LER 83-016 REV 1
UPDATE ON CONTROL ROOM EMERGENCY VENTILATION SYSTEM FILTER EFFICIENCY.
EVENT DATE: 030983 REPORT DATE: 022284 NSSS: GE TYPE: BWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: FILTERS

(NSIC 188897) DURING NORMAL OPERATION, THE RESULT OF AN OFFSITE ANALYSIS OF A CHARCOAL SAMPLE (SI 4.7.E.4) FROM THE CONTROL ROOM EMERGENCY VENTILATION SYSTEM (COMMON TO ALL UNITS) SHOWED A METHYL IODIDE REMOVAL EFFICIENCY LESS THAN THE REQUIRED 90-PERCENT (TECH SPEC 4.7.E.2). A CHARCOAL SAMPLE FROM THE REDUNDANT FILTER TRAIN HAS ALSO BEEN SENT OFFSITE FOR ANALYSIS. THE CAUSE OF THE REDUCED REMOVAL EFFICIENCY WAS DEGRADATION OF THE STORED CHARCOAL PRIOR TO USE. FOUR NEW FILTER TRAYS WERE INSTALLED AND SYSTEM OPERABILITY VERIFIED. SI 4.7.E.4 REQUIRES THE REPLACEMENT OF ALL FOUR TRAYS WHEN TESTED PER TECH SPEC 4.7.E.2. A PROGRAM TO MONITOR CHARCOAL SHELF LIFE WILL BE PREPARED AND IN EFFECT BY JULY 1, 1984.

[31] BROWNS FERRY 1 DOCKET 50-259 LER 83-018 REV 1
UPDATE ON SBGT TRAIN DECLARED INOPERABE.
EVENT DATE: 032583 REPORT DATE: 021584 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MCDONNELL & MILLER ITT

(NSIC 188898) DURING NORMAL OPERATION ON UNITS 1, 2, AND 3, WHILE PERFORMING SI 4.2.A-13, STANDBY GAS (SBGT) TRAIN "B" WAS FOUND INOPERABLE DUE TO ERRATIC FLOW SWITCH FS-65-42A (TECH SPEC 3.7.B.3 AND TECH SPEC TABLE 3.2.A). THE SBGT SYSTEM IS COMMON TO ALL THREE UNITS. TECH SPEC 3.7.B.3 PERMITS OPERATION FOR 7 DAYS WITH ONE TRAIN INOPERABLE. SBGT TRAIN "A" AND "C" WERE AVAILABLE AND OPERABLE. SBGT TRAIN "B" WAS INOPERABLE FOR ABOUT 12 HOURS. "B" SBGT TRAIN WAS INOPERABLE DUE TO ERRATIC MCDONNEL AND MILLER FLOW SWITCH, MODEL AF-1. THE SWITCH WAS REPLACED AND SI 4.7.B-1 AND SI 4.2.A-13 WERE SUCCESSFULLY COMPLETED. THE PADDLE-TYPE SWITCHES ARE EXPECTED TO BE REPLACED WITH DIFFERENTIAL PRESSURE SWITCHES. THIS WILL BE SCHEDULED PER THE BROWNS FERRY REGULATORY COMPLIANCE IMPROVEMENT PLAN.

[32] BROWNS FERRY 1 DOCKET 50-259 LER 83-029 REV 1
UPDATE ON STANDBY GAS TREATMENT TRAIN FAILURE.
EVENT DATE: 060483 REPORT DATE: 022184 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MCDONNELL & MILLER ITT

(NSIC 188899) DURING UNIT 1 REFUELING OUTAGE AND NORMAL OPERATION OF UNITS 2 AND 3, WHILE PERFORMING SI 4.2.7.B.1, STANDBY GAS TREATMENT SYSTEM OPERABILITY TEST, TRAIN "B" WAS FOUND INOPERABLE. THE STANDBY GAS TREATMENT SYSTEM IS COMMON TO ALL THREE UNITS. TECH SPEC 3.7.B.3 PERMITS OPERATION FOR 7 DAYS WITH ONE TRAIN INOPERABLE. STANDBY GAS TRAIN "A" AND "C" WERE AVAILABLE AND OPERABLE. STANDBY GAS TRAIN "B" WAS INOPERABLE FOR ABOUT 12 HOURS. SBGT TRAIN "B" WAS INOPERABLE DUE TO ERRATIC MCDONNEL AND MILLER MODEL AF-1 FLOW SWITCHES. DAMPER 0-65-603 WAS ADJUSTED TO IMPROVE FLOW CHARACTERISTIC AND SWITCH OPERATION. SI 4.7.B-1 WAS SUCCESSFULLY COMPLETED. UNTIL MORE RELIABLE FLOW SWITCHES ARE INSTALLED, "B" TRAIN SI 4.7.B-7, WILL BE CHANGED TO SET FLOW AT MAXIMUM NOT TO EXCEED 9900 CFM.

[33] BROWNS FERRY 1 DOCKET 50-259 LER 83-064 REV 1
UPDATE ON STACK GAS SAMPLE PUMPS TRIP ON OVERCURRENT.
EVENT DATE: 102983 REPORT DATE: 011184 NSSS: GE TYPE: BWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: MOTORS
VENDOR: RELIANCE ELECTRIC COMPANY

(NSIC 188604) DURING UNIT 1 AND UNIT 3 REFUELING OUTAGE AND NORMAL OPERATION OF UNIT 2, STACK GAS SAMPLE PUMP A TRIPPED ON OVERCURRENT. PUMP B WAS STARTED AND IT ALSO TRIPPED ON OVERCURRENT. FOLLOWING MAINTENANCE PUMP B WAS RETURNED TO SERVICE AND TRIPPED AGAIN ON 11/4/83. PUMP A WOULD NOT START. DURING BOTH EVENTS TEMPORARY MONITORING WAS ESTABLISHED IMMEDIATELY PER TECH SPEC 3.8.B.8. THERE ARE NO REDUNDANT SYSTEMS. PUMPS A AND B AND MOTOR A (RELIANCE MODEL C14G502) WERE REPLACED AFTER FIRST EVENT. MOTOR A WINDING WAS SHORTED. BOTH PUMPS WERE GOOD. REBUILT REPLACEMENT MOTOR REQUIRED EXCESSIVE CURRENT. MOTOR AND FUSES WERE REPLACED AND MOTORS A AND B OVERLOAD HEATER SIZES WERE INCREASED TO PREVENT SPURIOUS TRIPS. MOTOR IS BEING REBUILT AND PROPER CURRENT VERIFIED. NO SIGNIFICANT FUSE PROBLEM FOUND.

[34] BROWNS FERRY 1 DOCKET 50-259 LER 83-071
CONTINUOUS AIR MONITOR BREAKS BELT.
EVENT DATE: 121283 REPORT DATE: 011084 NSSS: GE TYPE: BWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: PUMPS
VENDOR: SCHWITZER

(NSIC 188536) DURING UNIT OUTAGE, WHILE PERFORMING SI 4.8.B.2-1B AND 4.8.B.2-2A AN ANALYST DISCOVERED A BROKEN VACUUM PUMP BELT ON 1-RM-90-250 (REACTOR AND TURBINE BUILDING VENT MONITOR). THE CAM MAY HAVE BEEN INOPERABLE FOR A MAXIMUM OF 24 HOURS (TECH SPEC 3.8.B). HOURLY SAMPLES AND SIMILAR MONITORS FOR UNITS 2 AND 3 SHOWED NO INCREASE IN ACTIVITY LEVELS DURING THE EVENT. THERE ARE NO REDUNDANT SYSTEMS. THE CAUSE WAS NORMAL WEAR DUE TO CONTINUOUS OPERATION. THE STANDARD V-BELT FOR THE SCHWITZER MODEL 325 SERIES AIR PUMP WAS REPLACED. NO FURTHER RECURRENCE CONTROL IS REQUIRED. THE DRIVE BELTS ARE CHECKED PERIODICALLY FOR WEAR BY SI 4.8.B.4.2.A.

[35] BROWNS FERRY 1 DOCKET 50-259 LER 83-072
WIND SPEED RECORDER FOUND INOPERABLE.
EVENT DATE: 122783 REPORT DATE: 012484 NSSS: GE TYPE: BWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: CLIMET INSTRUMENTS CO.

(NSIC 188740) UNITS 1 AND 3 WERE IN REFUELING OUTAGE AND UNIT 2 WAS AT 100% POWER. THE 887 FT. (MEAN SEA LEVEL) WIND SPEED RECORDER (XR-90-104) WAS OBSERVED TO BE INOPERABLE READING ZERO. THIS INSTRUMENT IS COMMON TO UNITS 1, 2 AND 3. TECH SPEC TABLE 3.2.I REQUIRES A MINIMUM OF ONE WIND SPEED RECORDER TO BE OPERABLE AT THIS LEVEL. INSTRUMENTATION AT ALL OTHER TOWER LEVELS WAS OPERABLE. THE LOSS OF THE WIND SPEED RECORDER WAS DUE TO ICE FORMATION ON THE WIND SPEED SENSOR (CLIMET INSTRUMENT MODEL 01101). THE 887 FT. MSL RECORDER WAS OUT OF SERVICE FOR SIX HOURS BEFORE THE SENSOR WAS CLEARED. THIS IS CONSIDERED A RANDOM EVENT AND NO FURTHER RECURRENCE CONTROL IS REQUIRED.

[36] BROWNS FERRY 2 DOCKET 50-260 LER 82-028 REV 3
UPDATE ON SIMULTANEOUSLY OPEN EQUIPMENT AIR LOCKED DOORS.
EVENT DATE: 092182 REPORT DATE: 030984 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 188889) DURING A REFUELING OUTAGE, THE TURBINE TO REACTOR BUILDING DOORS (NO. 237 AND 238) WERE OPENED SIMULTANEOUSLY, BREACHING SECONDARY CONTAINMENT. (TECH SPEC 3.7.C). THESE DOORS CONNECT THE UNIT 2 REACTOR ZONE WITH THE TURBINE BAY. ALL REQUIRED SAFETY SYSTEMS WERE AVAILABLE AND OPERABLE. THE FOLGER ADAMS INTERLOCK SYSTEM FAILED BECAUSE OF LOOSE DOOR LATCH SCREWS AND ELECTRICAL LIMIT SWITCHES THAT WERE OUT OF ADJUSTMENT. THE DOORS WERE CLOSED AND REPAIRED. PROCEDURES WERE REVISED. MODIFIED DESIGN WAS SUCCESSFULLY FIELD TESTED. PLANS FOR IMPLEMENTATION OF THE MODIFIED DESIGN ARE EXPECTED TO BE COMPLETE BY DEC. 15, 1984.

[37] BROWNS FERRY 2 DOCKET 50-260 LER 83-005 REV 1
UPDATE ON CONTAINMENT ISOLATION VALVE GASKET LEAKAGE.
EVENT DATE: 021683 REPORT DATE: 122283 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES

(NSIC 188472) ON 2/16/83, UNIT 1 WAS OPERATING AT 95% POWER, UNIT 3 WAS OPERATING AT 100% POWER, AND UNIT 2 WAS IN A REFUELING OUTAGE. DURING INTEGRATED LEAK RATE TEST ON UNIT 2, THE PRIMARY CONTAINMENT LEAK RATE WAS FOUND TO EXCEED THE ALLOWABLE LEAK RATE OF 0.75 LA (TECH SPEC 4.7.A.2.B). THERE WAS NO REQUIREMENT TO HAVE PRIMARY CONTAINMENT ESTABLISHED. THE LEAKAGE WAS BELOW THE DESIGN LIMIT OF LA. NO REDUNDANT SYSTEMS WERE REQUIRED TO BE IN SERVICE AND OPERABLE. SOURCE OF LEAKAGE WAS FOUND AROUND FLANGE OF 2-FCV-64-20 AT THE GASKET. TIGHTENING OF FLANGE BOLTS STOPPED LEAK AND REDUCED LEAK RATE TO APPROXIMATELY 0.5%. A MODIFICATION TO ALLOW TESTING THE FLANGE GASKETS FOR LEAKAGE ON THIS VALVE AND SIMILAR VALVES ARE TO BE MADE DURING THE CYCLE 5 REFUELING OUTAGES.

[38] BROWNS FERRY 2 DOCKET 50-260 LER 83-014 REV 1
UPDATE ON MAIN STEAM RELIEF VALVE AIR OPERATOR INSTALLED INCORRECTLY.
EVENT DATE: 033083 REPORT DATE: 061683 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: VALVE OPERATORS
VENDOR: TARGET ROCK CORP.

(NSIC 188673) DURING A MAINTENANCE OUTAGE ON UNIT 2 TO REPAIR MAIN STEAM RELIEF VALVE (MSRV), NUMBERED PCV-1-180, THE AIR OPERATOR WAS FOUND TO HAVE BEEN ASSEMBLED INCORRECTLY. MAINTENANCE PROCEDURES WHICH CHECK FOR PROPER OPERABILITY OF VALVE COMPONENTS WERE NOT FOLLOWED DURING INSTALLATION OF THE MSRV (TECH SPEC 6.7.2.B(3)). ALL OTHER MSRVS WERE OPERABLE. TARGET ROCK MODEL NO. 7567F-100 WAS INOPERABLE DUE TO NOT FOLLOWING PROCEDURE IN REASSEMBLY. INSPECTION DID NOT DETECT ERROR DUE TO PROCEDURAL INADEQUACY. VALVE WAS REPAIRED. INSPECTION PROCEDURE IS BEING REVISED. INVESTIGATION OF THE VALVE REASSEMBLY HAS BEEN PERFORMED AND ADDITIONAL DETAILS ARE PROVIDED ON LER SUPPLEMENTAL.

[39] BROWNS FERRY 2 DOCKET 50-260 LER 83-074 REV 1
UPDATE ON HPCI FAILURES.
EVENT DATE: 111083 REPORT DATE: 120583 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: OTHER COMPONENTS
VENDOR: FIKE METAL PRODUCTS CORP.

(NSIC 188473) DURING STARTUP OF HPCI DURING PERFORMANCE OF SPECIAL TEST 8211 ON 11/5/83, THE TURBINE EXHAUST INNER RUPTURE DIAPHRAGM RUPTURED. ON 11/10/83, DURING HPCI INITIATION RESULTING FROM A UNIT SCRAM, THE INNER DIAPHRAGM RUPTURED. TECH SPEC 3.5.E.2 PERMITS OPERATION FOR SEVEN DAYS WITH HPCI INOPERABLE. REDUNDANT SYSTEMS WERE AVAILABLE AND OPERABLE. THE EXACT CAUSE OF INNER RUPTURE DIAPHRAGM FAILURES HAS NOT BEEN DETERMINED. FURTHER INVESTIGATION WILL BE CONDUCTED TO DETERMINE RUPTURE CAUSES, AND A FOLLOW-UP REPORT WILL BE SUBMITTED. RUPTURE DIAPHRAGMS WERE REPLACED AND HPCI RETURNED TO SERVICE.

[40] BROWNS FERRY 2 DOCKET 50-260 LER 83-078
RHR CROSSTIES TO OTHER UNITS MADE INOPERABLE.
EVENT DATE: 120783 REPORT DATE: 010684 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188741) ON 11/16/83 THE UNIT 3 RHR PUMPS WERE REMOVED FROM SERVICE FOR MAINTENANCE. ON 12/7/83 WHILE ISOLATING VALVE 1-FCV-74-66 FOR MAINTENANCE, THE RHR CROSSTIE CONNECTION FOR UNIT 2 WAS ISOLATED. THIS RESULTED IN A LOSS OF THE RHR CROSSTIE CONNECTION FOR UNIT 2 TECH SPEC 3.5.B.13 AND PLACED UNIT 2 IN A 10-DAY LCO. THERE WAS NO AVAILABLE REDUNDANT SYSTEM. DUE TO MAINTENANCE ACTIVITIES ON THE RHR SYSTEM ON UNITS 1 AND 3, BOTH RHR CROSSTIE CONNECTIONS FOR UNIT 2 WERE MADE INOPERABLE TO FACILITATE THIS MAINTENANCE. THIS PLACED UNIT 2 IN A 10-DAY LCO. ON 12/10/83 THE CROSSTIE CONNECTION WAS RESTORED AND UNIT 2 WAS REMOVED FROM THE LCO IN 3 DAYS. NO CORRECTIVE ACTION OR RECURRENCE CONTROL ARE PLANNED AT THIS TIME.

[41] BROWNS FERRY 2 DOCKET 50-260 LER 83-083
HYDROGEN ANALYZER SAMPLE PUMP BEARING SEIZES.
EVENT DATE: 122983 REPORT DATE: 012784 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: MOTORS
VENDOR: METAL BELLOWS
TOKYO SHIBAURA ELECTRIC CO. LTD.(TOSHIBA)

(NSIC 188537) DURING NORMAL OPERATION, THE HYDROGEN ANALYZER "B" HYDROGEN SAMPLE INLET PUMP WAS DISCOVERED TO BE INOPERABLE (TECH SPEC 3.7.H.2). TECH SPEC 3.7.H.2 PERMITS OPERATION FOR 30 DAYS WITH ONE HYDROGEN ANALYZER INOPERABLE. HYDROGEN ANALYZER "A" WAS AVAILABLE AND OPERABLE. HYDROGEN ANALYZER "B" WAS

INOPERABLE FOR ABOUT 14 HOURS. METAL BELLOWS CORPORATION MOTOR, PN. 25626 (MFG. BY TOSHIBA) FAILED DUE TO A SEIZED BEARING. THE PUMP AND MOTOR ASSEMBLY, METAL BELLOWS CORPORATION PN. 25293, WAS REPLACED AND SI 4.7.H WAS COMPLETED. THE APPARENT CAUSE FOR THE BEARING FAILURE WAS IMPROPER BEARING CLEARANCE. THIS IS CONSIDERED A RANDOM FAILURE AND NO FURTHER RECURRENCE CONTROL IS PLANNED.

[42] BROWNS FERRY 2 DOCKET 50-260 LER 83-084
EMERGENCY EQUIPMENT COOLING WATER HEADER LOSES FLOW.
EVENT DATE: 122983 REPORT DATE: 012784 NSSS: GE TYPE: BWR
SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: FILTERS
VENDOR: KINNEY, S.P. ENGINEERING, INC.

(NSIC 188538) DURING NORMAL OPERATION, WHILE THE A3 EMERGENCY EQUIPMENT COOLING WATER (EECW) PUMP WAS OUT OF SERVICE FOR STRAINER REPAIR, THE STRAINER ON THE C3 PUMP BECAME RESTRICTED BY DEBRIS AND ALL FLOW WAS LOST TO THE NORTH EECW HEADER. TECH SPEC 3.5.C.2 REQUIRES A MINIMUM OF ONE EECW PUMP ON EACH EECW HEADER. PER TECH SPEC 3.5.C.6, PREPARATIONS FOR SHUTDOWN WERE INITIATED; HOWEVER, A3 PUMP WAS REPAIRED WITHIN SIX HOURS AND POWER REDUCTION WAS UNNECESSARY. THE LOSS OF THE C3 EECW PUMP STRAINER WAS CAUSED BY DEBRIS FROM THE RIVER. THE S.P. KINNEY 14" MODEL AV-3 STRAINER WAS CLEANED AND THE C3 EECW PUMP WAS RETURNED TO OPERABILITY. THE LOSS OF THE C3 EECW PUMP IS CONSIDERED A RANDOM EVENT AND NO RECURRENCE CONTROL IS NECESSARY.

[43] BRUNSWICK 1 DOCKET 50-325 LER 83-002
SIX SAFETY RELIEF VALVES EXCEED SPECIFIED SETPOINTS.
EVENT DATE: 011483 REPORT DATE: 083183 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: VALVES
VENDOR: TARGET ROCK CORP.

(NSIC 188514) DURING THE ONGOING UNIT NO. 1 REFUELING OUTAGE, REQUIRED ASME SECTION XI LABORATORY TESTING OF SRVS REVEALED SIX OF THE ELEVEN VALVES OPENED AT HIGHER THAN SPECIFIED SETPOINTS. THESE VALVES, 1-B21-F013B, D, E, F, K, AND L, WHICH OPENED AT PRESSURE RANGING FROM 1126 TO 1158 PSIG, ARE OF THE TWO-STAGE PILOT OPERATED DESIGN. TECH SPECS 3.4.2, 6.9.1.9B. CORROSION BUILDUP ON THE PILOT DISC AND SEAT SURFACES OF EACH SUBJECT VALVE PREVENTED THEM OPENING AT THEIR SPECIFIED SETPOINTS. THE VALVE VENDOR WILL INSPECT, REPAIR, AND ADJUST EACH SUBJECT VALVE TO SET PRESSURE REQUIREMENTS AND THE VALVES, MODEL NO. 7567F, WILL BE RETURNED TO SERVICE. FOLLOWING THE COMPLETION OF QUALIFICATION TESTING BY THE VALVE VENDOR, APPROPRIATE FUTURE CORRECTIVE ACTION TO THIS EVENT WILL BE TAKEN.

[44] BRUNSWICK 1 DOCKET 50-325 LER 83-044 REV 1
UPDATE ON RECIRCULATION PUMP TRIPS.
EVENT DATE: 091783 REPORT DATE: 012484 NSSS: GE TYPE: BWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVES
VENDOR: FISHER FLOW CONTROL DIV (ROCKWELL INT)

(NSIC 188617) DURING UNIT POWER OPERATION, A TRIP OF THE 1B REACTOR RECIRCULATION PUMP MOTOR GENERATOR (MG) SET OCCURRED DUE TO HIGH MG SET FLUID DRIVE TEMPERATURE. WITHIN 15 MINUTES OF THIS EVENT, THE MG SET FLUID DRIVE TEMPERATURE WAS RETURNED TO NORMAL AND THE 1B REACTOR RECIRCULATION PUMP WAS RETURNED TO SERVICE. TECH SPECS 34.1.1, 6.9.1.9B. THE DRIVE FLUID TEMPERATURE CONTROL VALVE, TCC-TV-608 (MODEL NO. 9110), WHICH HAD FAILED CLOSED, WAS DETERMINED TO HAVE A BROKEN VALVE PIN TRAVEL ARM. THE TRAVEL ARM WAS REPLACED AND THE VALVE STROKED PER MI-16-23. THE VALVE WAS LEFT IN SATISFACTORY OPERATING CONDITION. NO FURTHER ACTION IS PLANNED REGARDING THIS EVENT.

[45] BRUNSWICK 1 DOCKET 50-325 LER 83-045 REV 1
UPDATE ON RCIC STEAM SUPPLY VALVE FAILS TO OPEN.
EVENT DATE: 091983 REPORT DATE: 010984 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: VALVES
VENDOR: ANCHOR VALVE CO.

(NSIC 188515) WHILE PERFORMING REACTOR VESSEL LOOP CALIBRATIONS (PT-55.3PC), E51-F007, WHICH IS THE INBOARD PCIV STEAM SUPPLY TO THE RCIC SYSTEM, WOULD NOT COMPLETELY REOPEN, INDICATING A DUAL OPEN-CLOSE POSITION. WHILE PERFORMING RCIC ISOLATION INSTRUMENTATION (PT-02.1.9PC) ON SEPT. 24, 1983, E51-F007 WOULD NOT REOPEN. E51-F007, WHICH IS NORMALLY IN THE OPEN POSITION, IS INACCESSIBLE DURING UNIT POWER OPERATION. DURING EACH EVENT, THE UNIT WAS AT POWER OPERATION. TECH SPECS 3.7.4, 6.9.1.9B. AN INVESTIGATION INDICATED THAT THE LIMITORQUE MOTOR OPERATOR'S SPRING PACK WAS LOOSE AND THE RETAINING NUT WAS INSTALLED UPSIDE DOWN DURING CONSTRUCTION. ALSO, IT APPEARS THAT THE SPRING PACK WAS INCORRECTLY ADJUSTED DURING INITIAL CONSTRUCTION. THE SPRING PACK WAS REPLACED AND THE PRELOAD ESTABLISHED. THE PRELOAD WAS THEN CHECKED, THE VALVE WAS STROKED, AND THE TORQUE SWITCH WAS SET UP TO ALLOW THE VALVE TO FUNCTION PROPERLY.

[46] BRUNSWICK 1 DOCKET 50-325 LER 83-057 REV 1
UPDATE ON CONTAINMENT TEMPERATURE RECORDER PRINTS ERRATICALLY.
EVENT DATE: 111983 REPORT DATE: 022284 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BRISTOL

(NSIC 188911) DURING UNIT POWER OPERATION, PERFORMANCE OF THE PRIMARY CONTAINMENT VOLUMETRIC AVERAGE AIR TEMPERATURE DERIVATION, PT-16.2, REVEALED THAT PRIMARY CONTAINMENT MULTIPOINT TEMPERATURE RECORDER, 1-CAC-TR-1258, WAS SHOWING TEMPERATURE INDICATIONS, BUT WAS PRINTING ERRATICALLY. TR-1258 PRINTED ERRATICALLY DUE TO DIRTY ELECTRICAL CONTACTS IN THE RECORDER CONTROL BOARD TIMING RELAY. THE CONTACTS WERE CLEANED AND TR-1258, MODEL NO. 550, WAS RETURNED TO SERVICE. DUE TO A HISTORY OF SIMILAR EVENTS INVOLVING THE TR-1258 RECORDERS OF BOTH UNITS, AND THE CRITERIA OF RG-1.97, THESE INSTRUMENTS WILL BE REPLACED DURING THE NEXT RESPECTIVE REFUELING OUTAGE OF EACH UNIT.

[47] BRUNSWICK 1 DOCKET 50-325 LER 83-061
IRM CONTROL ROD BLOCK FUNCTION INOPERABLE.
EVENT DATE: 112783 REPORT DATE: 122783 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188772) DURING A UNIT REACTOR STARTUP, REACTOR POWER INTERMEDIATE RANGE MONITOR (IRM), C51-IRM-K601H WAS DETERMINED TO BE INOPERABLE DUE TO DOWNSCALE INDICATIONS. AT THE TIME, IRM K601A HAD BEEN INOPERABLE SINCE AUGUST 10, 1983, DUE TO INTERMITTENT INDICATIONS AND IRM K601D HAD BEEN INOPERABLE SINCE NOVEMBER 16, 1983 AS A CONTROL ROD BLOCK INPUT DUE TO INCOMPLETE SURVEILLANCE REQUIREMENTS. THIS EVENT RENDERED THE IRM CONTROL ROD BLOCK FUNCTION INOPERABLE DUE TO LESS THAN SIX (6) OPERABLE IRMS, THE SPECIFIED MINIMUM REQUIRED NUMBER OF OPERABLE IRMS. TECH SPEC 3.3.4, 6.9.1.9B. THE SIGNAL PREAMPLIFIER LOW/HIGH RANGE GAIN OF K601H, PART NO. 194X672G8, WAS OUT OF ADJUSTMENT. THE PROBLEM WITH K601A IS ATTRIBUTED TO A DEFECTIVE INSTRUMENT CABLE. K601D WAS INOPERABLE AS A CONTROL ROD BLOCK INPUT BECAUSE THE MONITOR DETECTOR POSITION CONTROL ROD BLOCK FUNCTIONAL TEST, PT-01.10, WAS PENDING PERFORMANCE. PT-01.10 WAS SATISFACTORILY COMPLETED AND THE SYSTEM WAS RETURNED TO SERVICE WITHIN 2 HOURS AND 36 MINUTES OF THE EVENT.

[48] BRUNSWICK 1 DOCKET 50-325 LER 83-063 REV 1
UPDATE ON ERRONEOUS RWCS FLOW INDICATIONS.
EVENT DATE: 120383 REPORT DATE: 022284 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188910) SURVEILLANCE DURING UNIT POWER OPERATION REVEALED REACTOR WATER CLEANUP SYSTEM (RWCS) DIFFERENTIAL FLOW INDICATOR, 1-G31-R615, WAS SHOWING AN ERRONEOUS INDICATION OF RWCS DIFFERENTIAL FLOW. DURING SUBSEQUENT UNIT POWER OPERATION ON DECEMBER 7, 1983, SPURIOUS RWCS "LEAK HI-HI" ALARM ANNUNCIATIONS OCCURRED. THE EVENTS OCCURRED DUE TO ENTRAPPED AIR IN THE SENSING LINES OF THE RWCS LEAK DETECTION SYSTEM. THIS RESULTED FROM A PROCEDURAL INADEQUACY IN THE RWCS HIGH FLOW RESPONSE TIME TEST, PT-45.2.16, WHICH WAS PERFORMED RESPECTIVELY ON DECEMBER 3 AND 6, 1983. THE ENTRAPPED AIR WAS REMOVED AND THE RWCS LEAK DETECTION SYSTEM WAS RETURNED TO SERVICE. APPROPRIATE REVISIONS TO PT-45.2.16 WERE IMPLEMENTED TO HELP PREVENT FUTURE SIMILAR OCCURRENCES.

[49] BRUNSWICK 1 DOCKET 50-325 LER 83-030
DC BATTERY HAS LOW SPECIFIC GRAVITY.
EVENT DATE: 122183 REPORT DATE: 011784 NSSS: GE TYPE: BWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: BATTERIES & CHARGERS
VENDOR: GOULD-NATIONAL BAIT

(NSIC 188572) DURING UNIT POWER OPERATION PERFORMANCE OF THE WEEKLY VERIFICATION OF DIVISIONS I AND II 125V DC BATTERY AND CHARGER OPERABILITY, PT-17.1, REVEALED THAT THE MEASURED SPECIFIC GRAVITY OF THE PILOT CELL FOR DIVISION I BATTERY 1A-1 WAS 1.178. THE SPECIFIED MINIMUM SPECIFIC GRAVITY OF PLANT DC ELECTRICAL BATTERIES IS GREATER THAN OR EQUAL TO 1.18. TECH SPECS 3.8.2.4, 6.9.1.9B. THE EVENT OCCURRED BECAUSE 1A-1, MODEL NO. NCX 1200, WAS NOT FULLY CHARGED. THE REASON WHY 1A-1 WAS NOT FULLY CHARGED IS UNKNOWN. 1A-1 WAS PLACED ON AN EQUALIZING CHARGE AND A SPECIFIC GRAVITY OF 1.185 WAS MEASURED FOR THE SUBJECT PILOT CELL AND 1A-1 WAS RETURNED TO SERVICE. APPLICABLE PLANT PERIODIC SURVEILLANCE PROCEDURES WILL BE REVISED AS NECESSARY TO HELP ENSURE PLANT DC BATTERIES ARE PLACED ON EQUALIZING CHARGE WHEN REQUIRED.

[50] BRUNSWICK 1 DOCKET 50-325 LER 83-064
SQUARE ROOT INTEGRATOR FUNCTIONS OUT OF CALIBRATION TOLERANCES.
EVENT DATE: 122883 REPORT DATE: 011784 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MOORE INDUSTRIES

(NSIC 188573) DURING UNIT POWER OPERATION, WHILE PERFORMING A ROUTINE CALIBRATION AND OPERABILITY VERIFICATION OF THE DRYWELL EQUIPMENT DRAIN (DWED) TOTALIZER AND SQUARE ROOT INTEGRATOR, IT WAS DETERMINED THAT THE SQUARE ROOT INTEGRATOR, G16-FYQ-K603, WAS FUNCTIONING OUT OF CALIBRATION TOLERANCES. TECH SPECS 3.4.3.2, 6.9.1.9B. THIS EVENT WAS CAUSED BY INSTRUMENT DRIFT OF THE FYQ-K603 SQUARE ROOT TRANSMITTER (SIT) CARD. THE SIT CARD, MODEL NO. SIT/4-20(PC), WAS ADJUSTED AND FYQ-K603 WAS RETURNED TO SERVICE. A CHECK OF THE DRYWELL FLOOR DRAIN TOTALIZER AND SQUARE ROOT INTEGRATOR CALIBRATION AND OPERATION DID NOT REVEAL ANY PROBLEMS. NO FURTHER ACTION REGARDING THIS EVENT IS PLANNED.

[51] BRUNSWICK 2 DOCKET 50-324 LER 81-091
LPCI FUNCTION OF RHR INOPERABLE.
EVENT DATE: 090281 REPORT DATE: 092981 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 164237) AN RHR RELAY LOGIC A POWER FAILURE OCCURRED MAKING THE LPCI FUNCTION OF THE "A" RHR SUBSYSTEM INOPERABLE. AN IMMEDIATE INVESTIGATION

REVEALED THAT THE LOGIC "A" POWER FUSE, F1A, HAD BLOWN. A FAILURE TO SEAL THE ELECTRICAL LEADS PENETRATION IN THE OPERATOR MOTOR HOUSING OF 2A RHR PUMP TORUS SUCTION VALVE, W-EII-F004A, DURING PREVIOUS MAINTENANCE ON THE VALVE ALLOWED AMBIENT ROOM HUMIDITY TO CAUSE AN ELECTRICAL SHORT IN THE VALVE OPEN/CLOSE LOGIC WIRING WHICH BLEW THE FUSE. THE SHORT WAS REPAIRED, THE PENETRATION WAS SEALED, AND THE FUSE WAS REPLACED WHICH RETURNED THE "A" RHR LPCI FUNCTION TO NORMAL.

[52] BRUNSWICK 2 DOCKET 50-324 LER 82-123 REV 4
UPDATE ON CIRCUIT BREAKER FAILURE DURING TRANSFER.
EVENT DATE: 101082 REPORT DATE: 022284 NSSS: GE TYPE: BWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: I-T-E CIRCUIT BREAKER (CANADA)

(NSIC 188891) DURING AN ORDERLY REACTOR SHUTDOWN, WHILE ATTEMPTING TO AUTOMATICALLY TRANSFER BUS 2D FROM THE UNIT AUXILIARY TRANSFORMER (UAT) TO THE UNIT STARTUP TRANSFORMER (SAT), A LOSS OF 4160 V EMERGENCY BUS E-3 OCCURRED. IN ADDITION, NO. 3 DIESEL GENERATOR WAS DETERMINED TO BE INOPERABLE. TECH SPECS 3.8.1.1, 3.8.2.1, 6.9.1.9B. THIS EVENT OCCURRED BECAUSE BOTH THE SAT OUTPUT BREAKER AND NO. 3 DIESEL GENERATOR OUTPUT BREAKER FAILED TO CLOSE WHEN THE UAT OUTPUT BREAKER WAS OPENED. THE UAT BREAKER, MODEL NO. 5HK350, WAS INSTALLED IN PLACE OF THE SAT BREAKER AND POWER TO E-3 WAS RESTORED. PROCEDURAL CHANGES WERE IMPLEMENTED TO COMPENSATE FOR SIMULTANEOUS CLOSE AND OPEN SIGNALS TO THE DIESEL GENERATOR'S OUTPUT BREAKERS UNDER CERTAIN CONDITIONS.

[53] BRUNSWICK 2 DOCKET 50-324 LER 83-019 REV 1
UPDATE ON INADEQUATE SUPPORT OF INSTRUMENT AIR TUBING TO SRV/ADS VALVE.
EVENT DATE: 021083 REPORT DATE: 013084 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188616) DURING A SHORT-TERM UNIT MAINTENANCE OUTAGE, WHILE PERFORMING A ROUTINE DRYWELL INSPECTION, AN NRC RESIDENT INSPECTOR OBSERVED THAT INSTRUMENT AIR TUBING TO SRV/ADS VALVES' ACCUMULATORS APPEARED TO BE INADEQUATELY SUPPORTED. AN INSPECTION AND ENGINEERING ASSESSMENT DETERMINED THE TUBING WAS NOT ADEQUATELY SUPPORTED IN ACCORDANCE WITH PLANT DESIGN REQUIREMENTS. TECH SPECS 3.4.2, 3.5.2, 6.9.1.8I. DURING THE INSTALLATION OF AN SRV MODIFICATION, THE SUBJECT TUBING HAD BEEN REROUTED WITHOUT ADEQUATE PROCEDURAL CONTROLS TO ENSURE SUPPORT DESIGN COMPLIANCE. SUPPORTS TO ENSURE STRUCTURAL INTEGRITY OF THE TUBING WERE INSTALLED PRIOR TO UNIT STARTUP AS PART OF A SHORT-TERM CORRECTION OF THE PROBLEM WITH A LONG-TERM CORRECTION TO BE PERFORMED DURING A FUTURE UNIT OUTAGE.

[54] BRUNSWICK 2 DOCKET 50-324 LER 83-078 REV 1
UPDATE ON NOT TESTING RECIRCULATION JET PUMPS.
EVENT DATE: 080783 REPORT DATE: 012584 NSSS: GE TYPE: BWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188691) DURING SIMULTANEOUS REACTOR STARTUPS ON BOTH UNITS 1 AND 2, IT WAS DETERMINED THAT OPERABILITY TESTING OF EACH UNIT'S REACTOR RECIRCULATION SYSTEM JET PUMPS, PT-13.1, WAS RESPECTIVELY PERFORMED ONCE DURING EACH UNIT'S INITIAL 24-HOUR PERIOD DURING "STARTUP," OPERATIONAL MODE 2. TECH SPECS REQUIRE THE SUBJECT TESTING BE PERFORMED ONCE PER 24 HOURS WHILE IN OPERATIONAL MODE 2. TECH SPECS 3.4.1.2, 6.9.1.9C. THIS EVENT RESULTED FROM A LACK OF CLARITY FOR THE REQUIREMENT LISTING IN THE CONTROL OPERATORS' (C.O.) DAILY SURVEILLANCE REPORT (DSR). THE C.O. DSR WAS REVISED TO CLARIFY THE REQUIREMENT PERIODICITY. A TECH SPECS INTERPRETATION WAS ISSUED TO CLARIFY THE TESTING REQUIREMENT. THE REQUIREMENT WAS DISCUSSED WITH LICENSED C.O.'S TO ENSURE THEIR COGNIZANCE OF THE SUBJECT TESTING PERIODICITY.

[55] BRUNSWICK 2 DOCKET 50-324 LER 83-089
ISOLATION VALVE LOSES POSITION INDICATION AND ISOLATION CAPABILITY.
EVENT DATE: 101083 REPORT DATE: 110883 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: ATLAS VALVE

(NSIC 188692) ROUTINE RTGB SURVEILLANCE DURING UNIT POWER OPERATION REVEALED A LACK OF POSITION INDICATION FOR PCIV B32-F005A, LOCATED AT RIP X-245D. THE INVESTIGATION OF THIS EVENT REVEALED THE VALVE SOLENOID OPERATOR POWER SUPPLY FUSE, FJ-1, HAD BLOWN, THEREBY DEFEATING THE CAPABILITY OF THE VALVE TO AUTOMATICALLY CLOSE ON LINE EXCESS FLOW. F005A IS THE ROOT ISOLATION FOR A REACTOR RECIRCULATION PUMP SEAL CHAMBER PRESSURE SENSING INSTRUMENTATION. TECH SPECS 3.6.3, 6.9.1.9B. WATER SPLASHOVER FROM HOUSEKEEPING WASHING INTRUDED INTO THE VALVE OPERATOR POWER SUPPLY JUNCTION BOX CAUSING FJ-1 TO BLOW DUE TO ELECTRICAL GROUNDING. THE WATER WAS REMOVED FROM THE JUNCTION BOX, FJ-1 WAS REPLACED, AND F005A, MODEL NO. 1985, WAS RETURNED TO SERVICE. APPROPRIATE PLANT SERVICES HOUSEKEEPING PERSONNEL HAVE BEEN COUNSELED TO UTILIZE PROTECTIVE COVERINGS AS REQUIRED DURING FUTURE SIMILAR HOUSEKEEPING.

[56] BRUNSWICK 2 DOCKET 50-324 LER 83-098
RPS INSTRUMENT CHANNELS NOT COMPLETELY TESTED AS REQUIRED.
EVENT DATE: 111883 REPORT DATE: 121683 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188218) A ROUTINE REVIEW OF PLANT SURVEILLANCE PROCEDURES BY THE ON-SITE NUCLEAR SAFETY GROUP DETERMINED THAT SUBJECT PLANT PERIODIC SURVEILLANCE PROCEDURES, USED ON BOTH UNIT NOS. 1 AND 2 SINCE LATE 1976, DID NOT PROVIDE FOR INDIVIDUAL VERIFICATION TO ENSURE THAT EACH RPS INSTRUMENT CHANNEL IS CAPABLE OF DEENERGIZING THE APPROPRIATE RPS SCRAM RELAY. THE SUBJECT PROCEDURES SPECIFIED USING ELECTRICAL JUMPERS ACROSS THE INDIVIDUAL INSTRUMENT CHANNELS OUTPUT RELAY CONTACTS TO PREVENT EACH CHANNEL FROM INDIVIDUALLY DEENERGIZING THE RPS SCRAM RELAY, K14, WHICH WAS ONLY TESTED BY A TEST SWITCH. ON NOVEMBER 16, 1983, I&C SURVEILLANCE TESTING, USING ELECTRICAL JUMPERS, WAS TERMINATED. A SPECIAL TEST PROCEDURE WAS IMPLEMENTED WHICH VERIFIED TOTAL RPS LOGIC OVERLAP.

[57] BRUNSWICK 2 DOCKET 50-324 LER 83-097 REV 1
UPDATE ON RHR, RECIRCULATION, AND RWCU SYSTEMS PIPE CRACKS.
EVENT DATE: 121283 REPORT DATE: 012484 NSSS: GE TYPE: BWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PIPES,FITTINGS
VENDOR: ASSOCIATED PIPING & ENGINEERING CORP.

(NSIC 188909) DURING THE PERFORMANCE OF TESTING REQUIRED BY IE BULLETIN 83-02, IT WAS DETERMINED THAT CRACK INDICATIONS EXISTED IN 19 OF 131 WELDS EXAMINED ON THE REACTOR RECIRCULATION SYSTEM AND REACTOR WATER CLEANUP AND RESIDUAL HEAT REMOVAL SYSTEM. DATA EVALUATION HAS DETERMINED THESE INDICATIONS RANGE FROM 5 TO 22.0 PERCENT OF PIPE WALL THICKNESS WITH LENGTHS THAT RANGE FROM .5" TO 11.0". THE INDICATIONS ARE ATTRIBUTED TO IGSCC. EIGHT WELDS WITH THESE INDICATIONS WERE REPAIRED USING ACCEPTABLE WELD OVERLAY TECHNIQUES. THE REMAINING WELD INDICATIONS WERE EVALUATED AND DETERMINED TO BE ACCEPTABLE FOR STARTUP AND CONTINUED OPERATION UNTIL APRIL 30, 1984.

[58] BRUNSWICK 2 DOCKET 50-324 LER 83-096
FIRE HOSE STATIONS INOPERABLE.
EVENT DATE: 122683 REPORT DATE: 020384 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
VENDOR: KENNEDY VALVE MFG CO.

(NSIC 188513) DURING UNIT NO. 1 POWER OPERATION CONCURRENT WITH AN ONGOING UNIT

NO. 2 SHUTDOWN, AUGMENTED OFF-GAS (ADG) BUILDING FIRE HOSE STATIONS 2-AOG-57 THROUGH 62, WERE RENDERED INOPERABLE DUE TO VALVE BODY CRACK-RUPTURING OF AOG FIRE PROTECTION STANDPIPE SYSTEM ISOLATION VALVES 2-FP-V901 AND V906. SUBSEQUENT WALKDOWN INSPECTIONS OF THE DIESEL GENERATOR BUILDING (DGB) FIRE PROTECTION STANDPIPE SYSTEM REVEALED FIRE HOSE STATIONS DGB-1 THROUGH 13 WERE RENDERED INOPERABLE DUE TO A VALVE BODY-TO-BONNET GASKET FAILURE OF STANDPIPE ISOLATION VALVE 2-FP-V129. TECH SPECS 3.7.7.4, 6.9.1.9B. UNSEASONABLY LOW AMBIENT OUTSIDE AIR TEMPERATURES AND A LACK OF INSULATION ON THE PIPING OF THE SUBJECT VALVES RESULTED IN FREEZING OF SUBJECT VALVES' PIPING CONTENTS WHICH CAUSED THE SUBJECT VALVE FAILURES. V901 AND V906 WERE REPLACED, THE V129 VALVE BODY-TO-BONNET GASKET WAS REPLACED, AND THE VALVES, PART NO. 162287, WERE RETURNED TO SERVICE. A PERMANENT PROCEDURE WHICH ADDRESSES PLANT FREEZE PROTECTION REQUIREMENTS WAS DEVELOPED AND IMPLEMENTED TO HELP PRECLUDE FUTURE SIMILAR EVENTS.

[59] CALVERT CLIFFS 1 DOCKET 50-317 LER 81-024 REV 1
UPDATE ON LONG RESPONSE TIME OF MSIV.
EVENT DATE: 040481 REPORT DATE: 051983 NSSS: CE TYPE: PWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVES
VENDOR: ROCKWELL MANUFACTURING COMPANY

(NSIC 188826) DURING A ROUTINE SHUTDOWN, THE OPERATOR NOTED THAT #11 MSIV CLOSING TIME APPEARED TO BE EXCESSIVE. A SUBSEQUENT TEST REVEALED #11 MSIV SHUT WITHIN THE REQUIRED TIME, HOWEVER, #12 MSIV CLOSING TIME EXCEEDED THE MAXIMUM AT 7.4 SEC. (TECH SPEC 3.7.1.5). #12 MSIV WAS REPAIRED AND RETURNED TO SERVICE AT 0140 ON 4-8-81. THE VALVES WERE NOT REQUIRED FOR OPERATION AT THE TIME OF DISCOVERY. LER 81-07 (50-318) DESCRIBES A SIMILAR EVENT. DURING THE MOST RECENT REFUELING OUTAGE, THE VALVE PACKING JUNK RING WAS DISCOVERED TO HAVE GALLED THE STEM. THE RING WAS TESTED AND FOUND TO BE AN ALLOY INSTEAD OF A MILD STEEL. BEING VERY CLOSE TO THE STEM, THE RING WAS BINDING THE STEM, SLOWING VALVE CLOSURE. THE RING WAS REPLACED WITH A PROPER ONE, AND THE PURCHASE SPEC. WAS REVISED TO PREVENT RECURRENCE.

[60] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-008 REV 1
UPDATE ON CONTROL ROD POSITION TRANSMITTERS FAIL.
EVENT DATE: 020583 REPORT DATE: 012684 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ELECTRO-MECHANICS

(NSIC 188687) AT 0850, DURING SURVEILLANCE TESTING, CONTROL ELEMENT ASSEMBLY (CEA) 26 REED SWITCH POSITION INDICATION (RSPI) WAS ERRATIC AND WAS DECLARED INOPERABLE. AT 0945, ACTION WAS TAKEN TO PLACE THE REACTOR IN MODE 3. AT 1345, THE REACTOR WAS PLACED IN MODE 3, TERMINATING THE EVENT. ALL CEA PULSE COUNTING POSITION INDICATION CHANNELS REMAINED OPERABLE DURING THE EVENT. SIMILAR EVENTS: NONE. THE CAUSE FOR THIS EVENT WAS THE FAILURE OF REED STACK POSITION TRANSMITTER (RSPT) (ELECTRO-MECHANICS, PART#N9027, REV 1) FOR CEAS 26 AND 28. THE RSPTS WERE REPLACED. REPAIRS WERE MADE TO THE FAILED RSPTS FOLLOWING VENDORS ROOT CAUSE INSPECTION.

[61] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-018 REV 1
UPDATE ON DIESEL GENERATOR FAILS TO START.
EVENT DATE: 040883 REPORT DATE: 011884 NSSS: CE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: FAIRBANKS MORSE

(NSIC 188610) AT 1115 DURING NORMAL OPERATION, #12 EMERGENCY DIESEL GENERATOR (EDG) FAILED TO START DURING PERFORMANCE OF MAINTENANCE (TECH SPEC 3.8.1.1). INVESTIGATION REVEALED THAT SUFFICIENT PRESSURE WAS NOT AVAILABLE IN THE FUEL OIL LINE. THE LINE WAS PRIMED WITH THE MANUAL FUEL OIL PUMP AND THE EDG STARTED.

EDG WAS RESTARTED AN HOUR LATER TO VERIFY THAT THE FUEL OIL PUMP WOULD STAY PRIMED. AT 1425 THE EDG WAS RETURNED TO SERVICE. SIMILAR EVENTS: NONE. ADJUSTMENTS TO GOVERNOR WHILE THE DIESEL GENERATOR WAS SHUT DOWN ALLOWED FUEL OIL FROM FUEL HEADER TO DRAIN TO THE CLEAN OIL DRIP TANK. A REVISION TO MAINTENANCE INSTRUCTIONS TO HAND PRIME THE FUEL HEADER AFTER GOVERNOR ADJUSTMENTS WILL BE MADE TO PREVENT SIMILAR EVENTS.

[62] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-026 REV 1
UPDATE ON CONTROL ROD POSITION SWITCH INOPERABLE.
EVENT DATE: 052183 REPORT DATE: 012684 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ELECTRO-MECHANICS

(NSIC 188611) DURING NORMAL OPERATION, ERRATIC METRASCOPE INDICATION FOR CEA 18 AND METRASCOPE ASSOCIATED ALARMS IDENTIFIED A FAILED REED SWITCH POSITION TRANSMITTER (RSPT) STACK. THE AFFECTED STACK WAS DECLARED INOPERABLE (TECH SPEC 3.1.3.3) AND CEA 18 WAS WITHDRAWN TO THE FULL OUT POSITION. THE PULSE COUNTING POSITION INDICATOR CHANNEL FOR CEA 18 AND ITS UPPER ELECTRICAL LIMIT "FULL OUT" INDICATION REMAINED OPERABLE. SIMILAR EVENT: 50-317/83-08. CEA 18'S RSPT FAILED (ELECTRO-MECHANICS, PART #N9027, REV. 1). THE CMI FEATURE WAS RETAINED THROUGH USE OF A TEMPORARY MODIFICATION UNTIL CEA 18'S RSPT WAS REPLACED DURING THE UNIT'S REFUELING OUTAGE. REPAIRS WERE MADE TO THE FAILED RSPT FOLLOWING VENDOR'S ROOT CAUSE INSPECTION.

[63] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-032 REV 1
UPDATE ON DEFECTIVE ESFAS LOGIC MODULE.
EVENT DATE: 052383 REPORT DATE: 120983 NSSS: CE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: VITRO ENGINEERING DIVISION

(NSIC 188560) AT 0250 DURING PERFORMANCE OF SURVEILLANCE TESTS, THE CIS "B" LOGIC MODULE WOULD NOT ACTUATE. IT WAS DETERMINED THAT THE LOGIC MODULE WAS DEFECTIVE. THE MODULE WAS REPLACED, TESTED AND ESFAS WAS RETURNED TO SERVICE AT 1345. THE REDUNDANT ESFAS REMAINED OPERABLE THROUGHOUT THE EVENT. SIMILAR EVENTS: NONE. VITRO LABS DETERMINED THE CAUSE OF THE LOGIC MODULE FAILURE (#1628-1061) TO BE TWO DEFECTIVE ELECTRONIC LOGIC COMPONENTS. ONE COMPONENT (U3) INDIRECTLY SIGNALS OPERATION OF THE TEST LAMP AND SENDS A SIGNAL TO THE OTHER LOGIC COMPONENT (U5), WHOSE OUTPUT IS FOR TRIP LOGIC. IN ACCORDANCE WITH THE VENDOR REPORT, NO FURTHER ACTION IS DEEMED NECESSARY.

[64] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-036 REV 1
UPDATE ON REED SWITCH POSITION SWITCH LOST TO ALL CONTROL ELEMENT ASSEMBLIES.
EVENT DATE: 061883 REPORT DATE: 012684 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ELECTRO-MECHANICS

(NSIC 188612) DURING STEADY STATE OPERATION AT 83% POWER, REED SWITCH POSITION INDICATION (RSPI) WAS LOST FOR ALL CONTROL ELEMENT ASSEMBLIES (CEA) (TECH SPEC 3.1.3.3). ACTION WAS TAKEN TO PLACE REACTOR IN MODE 3 PER TECH SPEC 3.0.3. TROUBLESHOOTING INDICATED A SHORT ON CEA 56 REED STACK. LEADS TO CEA 56 WERE LIFTED, RESTORING PROPER INDICATION ON THE OTHER REED STACK CHANNELS. ALL CEA PULSE COUNTING POSITION CHANNELS AND UPPER ELECTRICAL LIMIT SWITCHES REMAINED OPERABLE THROUGHOUT EVENT. SIMILAR EVENTS: 83-08, 50-318/82-22. THE RSPI POWER SUPPLY WAS OVERLOADED WHEN CEA 56'S REED STACK POSITION TRANSMITTER (RSPT) (ELECTRO-MECHANICS, PART #N9027, REV. 1) SHORTED. THE CMI FEATURE WAS RETAINED VIA A TEMPORARY MODIFICATION UNTIL THE RSPT WAS REPLACED DURING THE UNIT'S REFUELING OUTAGE. THE FAILED RSPT WAS REPAIRED FOLLOWING THE VENDOR'S ROOT CAUSE INSPECTION.

[65] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-042
DRIFT OF AFW FLOW TRANSMITTER.
EVENT DATE: 072983 REPORT DATE: 082583 NSSS: CE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FISCHER & PORTER CO.

(NSIC 188614) AT 1105 DURING PERFORMANCE OF SURVEILLANCE TESTS, THE AUXILIARY FEEDWATER FLOW INDICATOR TO 11 STEAM GENERATOR WAS DISCOVERED TO BE READING INCORRECTLY (TECH SPEC 3.3.3.6). THE FLOW INDICATOR WAS ADJUSTED, TESTED AND RETURNED TO SERVICE AT 1500. FLOW INDICATION TO 12 STEAM GENERATOR REMAINED OPERABLE THROUGHOUT THE EVENT. SIMILAR EVENT: 50-317/82-07. TROUBLESHOOTING REVEALED THE CAUSE OF THIS EVENT WAS THE ZERO REFERENCE SHIFTED LOW ON 1-FT-4509 (F&P CO. MODEL #10B2496PBBCB). THE TRANSMITTER WAS RE-CALIBRATED AND FUNCTIONALLY TESTED. SINCE THE FLOW LOOP IS SURVEILLANCE TESTED MONTHLY AND THIS FAILURE DETECTABLE BY OBSERVATION, NO FURTHER CORRECTIVE OR PREVENTIVE ACTIONS ARE DEEMED NECESSARY.

[66] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-041 REV 1
UPDATE ON ECCS PUMP ROOM DAMPER FAILS TO OPEN.
EVENT DATE: 080383 REPORT DATE: 011384 NSSS: CE TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVE OPERATORS
VENDOR: TRANE COMPANY

(NSIC 188613) AT 1905 DURING NORMAL OPERATION, THE ECCS PUMP ROOM EXHAUST VENTILATION SYSTEM CHARCOAL FILTER INLET DAMPER WOULD NOT OPEN WHEN THE FILTERS' BYPASS DAMPER WAS SHUT (TECH SPEC 3.7.7.1). THE INLET DAMPER WAS SECURED IN THE OPEN POSITION RESTORING THE SYSTEM TO OPERABLE STATUS. SUBSEQUENT INVESTIGATION REVEALED THE CHARCOAL FILTERS PASSED THE REQUIRED AMOUNT OF AIR WHEN THE INLET DAMPER WAS SHUT. SIMILAR EVENT: 50-318/83-37. THE CHARCOAL FILTER DAMPER ACTUATORS WERE CONNECTED INCORRECTLY CAUSING DAMPER TO OPERATE INCORRECTLY. DAMPER OPERATORS WERE REMOUNTED TO PROVIDE CORRECT DAMPER OPERATION. NO FURTHER ACTION IS REQUIRED.

[67] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-043 REV 1
UPDATE ON ALL CEAS LOSE REED SWITCH POSITION INDICATION.
EVENT DATE: 080483 REPORT DATE: 012584 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ELECTRO-MECHANICS

(NSIC 188615) AT 1315 DURING NORMAL OPERATION, REED SWITCH POSITION INDICATION (RSPI) WAS LOST FOR ALL CEAS (TECH SPEC 3.1.3.3). TROUBLESHOOTING COMMENCED IMMEDIATELY. AT 1345, A SHORT WAS DISCOVERED ON THE CEA 32 REED STACK. THE LEADS TO CEA 32 REED STACK WERE LIFTED RESTORING PROPER INDICATION ON ALL OTHER REED STACK CHANNELS. ALL CEA PULSE COUNTING POSITION INDICATOR CHANNELS AND UPPER ELECTRICAL LIMIT SWITCHES REMAINED OPERABLE THROUGHOUT THE EVENT. SIMILAR EVENTS: 50-317/83-36; 50-318/82-22. A SHORT IN CEA 32'S REED STACK POSITION TRANSMITTER (RSPT) (ELECTRO-MECHANICS, PART #N9027, REV. 1) CAUSED RSPI POWER SUPPLY TO OVERLOAD. THE CMI FEATURE WAS RETAINED VIA A TEMPORARY MODIFICATION UNTIL THE FAILED RSPT WAS REPLACED DURING THE UNIT'S REFUELING OUTAGE. THE FAILED RSPT WAS REPAIRED FOLLOWING VENDOR'S ROOT CAUSE INSPECTION.

[68] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-047 REV 1
UPDATE ON CONTROL ROOM AIR CONDITIONER FAILS TO START.
EVENT DATE: 082283 REPORT DATE: 012684 NSSS: CE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: HEAT EXCHANGERS
VENDOR: TRANE COMPANY

(NSIC 188861) AT 2155 DURING NORMAL OPERATION, 12 CONTROL ROOM AIR CONDITIONER

(CRAC) COMPRESSOR WOULD NOT RUN WHEN IT RECEIVED A START SIGNAL (TECH SPEC 3.7.6.1). INVESTIGATION REVEALED THE COMPRESSOR HAD TRIPPED ON HIGH PRESSURE. THE COMPRESSOR WAS RESET AND THE 12 CRAC RETURNED TO SERVICE AT 2315. 11 CRAC REMAINED OPERABLE THROUGHOUT THE EVENT. SIMILAR EVENTS: NONE. MAINTENANCE PERSONNEL INSPECTED AC UNIT AND RESET HIGH PRESSURE SWITCH. NO ABNORMALITY WAS OBSERVED. THE UNIT WAS RESTARTED AND OPERATED NORMALLY. ON 1/24/84 THE HIGH PRESSURE SWITCH WAS CHECKED FOR CALIBRATION AND FOUND TO BE SET AT 353 PSI. IT WAS ADJUSTED TO THE SETPOINT GIVEN IN THE TRANE TECH MANUAL (365 PSI). NO FURTHER ACTION REQUIRED.

[69] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-055 REV 1
UPDATE ON MAIN STEAM SAFETY VALVES OUT OF CALIBRATION.
EVENT DATE: 100183 REPORT DATE: 122183 NSSS: CE TYPE: PWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: VALVES
VENDOR: DRESSER INDUSTRIAL VALVE & INST DIV

(NSIC 188561) AT 0900 DURING SHUTDOWN OPERATIONS WHILE PERFORMING SURVEILLANCE TESTS, THREE MAIN STEAM SAFETY VALVES DID NOT LIFT AT THE REQUIRED SETPOINT. RV-3995 AND RV-3996 LIFTED PRIOR TO REACHING THE SETPOINT AND RV-4006 LIFTED HIGHER THAN THE SETPOINT (TECH SPEC 3.7.1.1). THE REACTOR ENTERED MODE 5 AT 2020 ON 10-1, TERMINATING THE EVENT. ALL OTHER MAIN STEAM SAFETY VALVES REMAINED OPERABLE DURING THE EVENT. SIMILAR EVENTS: 50-317/82-21; 50-318/82-48. THE SUBJECT VALVES (DRESSER TYPE 3700) WERE DISASSEMBLED, INSPECTED, AND REPAIRED DURING THE CURRENT REFUELING OUTAGE. THE VALVES WERE RESET AND TESTED SATISFACTORILY DURING PLANT STARTUP. NO FURTHER ACTION IS DEEMED NECESSARY.

[70] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-064 REV 1
UPDATE ON HPSI FLOW RATE IMBALANCE.
EVENT DATE: 110383 REPORT DATE: 012484 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188904) DURING SHUTDOWN OPERATION, A HPSI BALANCE TEST REVEALED INDIVIDUAL INJECTION LEG FLOW RATES OUTSIDE THE ALLOWABLE LIMITS OF TECH SPEC 4.5.2 G&H. HPSI HEADER ISOLATION VALVE STROKE LIMITS WERE ADJUSTED TO BRING THE INJECTION LEG FLOW RATES INTO SPECIFICATION. SIMILAR EVENTS: NONE. SOME MAINTENANCE PROCEDURES DID NOT PREVIOUSLY REQUIRE POST-MAINTENANCE VALVE STROKE MEASUREMENTS. VALVE TRAVEL WAS ADJUSTED FOR PROPER FLOW RATES. TO PREVENT RECURRENCE, INFORMATION TAGS WILL BE HUNG, MAINTENANCE PROCEDURES WILL BE REVISED, FLOW RATES WILL BE TESTED EACH REFUELING OUTAGE, AND A FLOW RATE SPECIFICATION RELAXATION WILL BE INVESTIGATED.

[71] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-071
TURBINE RUNBACK CAUSES LOW RCS PRESSURE.
EVENT DATE: 121083 REPORT DATE: 010984 NSSS: CE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MERCOID CORP.

(NSIC 188509) AT 2200 WHILE INCREASING POWER, PRESSURIZER (PZR) PRESSURE DECREASED TO 2180 PSIA (TECH SPEC 3.2.5). A PRESSURE SWITCH IN THE STATOR LIQUID COOLING SYSTEM FAILED CAUSING A TURBINE RUNBACK. THE OPERATOR DECREASED REACTOR POWER AND IN TURN DECREASED REACTOR COOLANT SYSTEM (RCS) TEMPERATURE. AS RCS TEMPERATURE DECREASED, PZR PRESSURE DECREASED TO 2180 PSIA. PZR PRESSURE RETURNED TO NORMAL 3 MINUTES LATER TERMINATING THE EVENT. SIMILAR EVENTS: NONE. INVESTIGATION FOUND THE PRESSURE SWITCH (MERCOID DA33-2) FAILED BECAUSE A SCREW HOLDING THE SWITCH ACTUATOR TO THE BOURDON TUBE HAD LOOSENED. THE SCREW WAS REPLACED AND THE SWITCH TESTED SATISFACTORILY. NO CAUSE FOR THE LOOSENED SCREW CAN BE FOUND. A THREAD FILLER, GLYPTOL, WILL BE APPLIED TO THE SCREW TO PREVENT RECURRENCE.

[72] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-074
SALTWATER SUBSYSTEM HAS LOW FLOW.
EVENT DATE: 121383 REPORT DATE: 011284 NSSS: CE TYPE: PWR
SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: ITE IMPERIAL CORPORATION

(NSIC 188905) AT 0952 FLOW WAS LOST IN A SALTWATER SUBSYSTEM WHEN AN OPERATOR MISTAKENLY OPERATED THE 4KV DISCONNECT ON THE OPERATING SALTWATER PUMP IN THAT SUBSYSTEM (TECH SPEC 3.7.4.1). THE OPERATOR HAD BEEN INSTRUCTED TO OPERATE THE DISCONNECT ON A SERVICE WATER PUMP WHICH WAS NOT IN OPERATION. AT 0954 FLOW WAS RESTORED. THE REDUNDANT SALTWATER SUBSYSTEM REMAINED OPERABLE THROUGHOUT THE EVENT. NO SIMILAR EVENTS HAVE BEEN REPORTED. THE CAUSE OF THIS EVENT WAS THE OPERATOR'S FAILURE TO VERIFY HE WAS OEPRATING THE PROPER EQUIPMENT. A STANDING INSTRUCTION HAS BEEN ISSUED REQUIRING ALL OPERATION OF 4KV MANUAL DISCONNECTS TO BE PERFORMED BY TWO OPERATORS SUCH THAT THE SECOND OPERATOR MUST VERIFY THE FIRST OPERATOR IS OPERATING THE CORRECT DISCONNECT PRIOR TO ITS OPERATION.

[73] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-069
TWO UV TRIP DEVICES HAVE LONG RESPONSE TIME.
EVENT DATE: 122183 REPORT DATE: 011984 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

(NSIC 188862) AT 0900 DURING MONTHLY SURVEILLANCE TEST OF REACTOR TRIP CIRCUIT BREAKER (TCB) UNDERVOLTAGE (UV) DEVICES, THE RESPONSE TIME OF TCB 2 AND 6 UV TRIP DEVICES WAS SLOWER (BETWEEN 1.0 AND 1.4 SEC) THAN ALLOWED BY TECH SPEC 3.3.1.1. THE BREAKERS AND UV DEVICES WERE ADJUSTED AND TESTED SATISFACTORILY AT 0440, 12-22-83. TCB 2 AND 6 REDUNDANT SHUNT TRIP DEVICES WERE OPERATIONAL WITH SATISFACTORY RESPONSE TIMES. THE OTHER SIX TCBS REMAINED OPERABLE DURING THIS EVENT. SIMILAR EVENTS: 83-37; 50-318/83-36. THIS EVENT WAS CAUSED BY SETPOINT DRIFT AND WORN OR BINDING FRONT FRAME ASSEMBLY MECHANISMS (FFAM) ON THE TCBS. CORRECTIVE ACTION INCLUDED REPLACEMENT OF FFAMS AND UV DEVICES. AFTER ADJUSTING AND TESTING, UV TRIP DEVICE RESPONSE TIMES WERE LESS THAN .050 SECONDS. NO FURTHER ACTION IS REQUIRED.

[74] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-072
TWO REACTOR PROTECTION FLOW CHANNELS INOPERABLE.
EVENT DATE: 122283 REPORT DATE: 010584 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188863) AT 1505 DURING NORMAL OPERATION, REACTOR PROTECTION SYSTEM CHANNELS A AND C FOR REACTOR COOLANT FLOW WERE FOUND TO BE INOPERABLE (TECH SPEC 3.3.1.1). CHANNEL C WAS REPAIRED AND RETURNED TO SERVICE AT 1530. CHANNEL A WAS REPAIRED AND RETURNED TO SERVICE ON 12-31-83. THE TWO REDUNDANT CHANNELS REMAINED OPERABLE DURING THIS EVENT. SIMILAR EVENTS: NONE. CHANNEL A FLOW WAS DECLARED INOPERABLE DUE TO ERRATIC INDICATION. TRANSMITTER WAS REPAIRED AND NEW FLOW SETPOINT DETERMINED FOR CHANNEL A AND INSERTED. PROCEDURE INADEQUACY WAS CAUSE FOR CHANNEL C FLOW SETPOINT.

[75] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-075
RPS CHANNEL FOR HIGH POWER AND THERMAL MARGIN/LOW PRESSURE INOPERABLE.
EVENT DATE: 122783 REPORT DATE: 012784 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BELL AND HOWELL

(NSIC 188759) AT 1220 DURING NORMAL OPERATION, REACTOR PROTECTION SYSTEM (RPS) CHANNEL D FOR HIGH POWER AND THERMAL MARGIN/LOW PRESSURE (TM/LP) WERE FOUND TO BE INOPERABLE (TECH SPEC 3.3.1.1). THE TRIP UNITS WERE REPAIRED AND RETURNED TO

SERVICE AT 1510. THE REMAINING THREE CHANNELS FOR EACH TRIP REMAINED OPERABLE DURING THIS EVENT. SIMILAR EVENTS: NONE. CAUSE OF EVENT WAS FOREIGN MATERIAL ON THE TM/LP POWER SUPPLY LEADS CAUSING THE POWER SUPPLY TO LOAD DOWN AND CHANNEL D TM/LP TRIP ON THE REACTOR PROTECTIVE SYSTEM. POWER SUPPLY LEADS AND TERMINATIONS CLEANED AND TM/LP CHANNEL D RETURNED TO NORMAL. CHANNEL D DECLARED OPERABLE. NO FURTHER ACTION IS REQUIRED.

[76] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-078
LOW PRESSURIZER LEVEL.
EVENT DATE: 122983 REPORT DATE: 012784 NSSS: CE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188562) FOR THE PAST 30 DAYS, PRESSURIZER LEVEL DECREASED BELOW 133 INCHES THREE TIMES (T.S3.4.4). PRESSURIZER LEVEL DECREASED TO 130 INCHES FOR 5 MINUTES AT 1230, TO 130 INCHES FOR 3 MINUTES AT 2125, AND TO 127 INCHES FOR 10 MINUTES AT 2135 DURING NORMAL STARTUP OPERATIONS ON 12-29-83. SIMILAR EVENTS: 50-317/83-70; 50-318/83-78. RCS TEMPERATURE SWINGS OF 10 DEGREES ARE NOT UNCOMMON DURING NORMAL STARTUP OPERATIONS. THESE TEMPERATURE SWINGS CAN RESULT IN PRESSURIZER LEVEL DECREASING BELOW 133 INCHES. THE PRESSURIZER LEVEL PROGRAM WILL BE CHANGED TO PREVENT RECURRENCE.

[77] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-076
BEARINGS DAMAGED ON AFW PUMP.
EVENT DATE: 123083 REPORT DATE: 012684 NSSS: CE TYPE: PWR
SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: PUMPS
VENDOR: INGERSOL-RAND CO.

(NSIC 188510) AT 1025 ON 12-30-83, 13 AFW PUMP WAS REMOVED FROM SERVICE TO REPAIR AN OIL LEAK ON THE OUTBOARD PUMP BEARING. AT 1320, WHILE ATTEMPTING TO DRAIN OIL FROM THE BEARING, THE BEARING DRAIN WAS FOUND PLUGGED WITH METAL FILINGS, INDICATING BEARING DAMAGE HAD OCCURRED. THE BEARING WAS REPLACED AND THE PUMP RETURNED TO SERVICE AT 1655 ON 1-10-84. SIMILAR EVENTS: NONE. BEARING FAILURE WAS THE RESULT OF IMPROPER LUBRICATION CAUSED BY AN OBSTRUCTION IN THE BEARING HOUSING OIL RETURN PASSAGE. INSPECTION REVEALED THAT A PORTION OF AN O-RING REMAINED FROM MANUFACTURE. THE O-RING WAS REMOVED. THE OIL RETURN PASSAGE ON THE OTHER ELECTRIC DRIVEN AFW PUMP, NO. 23, WAS INSPECTED AND VERIFIED TO BE FREE FROM BLOCKAGE.

[78] CALVERT CLIFFS 2 DOCKET 50-318 LER 82-002 REV 1
UPDATE FOR LOSS OF 4 KV BUS.
EVENT DATE: 020482 REPORT DATE: 120183 NSSS: CE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MONSANTO RESEARCH CORP.

(NSIC 188660) AT 0611, DURING SURVEILLANCE TESTING, UPON PRESSING THE ZD GROUP TEST BUTTON FOR 21 4KV BUS UV SENSOR MODULE, FEEDER BREAKER 152-2101 TRIPPED OPEN CAUSING LOSS OF POWER TO 21 4KV BUS (TECH SPEC 3.8.2.1). NO. 12 DIESEL GENERATOR STARTED AND WAS AVAILABLE FOR LOADING. FEEDER BREAKER 152-1201 WAS CLOSED AT 0612 REENERGIZING 21 4KV BUS. THE REDUNDANT AC ELECTRICAL BUSES REMAINED OPERABLE THROUGHOUT THIS EVENT. SIMILAR EVENTS: NONE. A FAILED ISOLATION MODULE (VITRO #1628-1082) WAS APPLYING A FALSE, HIDDEN TRIP SIGNAL THAT LED TO THE BREAKER TRIP. VITRO RESEARCHED THE RELATIVELY LARGE NUMBER OF ISOLATION MODULE FAILURES AND FOUND A DESIGN DEFECT IN A MONSANTO MCT2 OPTOISOLATOR. REPLACEMENT OF ALL MODULES WITH THIS DEFECT WILL BEGIN ON BOTH UNITS DURING THE NEXT REFUELING OUTAGE.

[79] CALVERT CLIFFS 2 DOCKET 50-318 LER 82-031 REV 1
UPDATE ON EDG FAILURE.
EVENT DATE: 061982 REPORT DATE: 011984 NSSS: CE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: FAIRBANKS MORSE

(NSIC 188833) AT 1315 DURING NORMAL PLANT OPERATION WHILE PERFORMING A PREVENTIVE MAINTENANCE TEST, 12 DIESEL SPEED CONTROL FAILED SUCH THAT LOAD COULD NOT BE LOWERED OR RAISED (TECH SPEC 3.8.1.1). THE REMAINING DIESEL GENERATORS AND OFF-SITE POWER WERE VERIFIED OPERABLE. ADJUSTMENTS WERE MADE TO THE GOVERNOR, THE DIESEL GENERATOR WAS TESTED AND RETURNED TO SERVICE AT 1920. SIMILAR EVENTS: NONE. THIS EVENT WAS CAUSED BY THE D/G GOVERNOR BEING OUT OF ADJUSTMENT. THE LOAD LIMIT KNOB NEEDED ADJUSTMENT AND THE VOLTAGE INPUT TO THE ELECTRIC GOVERNOR ACTUATOR WAS HIGH. THESE TWO ITEMS WERE ADJUSTED AND THE DIESEL CONTROLLED PROPERLY DURING A ONE HOUR TEST.

[80] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-020 REV 1
UPDATE ON ECCS ROOM EXHAUST FAN DAMPER FAILS TO OPEN.
EVENT DATE: 041583 REPORT DATE: 122983 NSSS: CE TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVES

(NSIC 188760) DURING NORMAL OPERATION WHILE SURVEILLANCE TESTING THE EXHAUST DAMPER TO 21 ECCS ROOM EXHAUST FAN (HVAC-5437), THE DAMPER WAS FOUND DISCONNECTED FROM ITS ACTUATOR AND IN THE SHUT POSITION. THE EFFECTED VENTILATION TRAIN WAS DECLARED INOPERABLE (TECH SPEC 3.7.7.1). THE ACTUATOR WAS RECONNECTED AND THE TRAIN DECLARED OPERABLE 20 MINUTES AFTER DISCOVERY. A REDUNDANT VENTILATION PATH REMAINED OPERABLE DURING THIS EVENT. SIMILAR EVENTS: NONE. THE PRESS FIT BETWEEN THE DAMPER LEVER ARM AND THE BUSHING WAS LOOSENED BY WEAR RESULTING IN THE ARM SEPARATING FROM THE BUSHING MAKING THE DAMPER INOPERABLE. THE LEVER ARM WAS STAKED IN PLACE TO RESTORE OPERABILITY. FACILITY CHANGE REQUEST (83-67) TO TACK WELD THE BUSHING TO THE LEVER ARM WAS COMPLETED ON 12/19/83. FOUR EXHAUST DAMPERS WERE ALSO WELDED.

[81] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-037 REV 1
UPDATE ON ECCS PUMP ROOM DAMPER FAILS TO OPEN.
EVENT DATE: 080383 REPORT DATE: 011384 NSSS: CE TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVE OPERATORS
VENDOR: TRANE COMPANY

(NSIC 188906) AT 1730 DURING PERFORMANCE OF SURVEILLANCE TESTS, THE ECCS PUMP ROOM EXHAUST VENTILATION SYSTEM CHARCOAL FILTER INLET DAMPER WOULD NOT OPEN WHEN THE FILTERS' BYPASS DAMPER WAS SHUT (TECH SPEC 3.7.7.1). THE INLET DAMPER WAS SECURED IN THE OPEN POSITION RESTORING THE SYSTEM TO OPERABLE STATUS. SUBSEQUENT INVESTIGATION REVEALED THE CHARCOAL FILTERS PASSED THE REQUIRED AMOUNT OF AIR WHEN THE INLET DAMPER WAS SHUT. SIMILAR EVENTS: 50-317/83-41. THE CHARCOAL FILTER DAMPER ACTUATORS WERE CONNECTED INCORRECTLY CAUSING DAMPER TO OPERATE INCORRECTLY. DAMPER OPERATORS WERE REMOUNTED TO PROVIDE CORRECT DAMPER OPERATION. NO FURTHER ACTION IS REQUIRED.

[82] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-040 REV 1
UPDATE ON TWO REACTOR SCRAMS FOLLOWING RAPID CLOSURE OF TURBINE VALVES.
EVENT DATE: 080983 REPORT DATE: 111083 NSSS: CE TYPE: PWR
SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188688) ON 9, 22 AND 27 AUGUST, DURING NORMAL OPERATIONS, A FAILURE IN THE TURBINE CONTROL CIRCUITRY CAUSED A RAPID CLOSURE OF THE MAIN TURBINE GOVERNOR VALVES. THE POWER MISMATCH BETWEEN PRIMARY AND SECONDARY CAUSED COLD LEG TEMPERATURE TO EXCEED 548 DEGREES F (TECH SPEC 3.2.5). THE FIRST 2 EVENTS WERE

TERMINATED BY INITIATING A MANUAL REACTOR TRIP. THE THIRD EVENT WAS TERMINATED BY REOPENING THE AFFECTED CONTROL VALVES IN "TURBINE MANUAL." SIMILAR EVENTS: NONE. EXTENSIVE TROUBLESHOOTING REVEALED THE CAUSE OF THE GOVERNOR VALVES' CLOSURES TO BE A FAILED SPEED ERROR AMPLIFIER 'A' (WESTINGHOUSE #398792) PRINTED CIRCUIT CARD IN THE MAIN TURBINE ELECTRO-HYDRAULIC CONTROL SYSTEM. THE CARD WAS REPLACED WITH A SPARE FROM STOCK. NO FURTHER ACTION IS DEEMED NECESSARY.

[83] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-052 REV 1
UPDATE ON AFW PUMP INOPERABLE.
EVENT DATE: 092883 REPORT DATE: 102883 NSSS: CE TYPE: PWR
SYSTEM: OTHER AUX WATER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188563) AT 1715 DURING NORMAL OPERATIONS, 23 AUXILIARY FEEDWATER (AFW) PUMP WAS FOUND TO BE INOPERABLE (TECH SPEC 3.7.1.2.A). AT 2120 THE PUMP WAS RETURNED TO SERVICE. DURING THIS PERIOD THE REMAINING AFW PUMPS WERE OPERABLE. SIMILAR EVENTS: NONE. INVESTIGATION FOUND ALL #23 AFW PUMP MOTOR BREAKER (G.E. AMH 4.76-250-ID) PROTECTIVE RELAYS TRIPPED. THE RELAYS WERE RESET. NO OPERATIONAL PROBLEMS WERE FOUND. SUSPECTED CAUSE IS WORKERS SHORTING INTERNAL BREAKER CIRCUITS WHEN WORKING SCAFFOLDING WHILE GROUTING AT CUBICLE BASE WITH DOOR OPEN. A FACILITY CHANGE TO ADD ALARMS IS BEING INVESTIGATED.

[84] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-057 REV 1
UPDATE ON LEAKING CONTAINMENT AIR LOCK DOOR.
EVENT DATE: 101783 REPORT DATE: 121583 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS,PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 188564) AT 0715 DURING PERFORMANCE OF SURVEILLANCE TEST PROCEDURES, AN EXCESSIVE LEAK RATE PAST THE CONTAINMENT PERSONNEL AIR LOCK OUTER DOOR WAS DISCOVERED (TECH SPEC 3.6.1.3). THE SOURCE OF THE LEAK WAS LOCATED AND REPAIRED AT 1800. THE INNER DOOR REMAINED CLOSED THROUGHOUT THE EVENT. SIMILAR EVENTS: 50-318/82-01 AND 50-317/82-01. DEGRADATION OF THE GASKET CAUSED THE GASKET TO LEAK. THE GASKET AND GROOVE WERE CLEANED AND LUBRICATED. THE GASKET WAS REVERSED TO PRESENT A NEW SEATING SURFACE AND SUBSEQUENTLY PASSED ITS LEAKAGE TEST. TO PREVENT RECURRENCE, PREVENTIVE MAINTENANCE ITEMS HAVE BEEN APPROVED TO LUBRICATE AND INSTALL NEW DOOR GASKETS PERIODICALLY.

[85] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-064 REV 1
UPDATE ON HPSI HEADER ISOLATION VALVES OUT OF ADJUSTMENT.
EVENT DATE: 110583 REPORT DATE: 012484 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188907) AFTER OBTAINING RESULTS OF THE UNIT 1 HPSI FLOW BALANCE TEST, THE UNIT 2 HPSI HEADER ISOLATION VALVES' STROKES WERE MEASURED AND ADJUSTED TO THE PREVIOUSLY KNOWN SETTINGS TO ALLOW PROPERLY BALANCED FLOW. (TECH SPEC 4.5.2.G&H). SIX VALVES REQUIRED ADJUSTMENTS. SIMILAR EVENT: 50-317/83-64. SOME MAINTENANCE PROCEDURES DID NOT PREVIOUSLY REQUIRE POST-MAINTENANCE VALVE STROKE MEASUREMENTS. VALVE TRAVEL WAS ADJUSTED FOR PROPER FLOW RATES. TO PREVENT RECURRENCE, INFORMATION TAGS WILL BE HUNG, MAINTENANCE PROCEDURES WILL BE REVISED, FLOW RATES WILL BE TESTED EACH REFUELING OUTAGE, AND A FLOW RATE SPECIFICATION RELAXATION WILL BE INVESTIGATED.

[86] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-070
PRESSURIZER LEVEL TOO LOW.
EVENT DATE: 112583 REPORT DATE: 122283 NSSS: CE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188566) AT 2310 DURING NORMAL START-UP OPERATIONS, PRESSURIZER LEVEL DECREASED TO 116 INCHES (TECH SPEC 3.4.4) WHILE LOADING THE MAIN TURBINE. PRESSURIZER LEVEL RETURNED TO NORMAL 2 MINUTES LATER TERMINATING THE EVENT. SIMILAR EVENTS: 50-318/83-55. RCS TEMPERATURE SWINGS OF 10 DEGREES ARE NOT UNCOMMON DURING NORMAL START-UP OPERATIONS. THESE TEMPERATURE SWINGS CAN RESULT IN PRESSURIZER LEVEL DECREASING BELOW 133 INCHES. A CHANGE TO THE PRESSURIZER PROGRAM LEVEL IS IN PROGRESS.

[87] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-067
CHARGING PUMP TAKEN OUT OF SERVICE.
EVENT DATE: 120883 REPORT DATE: 010684 NSSS: CE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: VALVES
VENDOR: CORSBY VALVE & GAGE CO.

(NSIC 188565) AT 0655 DURING NORMAL OPERATION, WITH NUMBER 22 CHARGING PUMP OUT OF SERVICE, 23 CHARGING PUMP DISCHARGE RELIEF VALVE LIFTED. 23 CHARGING PUMP WAS IMMEDIATELY REMOVED FROM SERVICE (TECH SPEC 3.1.2.4). 22 CHARGING PUMP WAS RETURNED TO SERVICE AT 0935. 21 CHARGING PUMP REMAINED OPERABLE DURING THE EVENT. SIMILAR EVENTS: 82-13. 2-RV-324 WAS TESTED AND FOUND TO LIFT AT 2650 PSIG. DISASSEMBLY OF THE VALVE REVEALED A DAMAGED DISC. THE DISC WAS REPLACED AND FURTHER TESTING ACHIEVED THE CORRECT SETPOINT. THE VALVE WAS INSTALLED AND #23 CHARGING PUMP RETURNED TO SERVICE. CAUSE OF RELIEF VALVE LIFTING WAS A DAMAGED DISC. NO FURTHER CORRECTIVE ACTION REQUIRED.

[88] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-075
SPURIOUS CRA MOTION INHIBIT ACTUATION.
EVENT DATE: 121083 REPORT DATE: 010984 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ELECTRO-MECHANICS

(NSIC 188567) DURING NORMAL OPERATION, AN INTERMITTENT FAILURE IN THE METRASCOPE CEA POSITION INDICATION SYSTEM CAUSED SPURIOUS CEA MOTION INHIBIT (CMI), AND CEA GROUP OUT OF SEQUENCE ALARMS. CMI WAS DECLARED INOPERABLE FOR 12 HOURS DURING WHICH TIME THE CEA CONFIGURATION WAS VERIFIED PER TECH SPEC 3.1.3.1. ACTUAL CEA POSITIONS WERE AVAILABLE ON ALL POSITION INDICATION SYSTEMS. SIMILAR EVENTS: 50-317/83-65. THE REED STACK POSITION TRANSMITTER (RSPT) (ELECTRO-MECHANICS, PART #19027, REV. 1) FOR CEA 4 FAILED (INTERMITTENT GROUND), REASON UNKNOWN. THE CMI FEATURE HAS BEEN RETAINED VIA A MODIFICATION. RSPT WILL BE REPLACED DURING THE NEXT REFUELING OUTAGE. RESULTS OF ROOT CAUSE INVESTIGATION ARE BEING ANALYZED; AN UPDATE REPORT WILL BE SUBMITTED PENDING RESULTS.

[89] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-072
MAIN STEAM ISOLATION VALVE INADVERTENTLY SHUTS.
EVENT DATE: 121783 REPORT DATE: 011284 NSSS: CE TYPE: PWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: PIPES,FITTINGS
VENDOR: GREER HYDRAULICS, INC.

(NSIC 188908) AT 0323 DURING PERFORMANCE OF SURVEILLANCE TESTS, 21 MAIN STEAM ISOLATION VALVE (MSIV) INADVERTENTLY WENT SHUT. A LOW PRESSURE HYDRAULIC LINE ON 21 MSIV BECAME DISCONNECTED AND THE HYDRAULIC FLUID RESERVOIR LEVEL DECREASED RENDERING 21 MSIV INOPERABLE (TECH SPEC 3.7.1.5). THE LINE WAS REPLACED AND THE MSIV RETURNED TO SERVICE AT 1345. SIMILAR EVENTS: NONE. THE DRAIN LINE BECAME DISCONNECTED DUE TO THE FAILURE OF A SWAGELOK COMPRESSION FITTING. THE "BITE" OF THE CARBON STEEL FERRULE ON THE EXISTING STAINLESS STEEL TUBING WAS INSUFFICIENT. THE TUBING HAS BEEN CHANGED TO CARBON STEEL OF GREATER WALL THICKNESS. USE OF A SPECIALIZED MACHINE TO CONNECT THE FERRULE HAS SUPPLIED A SECURER FITTING.

[90] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-071
PDIL FOR ONE GROUP OF RODS INOPERABLE RENDERING CMI INOPERABLE.
EVENT DATE: 121983 REPORT DATE: 011884 NSSS: CE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: METRA INSTRUMENTS

(NSIC 188761) AT 1240, DURING A RETURN TO FULL POWER, THE POWER DEPENDENT INSERTION LIMIT (PDIL) FOR GROUP 4 RODS WAS FOUND INOPERABLE WHICH RENDERED CEA MOTION INHIBIT (CMI) INOPERABLE (TECH SPEC 3.1.3.1). PDIL WAS REPAIRED AND CMI DECLARED OPERABLE AT 1440 ON 12-20-83. CEAS WERE MAINTAINED FULLY WITHDRAWN AND THE CEA CONTROL SYSTEM WAS MAINTAINED IN THE OFF CONDITION DURING THIS EVENT. SIMILAR EVENT: 83-27/50-318. THE GROUP IV PDIL SETPOINTS WERE FOUND TO BE OUT OF TOLERANCE FOR 35% POWER, HOWEVER IN TOLERANCE AT OTHER POWER LEVELS. PDIL WAS READJUSTED AND AT 1440 ON 12-20-83 CMI WAS DECLARED OPERABLE. CAUSE OF EVENT WAS PERSONNEL ERROR.

[91] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-073
RPS CHANNEL FOR SG LOW PRESSURE TRIP INOPERABLE.
EVENT DATE: 122083 REPORT DATE: 011984 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: POWER-MATE

(NSIC 188762) AT 1140 DURING NORMAL OPERATION, REACTOR PROTECTION SYSTEM CHANNEL D FOR STEAM GENERATOR LOW PRESSURE TRIP WAS FOUND TO BE INOPERABLE (TECH SPEC 3.3.1.1). THE TRIP UNIT WAS REPAIRED AND RETURNED TO SERVICE AT 1235. THE THREE REDUNDANT CHANNELS REMAINED OPERABLE DURING THIS EVENT. SIMILAR EVENTS: NONE. CAUSE OF CHANNEL D INOPERABILITY WAS DUE TO FAILURE OF THE TRIP UNIT POWER SUPPLY (POWER MATE NO. DRA 15-0.750). THE POWER SUPPLY WAS REPLACED AND THE CHANNEL RETURNED TO SERVICE. THE POWER SUPPLY WILL BE RETURNED TO THE MANUFACTURER FOR FAILURE ANALYSIS AND AN UPDATE REPORT WILL BE SUBMITTED.

[92] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-077
CHARGING HEADER DRAIN LINE LEAKS.
EVENT DATE: 122183 REPORT DATE: 011984 NSSS: CE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: PIPES,FITTINGS
VENDOR: BECHTEL CORP.

(NSIC 188765) AT 0600 DURING NORMAL OPERATION A LEAK WAS DISCOVERED IN A CHARGING HEADER DRAIN LINE (TECH SPEC 6.9.1.9). AN ENGINEERING EVALUATION IS CURRENTLY IN PROGRESS TO DETERMINE THE METHOD OF REPAIR. SIMILAR EVENTS: 50-318/81-35 & 83-49. LINE VIBRATION AND THE LACK OF RESTRAINT CAUSED FAILURE OF A 3/4" SOCKET WELD. A RESTRAINT HAS BEEN INSTALLED UNDER PCR 84-1 WHICH ALSO CALLS FOR ANALYSIS OF THE 2"-CC-7 PIPING TO DETERMINE WHERE OTHER RESTRAINTS MAY BE NEEDED. THE LEAK RATE OF THE FAILURE IS BEING MONITORED; WELD REPAIRS WILL BE DONE NO LATER THAN THE 1984 UNIT 2 REFUELING OUTAGE.

[93] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-074
AUXILIARY FEEDWATER PUMP STARTS ON VALVE FAILURE.
EVENT DATE: 122383 REPORT DATE: 011984 NSSS: CE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVES
VENDOR: FISHER CONTROLS CO.

(NSIC 188763) DURING NORMAL OPERATION, THE MAIN STEAM SUPPLY VALVE TO THE STEAM DRIVEN AUXILIARY FEEDWATER (AFW) PUMPS FAILED OPEN CAUSING 21 AFW PUMP TO START. TO REPAIR THE VALVE, THE AUTO INITIATE CAPABILITY FOR THE STEAM DRIVEN AFW PUMPS WAS DEFEATED (TECH SPEC 3.7.1.2). THE AFW SYSTEM WAS RETURNED TO A NORMAL LINEUP 17.5 HOURS AFTER BEING DECLARED INOPERABLE. THE MOTOR DRIVEN PUMP REMAINED OPERABLE THROUGHOUT THE EVENT. SIMILAR EVENTS: 50-318/83-35, 83-39, & 83-50.

THE ACTUATOR DIAPHRAGM CASING BOLT HOLES ON 2-CV-4070 WERE ELONGATED LETTING THE DIAPHRAGM LEAK THROUGH THE HOLES. A NEW DIAPHRAGM WAS INSTALLED AND THE VALVE WAS CYCLED SATISFACTORILY. ENGINEERING IS INVESTIGATING PROBLEMS WITH THIS TYPE VALVE TO DETERMINE FUTURE CORRECTIVE ACTION.

[94] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-076
TWO CEA'S DROP INTO CORE.
EVENT DATE: 122783 REPORT DATE: 012684 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 188764) DURING THE PAST 30 DAYS, 2 CEAS HAVE DROPPED INTO THE CORE. ON 12-27 AT 1903 CEA-1 DROPPED INTO THE CORE, AND AGAIN ON 12-28 AT 0633, CEA-64 DROPPED INTO THE CORE DURING PERFORMANCE OF SURVEILLANCE TESTS. REACTOR POWER WAS REDUCED TO 70% PER TECH SPEC 3.1.3.1 AND CEAS WERE REALIGNED WITH THEIR GROUP. ALL OTHER CEAS REMAINED OPERABLE THROUGHOUT THE EVENTS. SIMILAR EVENTS: 50-317/82-36; 50-318/82-26. ELECTRICAL TESTING OF THE CEAS DURING OPERATION DISCLOSED NO CAUSE FOR THIS EVENT. THE LICENSEE IS CONTINUING EFFORTS TO DETERMINE THE CAUSE OF THIS EVENT. CURRENT TRACES WILL BE TAKEN AND EVALUATED ON EACH CEA IN THE REGULATING GROUPS DURING THE NEXT SCHEDULED TEST.

[95] CONNECTICUT YANKEE DOCKET 50-213 LER 83-022
VOLUME CONTROL TANK VALVE INOPERABLE.
EVENT DATE: 112383 REPORT DATE: 122283 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188309) WHILE OPERATING AT STEADY STATE POWER, VOLUME CONTROL TANK OUTLET VALVE MOV 257 CONTROL POWER FAILED. IF CALLED ON TO OPERATE AS DESIGNED, IT MAY HAVE FAILED TO DO SO. AN OPERATOR WAS STATIONED AT THE VALVE FOR MANUAL OPERATION. THIS IS A REPORTABLE EVENT PER TECH SPECS 6.9.2.B(2). CAUSE OF THE PROBLEM WAS AN INADEQUATE AMPACITY CONTROL TRANSFORMER AND PROTECTIVE FUSE. THIS FUSE HAD PREVIOUSLY FAILED ON SEPT. 3, 1983, BUT WAS DETERMINED TO BE A NORMAL ONE TIME FUSE FAILURE. THE TRANSFORMER AND FUSE WERE REPLACED WITH PROPERLY SIZED UNITS. UNIT WAS DECLARED OPERABLE AND PLACED IN SERVICE.

[96] CONNECTICUT YANKEE DOCKET 50-213 LER 83-025
SUBGROUP OF CONTROL RODS FAIL TO MOVE OUT.
EVENT DATE: 120783 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188387) WHILE PERFORMING ROD MOTION CHECKS ON DECEMBER 7, 1983, BANK "A" CONTROL RODS WERE INSERTED FROM THE FULL OUT POSITION OF 320 STEPS TO 310 STEPS. WHEN AN ATTEMPT TO WITHDRAW RODS WAS MADE, THE SUBGROUP 2 RODS FAILED TO MOVE OUT. SALVE CYCLER MOTOR STARTER SWITCH WAS FOUND TO BE FAULTY. FAULTY SWITCH WAS REPLACED. LOAD WAS REDUCED UNTIL REPAIRS WERE COMPLETED TO SATISFY TECH SPEC FOR MINIMUM ROD HEIGHT.

[97] CONNECTICUT YANKEE DOCKET 50-213 LER 83-024
POTENTIAL OF HIGH CONTAINMENT PRESSURE.
EVENT DATE: 123083 REPORT DATE: 011284 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: HEAT EXCHANGERS
VENDOR: STONE & WEBSTER ENGINEERING CORP.

(NSIC 188664) WHILE PERFORMING AN ANALYSIS OF SERVICE WATER (SW) SYSTEM FLOW REQUIREMENTS AS REQUIRED BY SEP TOPIC IX-3, STATION SERVICE AND COOLING WATER SYSTEMS, AND NUREG-0826, SECTION 4.32.4, IT WAS DISCOVERED THAT CALCULATED SW

FLOW TO CONTAINMENT FOR COOLERS MAY BE LESS CONSERVATIVE THAN ASSUMED IN CURRENT CONTAINMENT PRESSURE ANALYSIS. ALSO A PROCEDURAL INADEQUACY WAS DISCOVERED THAT MAY RESULT IN INSUFFICIENT SW FLOW TO FAN COOLERS WHEN SW FLOW IS REQUIRED FOR RESIDUAL HEAT REMOVAL (RHR) HEAT EXCHANGERS. UNDER THE ASSUMPTION OF CONSERVATIVE SW FLOWRATE, THE CALCULATED PEAK CONTAINMENT PRESSURE IS APPROXIMATELY 39 PSIG (DESIGN IS 40 PSIG), THEREFORE, THERE IS ESSENTIALLY NO MARGIN REMAINING TO ACCOMMODATE A DECREASE IN HEAT REMOVAL CAPACITY. SW FLOW THROUGH FAN COOLERS IS MAINTAINED AT A REDUCED RATE BY THROTTLING THE SW OUTLET LINES OF FAN COOLERS IN ORDER TO KEEP THE SW SYSTEM AT A PRESSURE GREATER THAN ACCIDENT PRESSURES, THUS, PREVENTING THE SW SYSTEM FROM BECOMING A POST-ACCIDENT LEAKAGE PATH. IT HAS BEEN CALCULATED THAT CONTAINMENT PRESSURE ANALYSIS IS VALID FOR RIVER WATER TEMPERATURE UNDER 50 F DUE TO THE COMPENSATING EFFECT OF THE COOLER HEAT SINK. ADEQUATE FLOW TO FAN COOLERS IN THE EVENT OF RHR ACTUATION HAS BEEN ENSURED BY MODIFYING PROCEDURES TO REQUIRE THAT TWO SW PUMPS WILL BE AVAILABLE AND UTILIZED FOR SIMULTANEOUS OPERATION OF RHR HEAT EXCHANGERS AND FAN COOLERS.

[98] COOK 1 DOCKET 50-315 LER 82-061 REV 1
UPDATE ON CONTAINMENT RADIATION SWITCHES MALADJUSTED.
EVENT DATE: 072482 REPORT DATE: 031384 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: OTHER COMPONENTS

(NSIC 188890) WHILE SHUTDOWN FOR REFUELING A NEW TYPE OF CONTAINMENT AIR GASEOUS AND PARTICULATE MONITORS WERE INSTALLED. APPROXIMATELY 37 HRS LATER ON JULY 26, IT WAS DISCOVERED THAT THEIR ALARM/TRIP SETPOINT VALUE WAS HIGHER THAN SPECIFIED IN TECH SPEC 3.3.3.1. AT THE TIME OF DISCOVERY THE ACTION OF TECH SPEC 3.9.9 WAS CARRIED OUT. NO APPENDIX B RELEASE LIMITS WERE EXCEEDED. THIS WAS THE 1ST OCCURRENCE OF THIS TYPE AND NO PROBABLE CONSEQUENCE RESULTED. CONTROL ROOM PERSONNEL RESPONSIBLE FOR THE ADMINISTRATIVE SURVEILLANCE OF THE ALARM/TRIP SETPOINT COULD NOT DETERMINE THE PROPER SETPOINT. THE SURVEILLANCE PROCEDURE WAS REVISED AND SETPOINTS SET AT LESS THAN OR EQUAL TO 2X BACKGROUND. ADDITIONAL ADMINISTRATIVE CONTROLS WITHIN THE OPERATIONS DEPT. OVER PRE-INSTALLATION REVIEW AND POST INSTALLATION RELEASE HAVE BEEN INITIATED.

[99] COOK 1 DOCKET 50-315 LER 83-001
CO2 TANK MAIN ISOLATED FOR TEN MINUTES.
EVENT DATE: 011883 REPORT DATE: 021783 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: PYROTRONICS

(NSIC 188380) DURING NORMAL OPERATION, THE UNIT 1 AUXILIARY CABLE VAULT (ZONE 11) EXPERIENCED AN INADVERTENT CO2 DISCHARGE (REF: 50-316/83-019). AFTER DETERMINING THAT THE CO2 ACTUATION WAS SPURIOUS, THE CO2 TANK WAS ISOLATED AT 1625 HOURS TO TERMINATE THE DISCHARGE. THE MAIN ISOLATION VALVE WAS USED WHICH ALSO ISOLATED UNIT 1. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.3.8. THE CO2 TANK MAIN ISOLATION WAS ISOLATED WHICH AFFECTS BOTH UNITS 1 AND 2. APPROXIMATELY 10 MINUTES LATER THE VALVE ISOLATING THE SPECIFIC AREA OF CONCERN WAS CLOSED AND THE MAIN ISOLATION REOPENED. NO FURTHER ACTION PLANNED.

[100] COOK 1 DOCKET 50-315 LER 83-009
SPRAY ADDITIVE OUTLET TANK SEALED CLOSED.
EVENT DATE: 020183 REPORT DATE: 021583 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188552) DURING ROUTINE PLANT TOUR, AN OPERATOR FOUND THE SPRAY ADDITIVE TANK OUTLET VALVE SEALED IN THE CLOSED POSITION. WITH THE VALVE CLOSED, THE NAOH WOULD NOT HAVE BEEN ADDED TO THE CONTAINMENT SPRAY SYSTEM IN THE EVENT OF AN ACCIDENT. THIS IS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.6.2.2. A PRELIMINARY SAFETY EVALUATION HAS BEEN PERFORMED AND PROVIDED TO THE NRC RESIDENT

INSPECTOR. THE OPERATORS WERE DISTRACTED DURING THE PERFORMANCE OF THE TEST. APPROPRIATE ADMINISTRATIVE ACTIONS HAVE BEEN TAKEN. A REVIEW OF STP SCHEDULING IS BEING CONDUCTED.

[101] COOK 1 DOCKET 50-315 LER 83-056
CCW SEAL WATER CHECK VALVE TO H2 SAMPLING PUMPS FOUND LEAKING.
EVENT DATE: 060183 REPORT DATE: 062983 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: VALVES
VENDOR: ROCKWELL-INTERNATIONAL

(NSIC 188381) DURING SURVEILLANCE TEST 12 THP 4030.STP-236, CHECK VALVE NS-262 (CCW SEAL WATER TO THE H2 SAMPLING PUMPS) WAS FOUND TO BE LEAKING. THE H2 SAMPLING PUMPS WERE TAGGED OUT UNDER A MAINTENANCE CLEARANCE TO REPAIR NS-262 AT 1245 HRS ON 6/1/83. THIS IS LESS CONSERVATIVE THAN TECH SPEC 3.6.4.1 REQUIRES. THE ACTION STATEMENTS WERE MET. A PREVIOUS OCCURRENCE WAS 315/83-042. CHECK VALVE NS-262 WAS DISASSEMBLED. THE CAUSE OF LEAKAGE WAS DUE TO DIRT BUILDUP ON THE VALVE SEATING SURFACES. THE SEATING SURFACES WERE CLEANED AND THE VALVE WAS REASSEMBLED. THE H2 SAMPLING PUMPS WERE RETURNED TO SERVICE AT 1456 HRS ON 6/1/83.

[102] COOK 1 DOCKET 50-315 LER 83-058
CONTAINMENT SUMP FLOW RECORDER PAPER TORN.
EVENT DATE: 060983 REPORT DATE: 070683 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ESTERLINE-ANGUS

(NSIC 188553) WHILE PERFORMING A ROUTINE TOUR, AN OPERATOR DISCOVERED THAT THE CONTAINMENT SUMP FLOW MONITORING RECORDER (1-CS-001) WAS NOT ADVANCING. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.4.6.1.B. THE ACTION REQUIREMENTS WERE MET. PREVIOUS OCCURRENCE OF A SIMILAR NATURE INCLUDE: 50-315/83-044. INVESTIGATION REVEALED THAT THE HOLES IN THE CHART PAPER THAT ARE USED TO ADVANCE THE PAPER BY MEANS OF THE PAPER DRIVE WHEEL HAD RIPPED. THE CHART PAPER WAS REALIGNED ON THE DRIVE WHEEL AND THE RECORDER WAS VERIFIED TO BE OPERATING CORRECTLY. A MEMO HAS BEEN SENT TO DEPARTMENT HEADS ADVISING THEM TO USE CAUTION WHEN REVIEWING AND REWINDING THE CHART PAPER.

[103] COOK 1 DOCKET 50-315 LER 83-089
FUEL HANDLING PENETRATION TEST NOT PERFORMED.
EVENT DATE: 062883 REPORT DATE: 092883 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS,PRIMARY CONTAIN

(NSIC 188092) DURING REVIEW OF THE CONTAINMENT PENETRATION SURVEILLANCE PROCEDURE IT WAS DISCOVERED THAT THE 31 DAY VISUAL VERIFICATION OF THE BLIND FLANGE OVER THE FUEL TRANSFER TUBE, CPN-1, HAD BEEN DELETED FROM ALL REVISIONS FOLLOWING THE ORIGINAL. THIS IS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 4.6.1.1A. PREVIOUS OCCURRENCES WERE 315/75-048 AND 315/81-019. THIS LER REPLACES 50-316/83-058 WHICH REFERENCED THE INCORRECT DOCKET NUMBER. FURTHER INVESTIGATION REVEALED THE 31 DAY VISUAL VERIFICATION OF CPN-1 HAD BEEN DELECTED IN A REVISION WHICH WAS ISSUED 4/7/75. THE BLIND FLANGE USED FOR CONTAINMENT INTEGRITY AT CPN-1 HAS BEEN LEAK CHECKED AT THE CONCLUSION OF THE OUTAGES IN WHICH IT WAS USED DURING THE PERIOD THE VISUAL VERIFICATION WAS NOT DONE. THE FLANGE WAS VISUALLY VERIFIED IN PLACE AND A CHANGE SHEET WRITTEN TO INCLUDE CPN-1 IN THE PROCEDURE.

[104] COOK 1 DOCKET 50-315 LER 83-073 REV 1
UPDATE ON SEVERAL ICE CONDENSER BASKETS SUFFER ICE LOSS.
EVENT DATE: 072683 REPORT DATE: 122183 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188555) DURING A SCHEDULED SURVEILLANCE TEST OF THE ICE CONDENSER BASKETS, THE MINIMUM AVERAGE ICE WEIGHT OF SAMPLE BASKETS FROM BAYS 1, 6 AND ROW/GROUPS 7-1, 7-3, 8-3 AND 9-1 WERE FOUND TO BE LESS THAN 1220 POUNDS/BASKET AT A 95% LEVEL OF CONFIDENCE. THIS CONDITION WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 4.6.5.1.B.2. THE ACTION REQUIREMENTS WERE MET. PREVIOUS OCCURRENCES INCLUDE: 50-315/82-072, 316/83-059, 82-025, 116. ICE LOSS APPEARED TO BE A RESULT OF NATURAL SUBLIMATION. THE ICE MASS IN THE AFFECTED LIGHT WEIGHT BASKETS WAS FULLY RECONDITIONED TO OPTIMIZE THE ICE DENSITY FOR THE ENTIRE ICE BASKET LENGTH. THIS ALLOWED THE AFFECTED BAYS 1, 6 AND ROW/GROUPS 7-1, 7-3, 8-3 AND 9-1 TO MEET THE MINIMUM TECH SPEC WEIGHT LIMIT OF 1220 POUNDS. ADDITIONAL MEASURES TO REDUCE ICE LOSS HAVE BEEN TAKEN.

[105] COOK 1 DOCKET 50-315 LER 83-072 REV 1
UPDATE ON MANY CONTAINMENT ISOLATION VALVES LEAK.
EVENT DATE: 080183 REPORT DATE: 121683 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES

(NSIC 188554) WHILE PERFORMING THE B AND C LEAK RATE TEST, SEVERAL CONTAINMENT ISOLATION VALVES EXHIBITED EXCESSIVE LEAKAGE CAUSING THE TOTAL LEAK RATE TO EXCEED THE LIMIT IMPOSED BY TECH SPEC 3.6.1.2.B. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE: 50-315/82-058, 82-011, 025, 79-034, 78-037, 77-011, 76-023; 316/83-016, 81-018, 79-020, 053. B AND C LEAK RATE TESTING IDENTIFIED SEVERAL VALVES AS HAVING EXCESSIVE LEAK RATES, THE LEAK RATES WERE ATTRIBUTED TO A COMBINATION OF DIRT AND SCALE DEPOSIT ON THE SEATING SURFACES, EROSION OF THE VALVE SEATS AND AN INCOMPLETE WELD AT THE ELBOW IN THE DOME WELD CHANNEL PRESSURIZATION PIPING IN ONE VOLUME. THE VALVES WERE REPAIRED BY A COMBINATION OF CLEANING AND LAPPING THE SEATING SURFACES, REPLACEMENT OF VARIOUS VALVE COMPONENTS AND BY COMPLETING THE INCOMPLETE WELD.

[106] COOK 1 DOCKET 50-315 LER 83-083
ERRATIC OPERATION OF SOURCE RANGE NEUTRON MONITOR.
EVENT DATE: 081783 REPORT DATE: 090883 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188609) WITH REFUELING IN PROGRESS, SOURCE RANGE NEUTRON FLUX MONITOR (N-32) BECAME ERRATIC. N-32 WAS DECLARED INOPERABLE AT 0320 HOURS ON 8/17/83. THIS CONDITION WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.9.2. THE ACTION REQUIREMENT WAS MET. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE: 50-315/77-039, 78-055; 50-316/78-001, 091, 79-046. INVESTIGATION FOUND THE N-32 DB ATTENUATOR SET LOW FOR THE AMOUNT OF NOISE ON THE PRESENT SIGNAL. THE DB ATTENUATOR WAS ADJUSTED TO ATTENUATE THE NOISE ON THE SIGNAL. N-32 WAS VERIFIED TO OPERATE CORRECTLY AND RETURNED TO SERVICE AT 1430 HOURS ON 8-17-83.

[107] COOK 1 DOCKET 50-315 LER 83-090 REV 1
UPDATE ON LOW CENTRIFUGAL CHARGING PUMP FLOW.
EVENT DATE: 082583 REPORT DATE: 122983 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PUMPS
VENDOR: PACIFIC PUMPS

(NSIC 188556) DURING PERFORMANCE OF THE ECCS FLOW BALANCE BORON INJECTION SYSTEM, IT WAS FOUND THAT THE WEST CENTRIFUGAL CHARGING PUMP MINIMUM FLOW (TOTAL FLOW) TO THE THREE MOST CONSERVATIVE BRANCH LINES WAS 317.0 GPM WHICH WAS BELOW THE MINIMUM ALLOWABLE RATE OF 345.8 GPM. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 4.5.2.F. PREVIOUS OCCURRENCE OF A SIMILAR NATURE INCLUDES: 050-315/82-075. THE WEST CENTRIFUGAL CHARGING PUMP WAS REPAIRED BY REPLACING THE ROTATING ASSEMBLY. AN ORIFICE WAS INSTALLED ON DISCHARGE OF EAST PUMP TO OBTAIN

SIMILAR FLOWS FROM BOTH CENTRIFUGAL CHARGING PUMPS. THE ECCS FLOW BALANCE TEST WAS COMPLETED WITH ACCEPTABLE RESULTS.

[108] COOK 1 DOCKET 50-315 LER 83-117 REV 1
UPDATE ON DRIFT OF FEEDWATER FLOW TRANSMITTER.
EVENT DATE: 111583 REPORT DATE: 021484 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 188860) DURING UNIT STARTUP, A FEEDWATER FLOW DIFFERENTIAL EXISTED BETWEEN CHANNELS 1 AND 2 ON #1 STEAM GENERATOR. CHANNEL 1 (FFC-210) WAS FOUND TO EXCEED THE TECH SPEC MAXIMUM LIMIT. THE CHANNEL WAS DECLARED INOPERABLE AT 1701 HOURS ON 11-15-83. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPECS 2.2.1, TABLE 2.2-1 AND 3.3.11, TABLE 3.3-1. THE ACTION REQUIREMENTS WERE MET. THE CAUSE OF CHANNEL 1 READING OUT OF SPECIFICATION HIGH WAS ATTRIBUTED TO INSTRUMENT DRIFT. THE TRANSMITTER, MANUFACTURED BY FOXBORO COMPANY, WAS RECALIBRATED, VERIFIED TO OPERATE CORRECTLY AND DECLARED OPERABLE AT 1925 HOURS ON 11-15-83. UPDATED LER SUBMITTED TO CORRECT ERROR IN CAUSE SUBCODE.

[109] COOK 1 DOCKET 50-315 LER 83-122
FOUR ICE CONDENSER INTERMEDIATE DECK DOORS FOUND FROZEN SHUT.
EVENT DATE: 121283 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188336) DURING STEAM GENERATOR CREVICE FLUSHING WITH THE RCS IN HOT SHUTDOWN, WHILE ON A ROUTINE TOUR, FOUR ICE CONDENSER INTERMEDIATE DECK DOORS WERE FOUND FROZEN SHUT WHICH WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.6.5.3. THE DOORS WERE IMMEDIATELY FREED SO THAT THEY COULD OPEN IF REQUIRED. THE REMAINING INTERMEDIATE DECK DOORS WERE OPERABLE. PREVIOUS SIMILAR OCCURRENCES INCLUDE: 79-036, 79-045, 79-060, 80-010, 80-021, 80-024, 82-109, 82-110, 83-068 AND FOR DOCKET 316, 81-029, AND 81-038. ICE ACCUMULATION AROUND THE DOORS RESULTED IN THE DOORS BEING FROZEN. THE ICE WAS REMOVED. INVESTIGATION REVEALED THAT THE ICE BUILDUP RESULTED FROM LEAKING DRAIN LINES ON THE ICE CONDENSER AIR HANDLERS 4-2A, 4-4A AND 1-5B. THE LEAKING DRAIN LINES WERE REPAIRED.

[110] COOK 1 DOCKET 50-315 LER 83-125
FIRE DOOR INTENTIONALLY MADE INOPERABLE TO PERFORM MAINTENANCE.
EVENT DATE: 121283 REPORT DATE: 011784 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188412) ONE SAFETY RELATED FIRE DOOR WAS INTENTIONALLY MADE INOPERABLE TO PERFORM CORRECTIVE MAINTENANCE ON THE DOOR FRAME. THE DOOR'S LATCHING SYSTEM WAS RENDERED INOPERABLE DURING THE CORRECTIVE MAINTENANCE. FIRE WATCHES WERE POSTED IN AFFECTED AREAS AS REQUIRED BY TECH SPEC 3.7.10. THE FIRE DOOR SURVEILLANCE TEST WAS PERFORMED FOLLOWING REPAIRS AND PRIOR TO DECLARING THE DOOR OPERABLE. THE CONDITION REPORTED WAS CAUSED BY CORRECTIVE MAINTENANCE THAT WAS PERFORMED WHILE THE EQUIPMENT WAS REQUIRED TO BE OPERABLE. THIS RENOVATION PROJECT INCLUDES EIGHTY-FOUR FIRE DOORS AND HAS A TENTATIVE COMPLETION DATE OF LATE 1984. WORK ON THE FIRE DOORS IS CONTINUING AND A FOLLOW-UP REPORT WILL BE GENERATED WHEN THE PROJECT HAS BEEN COMPLETED.

[111] COOK 1 DOCKET 50-315 LER 83-123
CABLE FOR ACOUSTIC VALVE MONITOR ACCELEROMETER INADVERTENTLY CUT.
EVENT DATE: 121683 REPORT DATE: 011084 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188410) DURING REPLACEMENT OF MIRROR INSULATION OF THE PRESSURIZER PORV'S,

THE CABLE FOR ACOUSTIC VALVE MONITOR ACCELEROMETER (SV-45B) WAS CUT. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.3.8. THE ACTION REQUIREMENT WAS MET. NEW CABLE WAS INSTALLED, MONITOR WAS VERIFIED TO OPERATE CORRECTLY AND RETURNED TO SERVICE. TO PREVENT RECURRENCE, INSULATING PERSONNEL HAVE BEEN CAUTIONED TO EXERCISE EXTREME CARE WHEN WORKING IN THE AREA OF THE MONITORING EQUIPMENT. IN ADDITION, A DESIGN CHANGE HAS BEEN REQUESTED TO ADD PROTECTION TO THE MONITORING EQUIPMENT.

[112] COOK 1 DOCKET 50-315 LER 83-124
PYRALARM DETECTOR FOUND ALARMING FOR NO APPARENT REASON.
EVENT DATE: 121783 REPORT DATE: 011084 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: PYROTRONICS

(NSIC 188411) WITH THE RCS IN MODE 3, THE FIRE DETECTION SYSTEM ALARM FOR ZONE 14 IN THE AUXILIARY 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. THE ALARMING DETECTOR REMOVED ANY FURTHER CAPABILITY FOR THE DETECTION SYSTEM TO ALARM IN THE CONTROL ROOM IF ANY ADDITIONAL PYRALARMS WITHIN THE ZONE ALARMED. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.3.7. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE: 50-315/83-034, 076, 82-096, 106, AND 316/83-062, 82-092. INVESTIGATION FOUND THE DETECTOR ALARMING WITH NO ADVERSE CONDITIONS IN THE AREA TO CAUSE THE DETECTOR TO ALARM. THE DETECTOR WAS TESTED AND FOUND TO BE BAD. A NEW DETECTOR, MANUFACTURED BY PYRATRONICS, WAS INSTALLED, VERIFIED TO BE OPERATING CORRECTLY AND THE ZONE WAS RETURNED TO SERVICE. FURTHER ACTION TO MINIMIZE DETECTOR INOPERABILITY TIME IS EXPLAINED IN RO 50-315/82-096.

[113] COOK 1 DOCKET 50-315 LER 83-121
CHARCOAL AND PARTICULATE SAMPLES NOT TAKEN.
EVENT DATE: 121983 REPORT DATE: 010384 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188409) ON 12-19-83, WHILE INVESTIGATING AN 11-25-83 EVENT WHERE THE SAMPLE PUMP FOR THE UNIT VENT EFFLUENT MONITOR (VRS-1500) HAD BEEN FOUND INOPERABLE, IT WAS DISCOVERED THAT THE ACTION REQUIREMENT OF TECH SPEC 3.3.3.10 TABLE 3.3-13 ITEMS 3.B AND 3.C HAD NOT BEEN FULFILLED. THE CONTINUOUS CHARCOAL AND PARTICULATE SAMPLES HAD NOT BEEN OBTAINED. DURING THE TIME VRS-1500 WAS INOPERABLE (0248 HOURS ON 11-25-83 TO 1538 HOURS ON 11-26-83) NO RADIOACTIVE RELEASES OCCURRED FROM THE UNIT-1 VENT. THIS EVENT WAS THE RESULT OF INADEQUATE PROCEDURES. THE CONTINUOUS SAMPLING REQUIREMENTS, REFERENCED BY ACTION ITEM NO. 32, WERE NOT RECOGNIZED AND INCORPORATED IN APPROVED PROCEDURES. TO PREVENT RECURRENCE, AN AUXILIARY SAMPLE APPARATUS IS NOW AVAILABLE ALLOWING CONTINUOUS PARTICULATE AND CHARCOAL SAMPLING SHOULD THE NORMAL SAMPLE PUMP FAIL FOR VRS-1500. PROCEDURES WERE MODIFIED TO UTILIZE AUXILIARY SAMPLING EQUIPMENT.

[114] COOK 1 DOCKET 50-315 LER 83-127
FIRE DOOR TWICE FOUND PARTIALLY OPEN.
EVENT DATE: 122383 REPORT DATE: 012384 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188414) ON TWO OCCASIONS, DURING NORMAL OPERATION, FIRE DOOR #519 WAS FOUND PARTIALLY OPEN. THIS CONSTITUTED AN INOPERABLE PENETRATION FIRE BARRIER, WHICH WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.10. UPON OBSERVATION THE DOOR WAS IMMEDIATELY RETURNED TO AN OPERABLE STATUS. THESE WERE THE FIRST OCCURRENCES OF THIS TYPE. DOOR #519 IS A DOUBLE LEAF DOOR WHICH IS PADLOCKED CLOSED. PERSONNEL ATTEMPTED TO USE THE DOOR, PULLING IT PARTIALLY OPEN. THROUGH THIS

ABNORMAL USE, CERTAIN MECHANICAL LATCH FUNCTIONS WERE ACTIVATED WHICH PREVENTED THE DOOR FROM CLOSING. A POSITIVE LOCK MECHANISM HAS BEEN FABRICATED AND INSTALLED TO PREVENT RECURRENCE.

[115] COOK 1 DOCKET 50-315 LER 83-128
DG TRIPS DURING TEST.
EVENT DATE: 122683 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: DYNALCO CORP.

(NSIC 188415) DURING THE PERFORMANCE OF THE AB DIESEL GENERATOR OPERABILITY TEST, THE DIESEL GENERATOR TRIPPED ON AN APPARENT OVERSPEED CONDITION. ON A SECOND ATTEMPT TO RESTART THE AB DIESEL, IT WAS CONFIRMED TO BE A SPURIOUS ACTUATION IN THE OVERSPEED TRIP CIRCUITRY AND NOT AN ACTUAL OVERSPEED. THE AB DIESEL GENERATOR WAS DECLARED INOPERABLE AT 0350 HOURS ON 12-26-83. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.8.1.1. THE ACTION REQUIREMENTS WERE MET. INVESTIGATION FOUND A LOOSE GROUND WIRE ASSOCIATED WITH THE ELECTRONIC TACHOMETER CIRCUIT. THE WIRE WAS RETIGHTENED. AB DIESEL GENERATOR WAS STARTED SATISFACTORILY AND DECLARED OPERABLE AT 0321 HOURS ON 12-27-83.

[116] COOK 1 DOCKET 50-315 LER 83-129
FIRE DOOR FAILS TO CLOSE.
EVENT DATE: 122883 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188416) DURING NORMAL OPERATION, FIRE DOOR #471 WOULD NOT FULLY CLOSE AND LATCH. THIS CONDITION CONSTITUTED AN INOPERABLE PENETRATION FIRE BARRIER, WHICH WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.10. THE ACTION STATEMENTS WERE MET. THIS IS THE FIRST OCCURRENCE OF THIS TYPE FOR DOOR #471. DOOR #471 IS A DOUBLE LEAF DOOR. THE LATCH PLATE ON THE INACTIVE LEAF WAS FOUND TO BE MISALIGNED WITH THE LATCH BOLT OF THE ACTIVE LEAF. THE LATCH PLATE WAS ALIGNED AND THE DOOR CLOSERS WERE ADJUSTED FOR PROPER CLOSING POWER. THE DOOR WAS TESTED SATISFACTORILY AND RETURNED TO SERVICE IN 6 HOURS AND 18 MINUTES.

[117] COOK 1 DOCKET 50-315 LER 83-126
RCS AVERAGE TEMPERATURE EXCEEDS LIMIT TWICE.
EVENT DATE: 123083 REPORT DATE: 012384 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188413) DURING NORMAL OPERATION WHILE PERFORMING THE WEEKLY TURBINE VALVE TESTS THE RCS T-AVE DNB PARAMETER OF 570.5 F WAS EXCEEDED FOR TWO SHORT PERIODS OF TIME. THE FIRST WAS FOR 3 MINUTES DURING THE FIRST VALVE TEST WHEN THE T-AVE WENT TO 573 F. THE SECOND OCCURRENCE WAS FOR 2 MINUTES DURING THE SECOND VALVE TEST WHEN T-AVE WENT TO 572 F. THESE TWO EVENTS EXCEED BY 2.5 F AND 1.5 F THE LIMITS OF TECH SPEC 3.2.5 TABLE 3.2-1. THE REQUIREMENTS OF THE ACTION STATEMENT WERE MET. THE T-AVE EXCURSION WAS CAUSED BY OPERATOR HOLDING THE TURBINE CONTROL VALVE CLOSED TO GATHER TURBINE CONTROL DATA. THE PROLONGED TIME THE TURBINE VALVE WAS HELD CLOSED CAUSED T-AVE TO INCREASE ABOVE THE TECH LIMIT. THE OPERATORS DURING TRAINING WEEK WILL DISCUSS THIS INCIDENT AND BE MADE AWARE TO REACT TO THIS TYPE OF OCCURRENCE MORE READILY. THE T-AVE ALARM SETPOINT HAS BEEN LOWERED TO ALARM PRIOR TO TECH SPEC LIMIT.

[118] COOK 1 DOCKET 50-315 LER 83-130
SAMPLE CONTAINMENT ISOLATION VALVE INOPERABLE.
EVENT DATE: 123083 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: HAMMEL DAHL

(NSIC 188417) DURING NORMAL OPERATION, AN AIR LEAK WAS DISCOVERED ON NUMBER 4 STEAM GENERATOR BLOWDOWN SAMPLE CONTAINMENT ISOLATION VALVE (DCR-304). THE VALVE WAS DECLARED INOPERABLE AND REMOVED FROM SERVICE FOR REPAIR. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.6.3.1 TABLE 3.6-1 ITEM 16. THE ACTION REQUIREMENTS WERE MET. PREVIOUS OCCURRENCE OF A SIMILAR NATURE INCLUDES: 050-316/83-075. INVESTIGATION FOUND THE AIR LEAK TO BE CAUSED BY A DEGRADED O-RING INSIDE THE VALVE OPERATOR. THE O-RING WAS REPLACED. DCR-304 WAS VERIFIED TO CLOSE WITHIN THE ALLOWABLE TIME AND RETURNED TO SERVICE.

[119] COOK 1 DOCKET 50-315 LER 83-131
HOSES EXCEED SURVEILLANCE TEST FREQUENCY.
EVENT DATE: 123183 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188757) DURING A REVIEW OF DATA SHEETS GENERATED DURING THE CONDUCT OF THE HYDROSTATIC TESTING OF THE PLANT'S TECH SPEC FIRE HOSES, IT WAS DISCOVERED THAT SOME HOSES ON THESE STANDPIPES HAD EXCEEDED THE 3 YEAR SURVEILLANCE TEST FREQUENCY OF TECH SPEC 4.7.9.5C. AS THIS WAS A POST DATA REVIEW, AND IN VIEW OF THE FACT THAT ALL HOSES ON THE STANDPIPES HAD JUST SUCCESSFULLY PASSED THE HYDROSTATIC TEST, NO FURTHER ACTION WAS TAKEN. THIS WAS THE FIRST OCCURRENCE OF THIS TYPE. MISSED SURVEILLANCE WAS ATTRIBUTED TO 3 FACTORS. 1) TWO DIFFERENT FIRE HOSE TEST FREQUENCIES BEING CONDUCTED AT PLANT; A 3 YR. FREQ. TO SATISFY TECH SPEC, AND A 5 YEAR FREQUENCY TO SATISFY NFPA CRITERIA; 2) INADVERTENT INTERCHANGING OF HOSES THAT OCCURRED DURING FIRE DRILLS; AND 3) ERRONEOUS ENTRY INTO TECH SPEC COMPUTER PROGRAM. RESOLUTION OF DEFICIENCIES - PROCEDURE REVISION, COMPUTER PROGRAM CORRECTED. TO PREVENT EVENTS OF THIS TYPE FROM RECURRING, THE FOLLOWING ACTIONS HAVE BEEN TAKEN: 1) THE PROCEDURE THAT GOVERNS THE HYDROSTATIC TESTING REQUIREMENTS HAS BEEN REVISED TO REFLECT A 3 YEAR TEST FREQUENCY FOR ALL PLANT FIRE HOSES. THIS PROCEDURE IS CURRENTLY BEING REVIEWED BY ALL APPLICABLE PARTIES AND SHOULD BE ISSUED BY MARCH 31, 1984. 2) A REVIEW OF ALL REQUIRED TECH SPEC SURVEILLANCES RELATIVE TO FIRE PROTECTION BY THE QUALITY CONTROL DEPARTMENT WAS PERFORMED TO INSURE THAT ALL DATA HAS BEEN ENTERED CORRECTLY.

[120] COOK 2 DOCKET 50-316 LER 82-016 REV 1
UPDATE ON CONTAINMENT SPRAY PUMP REMOVED FROM SERVICE.
EVENT DATE: 071981 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: PIPES,FITTINGS

(NSIC 188528) DURING NORMAL OPERATION, A PINHOLE LEAK WAS DISCOVERED ON THE SUCTION STRAINER FOR THE WEST CONTAINMENT SPRAY (CTS) PUMP. THE PUMP WAS REMOVED FROM SERVICE, CONSTITUTING AN INOPERABLE CTS TRAIN PER TECH SPEC 3.6.2.1. THE ACTION REQUIREMENTS WERE MET. A CRACK WAS FOUND IN THE AREA OF THE PINHOLE AND IT WAS REMOVED BY GRINDING AND REWELDING. THE PIPING WAS THEN SUCCESSFULLY HYDROSTATICALLY TESTED. NO ANALYSIS OF THE CAUSE WAS MADE AT THIS TIME BUT IT IS ASSUMED THAT IT RESULTED FROM FATIGUE SIMILAR TO THE RECENT LER ON THE SAME PIPING (LER 82-003/01T-0). THE EVENT WAS NOT IDENTIFIED AS REPORTABLE AT THE TIME AS A CONDITION REPORT WAS NOT INITIATED TO ANALYZE THE EVENT FOR REPORTABILITY. THE OPERATOR WAS NOT AWARE OF THE SEVERITY OF THE LEAK WHICH HE HAD NOTED AS "PINHOLE". IT HAS BEEN A PLANT PRACTICE TO INITIATE A CONDITION REPORT WHEN TECH SPEC EQUIPMENT IS REMOVED FROM SERVICE FOR OTHER THAN PREVENTIVE MAINTENANCE OR SURVEILLANCE TESTING.

[121] COOK 2 DOCKET 50-316 LER 81-063
TURBINE DRIVEN AUXILIARY FEED PUMP TOO HOT.
EVENT DATE: 102981 REPORT DATE: 113081 NSSS: WE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVES
VENDOR: ATWOOD & MORRILL CO., INC.

(NSIC 188337) DURING UNIT START-UP AND WHILE IN MODE 3, IT WAS DISCOVERED THAT THE TURBINE DRIVEN AUXILIARY FEED PUMP (TDAFP) WAS APPROXIMATELY 150 F WHILE IN STANDBY CONDITION. THE AUX. FEEDWATER LINES TO THE STEAM GENERATORS FROM THE TDAFP WERE CLOSED AND THE PUMP ALLOWED TO COOL. THE TWO MOTOR DRIVEN AUX. FEED PUMPS REMAINED OPERABLE DURING THIS TIME. WHEN THE TDAFP WAS COOLED, IT WAS TESTED AND THE STEAM GENERATORS FED SATISFACTORILY. SIMILAR EVENTS: 50-316/81-032. WHEN THIS CONDITION WAS DISCOVERED, THE AUX. FEEDWATER VALVES TO THE STEAM GENERATORS WERE CLOSED SO THE TDAFP COULD COOL DOWN. WHEN THE AUX. FEEDWATER PUMP COOLED, IT WAS IMPOSSIBLE TO DETERMINE WHICH CHECK VALVE WAS LEAKING BACK AND THE CONDITION DID NOT REOCCUR. CAUTION TAGS HAVE NOW BEEN PLACED ON THE 4 STEAM GENERATOR AUX. FEEDWATER VALVES WARNING THE OPERATOR NOT TO CLOSE THEM UNTIL IT IS DETERMINED WHICH CHECK VALVE IS LEAKING.

[122] COOK 2 DOCKET 50-316 LER 82-116
WEIGHT OF ICE CONDENSER SAMPLE BASKETS LESS THAN LIMIT.
EVENT DATE: 121482 REPORT DATE: 012783 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188386) DURING A SCHEDULED SURVEILLANCE TEST OF THE ICE CONDENSER BASKETS, THE MINIMUM AVERAGE ICE WEIGHT OF SAMPLE BASKETS FROM RADIAL ROWS 7, 8, AND 9 WAS FOUND TO BE LESS THAN 1220 POUNDS/BASKET AT A 95% LEVEL OF CONFIDENCE. THIS CONDITION WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 4.6.5.1.B.2. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE: 316/82-025; 315/82-072. ICE LOSS APPEARED TO BE A RESULT OF NATURAL SUBLIMATION AND THE FACT THAT THE AIR HANDLER UNITS WERE NOT MAINTAINED AS WELL AS DESIRED DUE TO HIGH AIRBORNE RADIATION CONDITIONS IN UNIT 2 UPPER CONTAINMENT. ICE MASS WAS ADDED TO ALL ROW GROUPS NOT MEETING TECH SPEC MINIMUM LIMITS.

[123] COOK 2 DOCKET 50-316 LER 83-052 REV 1
UPDATE ON VITAL BUS INVERTER FAILS RESULTING IN SCRAM.
EVENT DATE: 062383 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: GENERATORS

(NSIC 188557) DURING NORMAL OPERATION, A REACTOR TRIP OCCURRED AS A RESULT OF A FAILURE IN THE 120V AC VITAL BUS INVERTER (CRID IV). THIS EVENT WAS NONCONSERVATIVE IN RESPECT TO TECH SPEC 3.8.2.1. THE ACTION REQUIREMENTS WERE MET. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE: 50-315/79-022, 80-020, 316/81-027. THE INVERTER FAILURE OCCURRED DUE TO CAPACITOR C-2 FAILING, RESULTING IN A BLOWN FUSE THAT CAUSED THE REACTOR TO TRIP FROM AN INDICATED RCP BREAKER OPEN POSITION. THE CAUSE OF THE CAPACITOR FAILING IS DUE TO OPERATING TEMPERATURES BEING ABOVE THE RATED DESIGN TEMPERATURES. AN ENGINEERING REVIEW IS IN PROGRESS TO CORRECT THIS PROBLEM. THE CAPACITOR AND FUSE WERE REPLACED AND THE INVERTER WAS RETURNED TO SERVICE.

[124] COOK 2 DOCKET 50-316 LER 83-081 REV 1
UPDATE ON VITAL BUS INVERTER FAILURE TWICE CAUSES REACTOR TRIP.
EVENT DATE: 082283 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: GENERATORS

(NSIC 188558) DURING NORMAL OPERATION, A REACTOR TRIP OCCURRED ON TWO SEPARATE OCCASIONS (8-22-83 AND 8-25-83). BOTH TRIPS WERE THE RESULT OF FAILURES OF THE SAME 120V AC VITAL BUS INVERTER (CRID II). THESE EVENTS WERE NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.8.2.1. THE ACTION REQUIREMENTS WERE MET. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE: 50-315/79-022, 80-020, AND 50-316/81-027, 83-052. BOTH INVERTER FAILURES WERE CAUSED BY OPERATING TEMPERATURES IN THE CRID BEING ABOVE THE RATED DESIGN TEMPERATURES. AIR CONDITIONED, FORCED AIR COOLING HAS BEEN INSTALLED AS A TEMPORARY MEASURE WHILE AN ENGINEERING REVIEW IS IN PROGRESS TO IDENTIFY A LONG TERM SOLUTION.

[125] COOK 2 DOCKET 50-316 LER 83-117
SG BLOWDOWN SAMPLE ISOLATION VALVE FAILS TO OPEN.
EVENT DATE: 112383 REPORT DATE: 122183 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: HAMMEL DAHL

(NSIC 188686) WHILE SWITCHING FROM THE STARTUP TO THE NORMAL FLASHTANK, NUMBER 1 STEAM GENERATOR BLOWDOWN SAMPLE ISOLATION VALVE, DCR-301, TRIPPED CLOSED ON A HIGH ALARM FROM STEAM GENERATOR BLOWDOWN RADIATION MONITOR R-19. ATTEMPTS TO OPEN DCR-301 WERE UNSUCCESSFUL AFTER R-19 WAS RESET. DCR-301 WAS REMOVED FROM SERVICE FOR REPAIR. THIS EVENT WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.6.3.1 TABLE 3.6-1, ITEM A.13. THE ACTION REQUIREMENTS WERE MET. INVESTIGATION FOUND FLAT SPOTS ON THE SIDES OF TWO O-RINGS IN THE VALVE ACTUATOR. THE FLAT SPOTS WERE ALLOWING AIR TO LEAK PAST THE ACTUATOR PISTON AND BLOW OUT THE TOP OF THE PISTON CYLINDER, THUS PREVENTING AIR TO BUILDUP ON THE LOWER PORTION OF THE PISTON WHICH OPENS THE VALVE. THE O-RINGS WERE REPLACED, DCR-301 WAS TESTED SATISFACTORILY AND WAS RETURNED TO SERVICE.

[126] COOK 2 DOCKET 50-316 LER 83-116
LOWER CONTAINMENT OUTER PERSONNEL AIR LOCK DOOR EXCEEDS SEAL LEAKAGE LIMITS THREE TIMES.
EVENT DATE: 112883 REPORT DATE: 122183 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS,PRIMARY CONTAIN
VENDOR: WOOLLEY, W. J. COMPANY

(NSIC 188338) THE LOWER CONTAINMENT OUTER PERSONNEL AIR LOCK DOOR EXCEEDED THE SEAL LEAKAGE LIMITS DURING THREE CONSECUTIVE TESTS (11-28-83, 11-30-83 AND 12-2-83). ON EACH OCCASION THE SEAL WAS INSPECTED, CLEANED AND THE DOOR WAS RETESTED SATISFACTORILY. AS A PRECAUTIONARY MEASURE, THE DOOR WAS REMOVED FROM SERVICE ON 12-3-83 FOR OUTER DOOR SEALS REPLACEMENT. THESE EVENTS WERE NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.6.1.3. THE ACTION REQUIREMENTS WERE MET. SIMILAR OCCURRENCES: 315/78-023, 037, 043, 82-005, 83-017 AND 316/78-082. THE OUTER DOOR SEALS WERE REPLACED, ADJUSTMENTS WERE MADE TO THE TOP, LEFT AND RIGHT CLAMPS OF THE OUTER DOOR FRAME AS REQUIRED TO ENSURE A PROPER SEAL. THE DOOR WAS RETESTED SATISFACTORILY. SINCE THE REPLACEMENT OF THE OUTER DOOR SEALS AND CLAMP ADJUSTMENTS THE DOOR HAS SUCCESSFULLY PASSED SEVEN CONSECUTIVE NORMAL SCHEDULED TESTS.

[127] COOK 2 DOCKET 50-316 LER 83-121
FIRE DOOR FOUND TO OCCASIONALLY STICK IN THE FULL OPEN POSITION.
EVENT DATE: 120983 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188339) DURING NORMAL OPERATION, FIRE DOOR 472, IN THE 4KV ROOM, WAS FOUND TO OCCASIONALLY STICK IN THE FULL OPEN POSITION. THIS CONDITION CONSTITUTED AN INOPERABLE PENETRATION FIRE BARRIER WHICH IS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.10. ACTION REQUIREMENTS WERE MET. THE BOTTOM OF THE DOOR WAS SCRAPING ON THE FLOOR WHEN IN THE FULL OPEN POSITION, APPARENTLY DUE TO A PAINT BUILDUP ON THE FLOOR. THE HIGH SPOT IN THE FLOOR WAS GROUND DOWN AND THE MIDDLE AND LOWER DOOR HINGES WERE SHIMMED TO PROVIDE ADEQUATE CLEARANCE. THE DOOR WAS TESTED AND RETURNED TO SERVICE IN 22 HOURS AND 55 MINUTES.

[128] COOK 2 DOCKET 50-316 LER 83-122
ESF FAN REMOVED FROM SERVICE.
EVENT DATE: 121083 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: MECHANICAL FUNCTION UNITS
VENDOR: WOODS, T. B. AND SONS

(NSIC 188418) DURING NORMAL OPERATION, WHILE PERFORMING A SURVEILLANCE TEST ON ESF FAN 2-HV-AES-1, A SUSPICIOUS ODOR WAS NOTED. THE FAN WAS REMOVED FROM SERVICE AND A COUPLING HALF WAS FOUND LOOSE AND THE COUPLING HALVES DISENGAGED. FRICTION BETWEEN THE RUBBER COUPLING FACES HAD CAUSED THE ODOR. THIS CONDITION IS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.6. 2-HV-AES-2 REMAINED OPERABLE. ACTION REQUIREMENTS WERE MET. THE CAUSE OF THE LOOSENING OF THE COUPLING HALF SET SCREWS IN THE SURE-FLEX SIZE 10 TYPE S COUPLING COULD NOT BE DETERMINED. THE COUPLING WAS REENGAGED AND THE SCREWS SECURELY TIGHTENED. THE FAN WAS TESTED AND RETURNED TO SERVICE IN 5 HOURS AND 7 MINUTES. COUPLINGS ON SIMILAR FANS IN BOTH UNITS HAVE BEEN INSPECTED. NO DEFICIENCIES WERE NOTED.

[129] COOK 2 DOCKET 50-316 LER 83-123
BISTABLE FAILS DUE TO SETPOINT DRIFT.
EVENT DATE: 122083 REPORT DATE: 011784 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 188419) DURING A SURVEILLANCE TEST ON STEAM GENERATOR 1 PROTECTION CHANNEL SET I, IT WAS FOUND THAT THE OUTPUT FROM BISTABLE 2FB-512B (STEAM FLOW GREATER THAN REFERENCE STEAM FLOW) FLUCTUATED AT BOTH THE TRIP AND RESET POINTS. THE BISTABLE WAS REPLACED. THIS EVENT WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.1.1 TABLE 3.3-1 ITEM 15. THE ACTION REQUIREMENTS WERE MET. THE REPLACEMENT BISTABLE WAS CALIBRATED, VERIFIED TO BE OPERATING CORRECTLY AND RETURNED TO SERVICE.

[130] COOK 2 DOCKET 50-316 LER 83-111 REV 1
UPDATE ON FIRE DOOR MADE INOPERABLE FOR MAINTENANCE.
EVENT DATE: 122183 REPORT DATE: 011784 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188559) ONE SAFETY-RELATED FIRE DOOR WAS INTENTIONALLY MADE INOPERABLE TO PERFORM CORRECTIVE MAINTENANCE ON THE DOOR FRAME. THE DOOR'S LATCHING SYSTEM WAS RENDERED INOPERABLE DURING THE CORRECTIVE MAINTENANCE. FIRE WATCHES WERE POSTED IN AFFECTED AREAS AS REQUIRED BY TECH SPEC 3.7.10. THE FIRE DOOR SURVEILLANCE TEST WAS PERFORMED FOLLOWING REPAIRS AND PRIOR TO DECLARING THE DOOR OPERABLE. THE CONDITION REPORTED WAS CAUSED BY CORRECTIVE MAINTENANCE THAT WAS PERFORMED WHILE THE EQUIPMENT WAS REQUIRED TO BE OPERABLE. THIS RENOVATION PROJECT INCLUDES EIGHTY-FOUR FIRE DOORS AND HAS A TENTATIVE COMPLETION DATE OF LATE 1984. WORK ON THE FIRE DOORS IS CONTINUING AND A FOLLOW-UP REPORT WILL BE GENERATED WHEN THE PROJECT HAS BEEN COMPLETED.

[131] COOK 2 DOCKET 50-316 LER 83-124
POWER RANGE CHANNEL BLOWS FUSE.
EVENT DATE: 122483 REPORT DATE: 012384 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188420) DURING SURVEILLANCE TEST ON POWER RANGE DRAWER, A CONTROL POWER FUSE BLEW RENDERING THE CHANNEL INOPERABLE. THIS IS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.1.1. THE FUSE WAS REPLACED WITHIN THE ALLOWABLE TIME LIMITS. OPERATORS WERE USING A FLUKE TO OBTAIN READINGS. C&I PERSONNEL COULD NOT FIND ANY PROBLEM WITH THE DIGITAL VOLTMETER USED. THE POWER RANGE DRAWER WAS CALIBRATED AND NO PROBLEMS WERE ENCOUNTERED. THE REASON FOR THE CONTROL FUSE FAILURE COULD NOT BE DETERMINED AND THE PROBLEM DID NOT RECUR. NO FURTHER ACTIONS PLANNED.

[132] COOK 2 DOCKET 50-316 LER 83-125
OUTPUT FROM FLUX PENALTY MODULE FOUND TO BE DRIFTING.
EVENT DATE: 122983 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 188421) DURING THE PERFORMANCE OF THE LOOP 4 POWER RANGE NUCLEAR INSTRUMENTATION CALIBRATION TEST, THE OUTPUT FROM THE FLUX PENALTY MODULE (2NY-441) WAS FOUND TO BE DRIFTING IN THE CONSERVATIVE DIRECTION. THE MODULE WAS REPLACED. THIS EVENT WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.1.1 TABLE 3.3-1. THE ACTION REQUIREMENTS WERE MET. THE REPLACEMENT FLUX PENALTY MODULE WAS CALIBRATED, VERIFIED TO BE OPERATING CORRECTLY AND RETURNED TO SERVICE.

[133] COOK 2 DOCKET 50-316 LER 83-126
HOSES EXCEED SURVEILLANCE TEST FREQUENCY.
EVENT DATE: 123183 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188758) DURING A REVIEW OF DATA SHEETS GENERATED DURING THE CONDUCT OF THE HYDROSTATIC TESTING OF THE PLANT'S TECH SPEC FIRE HOSES, IT WAS DISCOVERED THAT SOME HOSES ON THESE STANDPIPES HAD EXCEEDED THE 3 YEAR SURVEILLANCE TEST FREQUENCY OF TECH SPEC 4.7.9.5C. AS THIS WAS A POST DATA REVIEW, AND IN VIEW OF THE FACT THAT ALL HOSES ON THE STANDPIPES HAD JUST SUCCESSFULLY PASSED THE HYDROSTATIC TEST, NO FURTHER ACTION WAS TAKEN. THIS WAS THE FIRST OCCURRENCE OF THIS TYPE. MISSED SURV. WAS ATTRIBUTED TO 3 FACTORS. 1) TWO DIFFERENT FIRE HOSE TEST FREQ. BEING CONDUCTED AT PLANT; A 3 YR. FREQ. TO SATISFY TECH SPEC, AND A 5 YR. FREQ. TO SATISFY NFPA CRITERIA; 2) INADVERTENT INTERCHANGING OF HOSES THAT OCCURRED DURING FIRE DRILLS; AND 3) ERRONEOUS ENTRY INTO TECH SPEC COMPUTER PROGRAM. RESOLUTION OF DEFICIENCIES - PROCEDURE REVISION, COMPUTER PROGRAM CORRECTED. TO PREVENT EVENTS OF THIS TYPE FROM RECURRING, THE FOLLOWING ACTIONS HAVE BEEN TAKEN: 1) THE PROCEDURE THAT GOVERNS THE HYDROSTATIC TESTING REQUIREMENTS HAS BEEN REVISED TO REFLECT A 3 YEAR TEST FREQUENCY FOR ALL PLANT FIRE HOSES. THIS PROCEDURE IS CURRENTLY BEING REVIEWED BY ALL APPLICABLE PARTIES AND SHOULD BE ISSUED BY MARCH 31, 1984. 2) A REVIEW OF ALL REQUIRED TECH SPEC SURVEILLANCES RELATIVE TO FIRE PROTECTION BY THE QUALITY CONTROL DEPARTMENT WAS PERFORMED TO INSURE THAT ALL DATA HAS BEEN ENTERED CORRECTLY.

[134] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-058
VITAL BUS INVERTER INOPERABLE.
EVENT DATE: 110383 REPORT DATE: 122283 NSSS: BW TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: GENERATORS
VENDOR: SOLID STATE CONTROLS, INC.

(NSIC 188325) AT 1551 ON NOV. 3, 1983 WHILE PERFORMING MAINTENANCE ON THE 120V AC VITAL BUS TRANSFER SWITCH (VBXS-1A), A FUSE WAS BLOWN RENDERING INVERTER 3A INOPERABLE. THE VITAL BUS THEN SWITCHED TO THE BACKUP POWER SUPPLY AS DESIGNED. THE INVERTER WAS REPAIRED, TESTED, AND RETURNED TO SERVICE AT 1115 ON NOV. 10, 1983. THE ALTERNATE POWER SOURCE TO "A" VITAL BUS WAS AVAILABLE AND BUSES B, C, AND D WERE OPERATING FROM NORMAL POWER SUPPLIES. THIS IS THE 3RD FAILURE OF INVERTER 3A AND THE 6TH REPORT UNDER TECH SPEC 3.8.2.1. THE FAILURE OF INVERTER "A" WAS DUE TO A BLOWN FUSE CAUSED BY MAINTENANCE PERSONNEL INADVERTENTLY SHORTING OUT A LAMP BASE. THE INVERTER WAS REPAIRED, TESTED, AND RETURNED TO SERVICE. THE RESPONSIBLE PERSONNEL WILL BE REINSTRUCTED ON PROPER OPERATION AND MAINTENANCE OF THE VITAL BUS TRANSFER SWITCHES.

[135] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-053 REV 1
UPDATE ON LOW SNUBBER OIL LEVEL.
EVENT DATE: 110983 REPORT DATE: 010684 NSSS: BW TYPE: PWR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: POWER PIPING COMPANY

(NSIC 188853) ON NOV. 9, 1983, DURING A ROUTINE VISUAL INSPECTION ONE SAFETY RELATED HYDRAULIC SNUBBER (MSH-252) WAS OBSERVED TO HAVE NO OIL LEVEL INDICATION IN THE SIGHTGLASS. THE SNUBBER WAS DECLARED INOPERABLE AT 1400 (TECH SPEC 3.7.9.1.), AND MAINTENANCE WAS INITIATED. MSH-252 WAS REPLACED ON NOV. 10, 1983, AND OPERABILITY WAS RESTORED AT 1800. THIS IS THE NINTH OCCURRENCE REPORTED UNDER TECH SPEC 3.7.9.1. THIS EVENT WAS CAUSED BY A LOOSE JAM-NUT ON THE STATIONARY END OF THE SNUBBER, WHICH ALLOWED THE SNUBBER TO ROTATE. AS THE SNUBBER ROTATED, THE FLUID DRAINED OUT. MSH-252 WAS REPLACED WITH A SPARE SNUBBER. OPERABILITY WAS RESTORED ON NOV. 10, 1983, AT 1800. PROCEDURE MP-130, PIPE SNUBBER MAINTENANCE, WILL BE REVISED TO ENSURE PROPER SNUBBER ORIENTATION IS MAINTAINED.

[136] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-055
RELAY FAILS IN ESFAS.
EVENT DATE: 111883 REPORT DATE: 121983 NSSS: BW TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: RELAYS
VENDOR: BAILEY METER COMPANY

(NSIC 188322) ON NOVEMBER 18, 1983, AT 1400, WHILE PERFORMING SURVEILLANCE PROCEDURE 130, ENGINEERED SAFEGUARDS MONTHLY FUNCTIONAL TESTING, CHANNEL RC6 (RCS PRESSURE LOW-LOW) OF ESFAS TRAIN "A" FAILED TO ACKNOWLEDGE A LOW PRESSURE INJECTION (LPI) BISTABLE TRIP. THE CHANNEL WAS TRIPPED WITHIN ONE HOUR AND MAINTENANCE WAS INITIATED. ALL TRAIN "B" WAS OPERABLE AND CAPABLE OF INITIATING LPI, IF NEEDED. THIS IS THE THIRD EVENT OF THIS TYPE AND THE TWENTY-SECOND REPORT UNDER TECH SPEC 3.3.2.1. THIS EVENT WAS CAUSED BY A MERCURY WETTED RELAY IN THE LPI BISTABLE FAILING TO OPERATE PROPERLY. THE MERCURY RELAY CARD ASSEMBLY WAS REPLACED AND THE CHANNEL WAS RETURNED TO OPERABILITY AT 1500 ON NOVEMBER 18, 1983.

[137] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-056
GOVERNOR FOR EFW PUMP DIESEL SET IMPROPERLY.
EVENT DATE: 112283 REPORT DATE: 122083 NSSS: BW TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: MECHANICAL FUNCTION UNITS
VENDOR: WOODWARD GOVERNOR COMPANY

(NSIC 188323) AT 1000 ON NOV. 22, 1983, WHILE PERFORMING SURVEILLANCE PROCEDURE SP-349B, EMERGENCY FEEDWATER SYSTEM OPERABILITY DEMONSTRATION, THE GOVERNOR ON THE EMERGENCY FEEDWATER PUMP (EFP-2) WAS DISCOVERED TO BE SET INCORRECTLY. THE CONTROL KNOB WAS ADJUSTED TO THE PROPER SETTING, AND THE SURVEILLANCE TESTING CONTINUED. THIS IS THE FIRST OCCURRENCE OF EFP-2 GOVERNOR INOPERABILITY AND THE TWENTY-FIFTH REPORT UNDER TECH SPEC 3.7.1.2. THE SETTING OF EFP-2 GOVERNOR WAS INADVERTENTLY CHANGED. SURVEILLANCE PROCEDURE SP-300, OPERATING DAILY SURVEILLANCE LOG, WILL BE REVISED TO REQUIRE CHECKING THE GOVERNOR SETTING ON A DAILY BASIS TO ASSURE THE PROPER SETTING IS MAINTAINED. AN ENGINEERING EVALUATION IS UNDERWAY TO DETERMINE THE FEASABILITY OF ENCLOSING THE CONTROL KNOB TO PREVENT RECURRENCE.

[138] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-057
EFW PUMP TURBINE STEAM VALVE FAILS TO OPEN.
EVENT DATE: 112283 REPORT DATE: 122083 NSSS: BW TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: RELAYS
VENDOR: ALLEN-BRADLEY CO.

(NSIC 188324) AT 1200 ON NOV. 22, 1983, WHILE PERFORMING SURVEILLANCE PROCEDURE SP-349B, EMERGENCY FEEDWATER SYSTEM OPERABILITY DEMONSTRATION, THE MOTOR ACTUATOR FOR THE TURBINE DRIVEN EMERGENCY FEEDWATER PUMP (EFP-2) STEAM ADMISSION VALVE (ASV-5) WAS DISCOVERED INOPERABLE. THE ACTUATOR WAS REPAIRED, TESTED, AND RETURNED TO SERVICE AT 1830 ON NOV. 22, 1983. THIS IS THE FIRST OCCURRENCE OF THIS TYPE AND THE TWENTY-SIXTH REPORT UNDER TECH SPEC 3.7.1.2. THE FAILURE OF THE MOTOR ACTUATOR ON ASV-5 WAS DUE TO A CONTACT FAILURE. THE ACTUATOR WAS REPAIRED, TESTED, AND RETURNED TO SERVICE. AN ENGINEERING EVALUATION TO DETERMINE THE CAUSE OF THE CONTACT FAILURE IS UNDERWAY.

[139] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-062
REACTOR BUILDING PRESSURE RECORDER INOPERABLE.
EVENT DATE: 120883 REPORT DATE: 010684 NSSS: BW TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: LEEDS & NORTHRUP CO.

(NSIC 188326) ON DEC. 8, 1983, IT WAS DETERMINED THAT THE RECORDER FOR REACTOR BUILDING PRESSURE (BS-65-PR) WAS INOPERABLE. THIS IS THE FIRST EVENT OF THIS TYPE AND THE FIFTEENTH REPORT UNDER TECH SPEC 3.3.3.6. REACTOR BUILDING PRESSURE INDICATION WAS AVAILABLE ON INDICATORS BS-16-PI AND BS-17-PI LOCATED ON THE MAIN CONTROL BOARD. THIS EVENT WAS CAUSED BY A PROCEDURAL INADEQUACY. THE RECORDER WAS DISCONNECTED DURING INSTALLATION OF A MODIFICATION WHEN ONE OF THE ELECTRICAL DRAWINGS USED FOR THE MODIFICATION WAS REVISED AND ONE OF THE WIRES TO THE RECORDER WAS INADVERTENTLY OMITTED. A MODIFICATION WAS PREPARED TO CORRECT THE WIRING TO THE RECORDER AND WAS INSTALLED ON DEC. 27, 1983. SP-300, OPERATING DAILY SURVEILLANCE LOG, WILL BE REVISED TO ENSURE THE RECORDERS LISTED IN TECH SPEC 3.3.3.6 ARE CHECKED EACH SHIFT.

[140] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-064
REACTOR BUILDING RADIATION MONITOR INOPERABLE.
EVENT DATE: 121983 REPORT DATE: 011884 NSSS: BW TYPE: PWR
SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: SHAWMUT COMPANY

(NSIC 188683) DURING A ROUTINE WALKDOWN OF THE CONTROL ROOM AT 2200 ON DEC. 19, 1983 THE REACTOR BUILDING RADIATION MONITOR (RM-A6) WAS INDICATING A LOW FLOW ALARM. THE ALARM PRINTED OUT AT 1708, HOWEVER, NO AUDIBLE ANNUNCIATOR WAS RECEIVED. THE ALARM WAS INVESTIGATED AND RM-A6 WAS RETURNED TO OPERATION AT 2253, DEC. 19, 1983. THIS IS THE THIRD EVENT OF THIS TYPE AND THE THIRTEENTH REPORT UNDER TECH SPEC 3.4.6.1. THE CAUSE OF THIS EVENT WAS A BLOWN LAMP IN THE LOCAL INDICATOR FOR A WASTE SAMPLING VALVE, WSV-6. THIS CAUSED A FUSE IN BREAKER 18 OF DC DISTRIBUTION PANEL (DPDP-5B) TO BLOW. DPDP-5B SUPPLIES CONTROL POWER TO WSV-4 AND WSV-6, WHICH IS THE FLOW PATH FOR RM-A6. THE FUSE AND LAMP WERE REPLACED AND THE SYSTEM WAS RETURNED TO SERVICE. AN ENGINEERING INVESTIGATION IS UNDERWAY TO PROVIDE A RECOMMENDATION TO PREVENT A RECURRENCE.

[141] DAVIS-BESSE 1 DOCKET 50-346 LER 81-061 REV 2
UPDATE ON CONTROL ROD POSITION INDICATOR FAILURE.
EVENT DATE: 100381 REPORT DATE: 122983 NSSS: BW TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188151) (NP-33-81-77) ON 10/3/81 AT 0104 HOURS AND ON 10/20/81 AT 0300 HOURS, ABSOLUTE POSITION INDICATION (API) ON GROUP 4 ROD 7 BECAME ERRATIC, FLUCTUATING 5-10% OF FULL RANGE. ASYMMETRIC ROD FAULT ALARMS WERE RECEIVED AND THE STATION ENTERED THE ACTION STATEMENT OF TECH SPEC 3.1.3.3.A.2. THE ROD WAS PLACED IN ASYMMETRIC BYPASSES AND ITS POSITION VERIFIED BY RELATIVE POSITION INDICATION AND ACTUATION OF ITS ZONE REFERENCE LIGHT. THE CAUSE OF THIS

OCCURRENCE WAS A LOSS OF SIGNAL IN THE ELECTRICAL PENETRATION MODULE. THE ELECTRICAL PENETRATION MODULE WAS REPLACED UNDER FACILITY CHANGE REQUEST 79-401.

[142] DAVIS-BESSE 1 DOCKET 50-346 LER 81-074 REV 1
UPDATE ON POSSIBLE FAILURE OF REACTOR PROTECTION SYSTEM.
EVENT DATE: 111681 REPORT DATE: 122281 NSSS: BW TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188829) (NP-33-81-89) ON 11/16/81 THE NSSS VENDOR, BABCOCK AND WILCOX, CONFIRMED THAT A NEW ANALYSIS SHOWED AS GENERAL INCREASE IN THE REACTOR PROTECTION SYSTEM (RPS) INSTRUMENT STRING ERRORS. THIS REDUCED THE MARGIN BETWEEN THE ACTUAL RPS TRIP SETPOINTS IN THE STATION AND THE TRIP POINTS IN THE TECH SPEC. THIS FINDING IS REPORTABLE UNDER TECH SPEC 6.9.1.9. THE CYCLE 2 TECH SPEC RPS TRIP SETPOINTS STILL CONTAINED IDENTIFIABLE SAFETY MARGINS TO OFFSET THE INCREASED INSTRUMENT ERROR SUCH THAT THE FUNCTIONAL REQUIREMENTS OF THE SYSTEM WOULD HAVE BEEN MET. THIS FINDING IS DUE TO ADDITIONAL TESTING ON THE RPS INSTRUMENTS WHICH SHOWED INCREASED ERRORS. THE ACTUAL RPS TRIP SETPOINTS IN THE PLANT HAVE BEEN ADJUSTED UNDER FACILITY CHANGE REQUEST 81-295 TO ACCOUNT FOR THE INCREASED INSTRUMENT ERRORS. THE VENDOR HAS BEEN AUTHORIZED TO PERFORM AN ANALYSIS TO DETERMINE THE NEW TECH SPEC RPS TRIP SETPOINTS FOR THE UPCOMING CYCLE 3 TECH SPEC REVISIONS.

[143] DAVIS-BESSE 1 DOCKET 50-346 LER 82-045 REV 3
UPDATE ON SPURIOUS CLOSING OF AFW FLOW CONTROL VALVE.
EVENT DATE: 090482 REPORT DATE: 011684 NSSS: BW TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVES
VENDOR: POWELL MANUFACTURING AND ELECTRICAL CORP.

(NSIC 188834) (NP-33-82-49) ON 9/4/82 AT 0945 HOURS, A CONTROL ROOM OPERATOR OBSERVED AUXILIARY FEEDWATER (AFW) PUMP 1-1 SUCTION VALVE FW786 CLOSED FOR NO APPARENT REASON WITHOUT AN OPERATOR TOUCHING THE CLOSE BUTTON. ON 12/3/82 AT 1720 HOURS, A CONTROL ROOM OPERATOR FOUND FW786 CLOSED. ON BOTH OCCURRENCES, THE STATION ENTERED THE ACTION STATEMENT OF TECH SPEC 3.7.1.2. AFW TRAIN 2 WAS OPERABLE DURING EACH OCCURRENCE. 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.

[144] DAVIS-BESSE 1 DOCKET 50-346 LER 83-013
CHLORINE DETECTOR FAILURE SHUTS DOWN CONTROL ROOM VENTILATION.
EVENT DATE: 030483 REPORT DATE: 033183 NSSS: BW TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188237) (NP-33-83-17) ON 3/4/83 AT 0305 HOURS, CHLORINE DETECTOR AE5358B TRIPPED CAUSING A SHUTDOWN OF THE CONTROL ROOM NORMAL VENTILATION SYSTEM. THIS PLACED THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.3.3.7. PER THE ACTION STATEMENT REQUIREMENTS, THE CONTROL ROOM VENTILATION SYSTEM WAS PLACED IN THE RECIRCULATION MODE. THE REDUNDANT CHLORINE DETECTOR WAS OPERABLE DURING THE TIME OF THIS OCCURRENCE. THE CAUSE WAS A COMPONENT FAILURE. THE ORIFICE HAD PLUGGED ON THE DETECTOR AND THE WICK HAD DRIED. UNDER GENERIC WORK ORDER 83-8583, INSTRUMENT AND CONTROL PERSONNEL CLEANED THE ORIFICE, REPLACED THE WICK, AND CHECKED OPERATION PER THE CHLORINE DETECTOR SYSTEM MONTHLY TEST ST 5037.02. AT 0440 HOURS ON 3/4/83, THE DETECTOR WAS DECLARED OPERABLE, REMOVING THE UNIT FROM THE ACTION STATEMENT.

[145] DAVIS-BESSE 1 DOCKET 50-346 LER 83-067 REV 1
UPDATE ON FIRE BARRIER WATCH NOT MAINTAINED.
EVENT DATE: 112483 REPORT DATE: 122983 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188871) (NP-33-83-95) ON 11/24/83 AT 2100 HOURS, AN EQUIPMENT OPERATOR DISCOVERED THAT FIRE DAMPERS (FD) 1085, 1084, AND 1111 WERE NOT BEING CONTINUOUSLY MONITORED AS REQUIRED BY TECH SPEC 3.7.10. INVESTIGATION REVEALED THAT THE INDIVIDUAL PERFORMING THE FIRE WATCH WAS SITTING IN THE AUXILIARY BUILDING SOUTHWEST STAIRWAY OBSERVING FD1085 AND COULD NOT OBSERVE FD1084 AND FD1111. FIRE DETECTION AND SUPPRESSION SYSTEMS ARE LOCATED IN THE AREA AND WERE OPERABLE. THIS EVENT IS ATTRIBUTABLE TO PERSONNEL ERROR IN THAT CONTRACT PERSONNEL FAILED TO REPORT FOR WORK, RESULTING IN A LACK OF ADEQUATE COVERAGE. THE CONTRACT SHIFT SUPERVISOR WAS AWARE OF THE PROBLEM, BUT FAILED TO INFORM THE TOLEDO EDISON SHIFT SUPERVISOR. UPON DISCOVERY, THE INDIVIDUAL WAS MOVED TO AN AREA WHERE ALL THREE FIRE DAMPERS COULD BE OBSERVED.

[146] DAVIS-BESSE 1 DOCKET 50-346 LER 83-072
LOSS OF ESSENTIAL BUSES CAUSES SCRAM.
EVENT DATE: 121783 REPORT DATE: 011684 NSSS: BW TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188346) (NP-33-83-101) ON 12/17/83 AT 1515 HOURS, 120 VAC ESSENTIAL BUS Y1 WAS DE-ENERGIZED. AS A RESULT OF THE LOSS OF Y1, THE FOLLOWING CHANNELS WERE ALSO DE-ENERGIZED: REACTOR PROTECTION SYSTEM (RPS) CHANNEL 1, SAFETY FEATURES ACTUATION SYSTEM (SFAS) CHANNEL 1, AND STEAM AND FEEDWATER RUPTURE CONTROL SYSTEM (SFRCS) CHANNEL 1. WHEN POWER WAS LOST TO RPS CHANNEL 1, THE HIGH AUCTIONEERED POWER SIGNAL TO THE ICS WENT TO 0% POWER. THE ICS RESPONDED BY GIVING A COMMAND FOR CONTINUOUS CONTROL ROD MOTION OUTWARD. A REACTOR TRIP DUE TO HIGH FLUX RESULTED. THE CAUSE OF THE LOSS OF Y1 WAS PERSONNEL ERROR. WHILE REMOVING A SCREW ON THE TERMINALS IN CIRCUIT NUMBER Y120A, RT4597AB, CONTAINMENT POST-ACCIDENT HIGH RANGE RADIATION MONITOR, THE SCREW SLIPPED OFF THE SCREW STARTER AND THE LEAD PULLED THE SCREW BACK, WHICH THEN SHORTED IT TO GROUND. THE TECHNICIAN WAS COUNSELED BY THE LEAD I&C ENGINEER.

[147] DAVIS-BESSE 1 DOCKET 50-346 LER 83-073
CONTAINMENT ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 121983 REPORT DATE: 011884 NSSS: BW TYPE: PWR
SYSTEM: REACTOR VESSEL INTERNALS COMPONENT: VALVE OPERATORS

(NSIC 188347) (NP-33-83-102) ON 12/19/83 AT 2700 HOURS DURING THE PERFORMANCE OF THE MISCELLANEOUS VALVES QUARTERLY TEST ST 5099.08, CONTAINMENT AIR SAMPLE RETURN VALVE CV5011E FAILED TO CLOSE ELECTRICALLY. NO ACTION STATEMENTS WERE ENTERED BECAUSE THE PLANT WAS IN MODE 5. THIS OCCURRENCE IS BEING REPORTED TO DOCUMENT A COMPONENT FAILURE. THE CAUSE IS UNKNOWN. MAINTENANCE WORK ORDER 1-83-5907-00 WAS ISSUED TO INVESTIGATE THE OPERATOR AND CONTROL CIRCUIT FOR CV5011E. THE VALVE WAS CYCLED THREE TIMES FROM THE LOCAL CONTROL SWITCH AND TWICE FROM THE CONTROL ROOM. THE VALVE OPERATED SMOOTHLY, THE RUNNING CURRENT WAS NORMAL, AND THE LIMIT SWITCHES AND TORQUE SWITCH OPERATED CORRECTLY. THE OPERATOR AND THE STARTER WERE CHECKED FOR GROUNDS, SHORTS, AND LOOSE CONNECTIONS, AND NONE WERE FOUND.

[148] DAVIS-BESSE 1 DOCKET 50-346 LER 83-074
BWST LEVEL INSTRUMENT INOPERABLE.
EVENT DATE: 122483 REPORT DATE: 012484 NSSS: BW TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: HEATERS,ELECTRIC

(NSIC 188348) (NP-33-83-104) ON 12/24/L83 AT 0625 HOURS, THE OPERATORS RECEIVED THE BORATED WATER STORAGE TANK (BWST) HI FAIL ALARM FOR SAFETY FEATURES ACTUATION

SYSTEM (SFAS) CHANNEL 1. THE OPERATORS TRIPPED THE BWST LOW LEVEL BISTABLE FOR SFAS CHANNEL 1 AS REQUIRED BY ACTION STATEMENT 9 OF TECH SPEC 3.3.2.1. AFTER THE INSTALLATION OF ADDITIONAL HEATERS, THE TRANSMITTER INDICATION RETURNED TO NORMAL. SURVEILLANCE TESTS ST 5099.01 AND ST 5099.05 WERE PERFORMED ON 12/25/83 AT 1250 HOURS, AND THE TRANSMITTER WAS DECLARED OPERABLE. THERE WAS NO DANGER. THREE REMAINING BWST CHANNELS WERE OPERABLE. A FOLLOWUP INVESTIGATION FOUND THAT THE HEAT TRACE WAS NOT PROPERLY INSTALLED ON THE TRANSMITTER PIPING. RECORDS SHOWED THE LAST WORK DONE ON THE TRANSMITTER WAS TO INSTALL THE TRANSMITTER AND RUN ST 5031.05. ST 5031.05 WAS NOT CLEAR WITH RESPECT TO CHECKING THE FREEZE PROTECTION. THIS PROCEDURE WAS MODIFIED TO SHOW THE PROPER SEQUENCE TO VERIFY THAT THE FREEZE PROTECTION IS PROPERLY INSTALLED.

[149] DIABLO CANYON 1 DOCKET 50-275 LER 83-004 REV 1
UPDATE ON SABOTAGE GOUGES IN REACTOR COOLANT PIPING.
EVENT DATE: 041983 REPORT DATE: 011784 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PIPES,FITTINGS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188540) PRIOR TO FUEL LOAD, GRINDING WHEEL AND ROTARY FILE GOUGES WERE DISCOVERED ON THE MAIN COOLANT SYSTEM PIPING ON THE DISCHARGE SIDE OF #3 MAIN COOLANT PUMP. OF THE FOUR GOUGES DISCOVERED, THE MOST SEVERE WAS APPROXIMATELY 0.150 INCHES DEEP X 2.0 INCHES LONG X 0.150 INCHES WIDE CAUSING A LESS THAN REQUIRED MINIMUM WALL THICKNESS. THIS EVENT IS REPORTABLE PER TECH SPEC 6.9.1.12.C. GOUGES WERE INTENTIONALLY CAUSED BY PERSONS UNKNOWN. GOUGES HAVE BEEN REPAIRED BY WELD BUILDUP AND GRINDING FLUSH, IN ACCORDANCE WITH AN APPROVED ASME SECTION XI PROCEDURE. ADDITIONAL CORRECTIVE ACTIONS TAKEN ARE DESCRIBED. THIS IS A FINAL REPORT.

[150] DIABLO CANYON 1 DOCKET 50-275 LER 83-026
POWER SWITCH TO PLANT VENT IODINE SAMPLER FOUND IN OFF POSITION.
EVENT DATE: 111483 REPORT DATE: 121483 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: RADECO, INC.

(NSIC 188319) PRIOR TO FUEL LOAD, THE POWER SWITCH TO THE PLANT VENT IODINE SAMPLER (RE-24) WAS FOUND IN THE OFF POSITION. THE INSTRUMENT WAS DECLARED INOPERABLE UNDER TECH SPEC SECTION 3.3.3.10. THERE WAS NO RELEASE OF RADIOACTIVE GASEOUS EFFLUENTS. RE-24 WAS INOPERABLE FOR A TOTAL PERIOD OF THREE (3) MINUTES, AND THE INSTRUMENT WAS RETURNED TO SERVICE. A SIMILAR EVENT WAS REPORTED IN LER 83-009. REPORTABLE PER TECH SPEC SECTION 6.9.1.13.B. POWER SWITCH WAS INADVERTENTLY SWITCHED OFF DURING A PERIOD OF HEAVY CONSTRUCTION ACTIVITY IN THE IMMEDIATE VICINITY. TO PREVENT RECURRENCE, A PROTECTIVE COVER WILL BE INSTALLED OVER THE POWER SWITCH, ADDITIONAL SUPERVISION WILL BE PLACED OVER CONSTRUCTION PERSONNEL AND A MEMO WILL BE DISTRIBUTED REMINDING CONSTRUCTION PERSONNEL TO USE CAUTION WHILE WORKING IN THE VICINITY OF OPERATING EQUIPMENT.

[151] DIABLO CANYON 1 DOCKET 50-275 LER 83-027
THREE DIESELS INOPERABLE.
EVENT DATE: 111783 REPORT DATE: 121983 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: VALVES

(NSIC 188394) DURING INITIAL FUEL LOAD, WITH DIESEL GENERATORS (DG) 1-1 AND 1-3 OUT OF SERVICE, DG 1-2 AIR RECEIVER 1-2A FELL BELOW ITS MINIMUM PRESSURE SETPOINT. A REDUNDANT AIR RECEIVER WAS AVAILABLE TO START THE DG 1-2 IN THE EVENT OF AN EMERGENCY. HOWEVER, THE SHIFT FOREMAN DECLARED DG 1-2 INOPERABLE AND IMMEDIATELY SUSPENDED ALL OPERATIONS INVOLVING CORE ALTERATIONS IN ACCORDANCE WITH TECH SPEC SECTION 3.8.1.2. DIESEL GENERATOR 1-2 STARTING AIR COMPRESSOR 1-2A INTERNAL RELIEF VALVE WOULD NOT RESEAT, RESULTING IN ITS ASSOCIATED AIR

RECEIVER FALLING BELOW ITS MINIMUM PRESSURE SETPOINT. ALL OPERATIONS INVOLVING CORE ALTERATIONS WERE SUSPENDED. THE MALFUNCTIONING RELIEF VALVE WAS REPLACED. THE AIR RECEIVER WAS SUBSEQUENTLY REPRESSURIZED AND DIESEL GENERATOR 1-2 DECLARED OPERABLE.

[152] DIABLO CANYON 1 DOCKET 50-275 LER 83-031
LOAD TESTING OF AUXILIARY HOIST NOT PERFORMED AT REQUIRED TIME.
EVENT DATE: 112283 REPORT DATE: 122283 NSSS: WE TYPE: PWR
SYSTEM: FUEL HANDLING SYSTEMS COMPONENT: OTHER COMPONENTS
VENDOR: STEARNS-ROGER COPR.

(NSIC 188320) WHILE IN MODE 6 (REFUELING), IT WAS DISCOVERED THAT TECH SPEC 4.9.6.2., LOAD TESTING OF THE AUXILIARY HOIST, HAD BEEN PERFORMED APPROXIMATELY 240 HOURS PRIOR TO USE OF THE AUXILIARY HOIST, RATHER THAN 100 HOURS AS REQUIRED. CAUSE WAS MISINTERPRETATION BY PLANT STAFF OF SURVEILLANCE REQUIREMENT 4.9.6.2 AS TO THE TERM "PRIOR TO START OF SUCH OPERATIONS". MAINTENANCE PROCEDURES ARE BEING REVISED TO REQUIRE THAT 4.9.6.2 BE ACCOMPLISHED WITHIN 100 HOURS PRIOR TO USE FOR "MOVEMENT OF CONTROL RODS WITHIN THE REACTOR PRESSURE VESSEL". A LICENSE AMENDMENT REQUEST TO MODIFY THIS ITEM IS BEING CONSIDERED.

[153] DIABLO CANYON 1 DOCKET 50-275 LER 83-033
BOTH SOURCE RANGE CHANNELS INOPERABLE.
EVENT DATE: 120283 REPORT DATE: 122983 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188677) WHILE IN MODE 5 (COLD SHUTDOWN), AND WITH ONE CHANNEL OF SOURCE RANGE INSTRUMENTATION REQUIRED PER TECH SPEC 3.3.1, BOTH CHANNELS OF SOURCE RANGE INSTRUMENTATION WERE DEENERGIZED FOR ABOUT TWO MINUTES DURING THE PERFORMANCE OF A SURVEILLANCE TEST. THIS EVENT IS REPORTABLE PER TECH SPEC 6.9.1.13B. CAUSE WAS A PERSONNEL ERROR IN THAT AN I&C TECHNICIAN FAILED TO FOLLOW A WRITTEN PROCEDURE DURING PERFORMANCE OF A SURVEILLANCE TEST. THIS PROCEDURE HAD A SPECIFIC PROVISION FOR PROTECTION AGAINST LOSS OF HIGH VOLTAGE IN THE MONITORING CIRCUIT. I&C PERSONNEL WERE INSTRUCTED BY THE ASST. PLANT MANAGER, TECH SERVICES ON THE IMPORTANCE OF FOLLOWING WRITTEN INSTRUCTIONS.

[154] DRESDEN 2 DOCKET 50-237 LER 83-063
MSIV GIVES DUAL POSITION INDICATION.
EVENT DATE: 083083 REPORT DATE: 092783 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188667) DURING NORMAL OPERATION AND WHILE PERFORMING MSIV 10 PERCENT CLOSURE TEST PROCEDURE DOS 250-1, A DOUBLE INDICATION OCCURRED ON MSIV 2-203-1B WHEN THE TEST BUTTON WAS RELEASED. MSIV CLOSURE WILL STILL PROVIDE PROPER SCRAM SIGNALS. THIS EVENT WAS THE FIRST OCCURRENCE OF THIS TYPE. CAUSE IS BELIEVED TO BE A GROUND ON THE 1B LIMIT SWITCH THAT IS PART OF THE INDICATION CIRCUIT. THIS CIRCUIT IS IN THE DRYWELL AND WILL BE CORRECTED DURING THE NEXT OUTAGE OF SUFFICIENT LENGTH. A SUPPLEMENTAL WILL BE WRITTEN WHEN FINAL REPAIRS ARE IMPLEMENTED.

[155] DRESDEN 2 DOCKET 50-237 LER 83-075 REV 1
UPDATE ON LATE PERFORMANCE ON DRYWELL LEAKAGE TEST.
EVENT DATE: 111883 REPORT DATE: 122383 NSSS: GE TYPE: BWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188464) DURING NORMAL OPERATION, DUE TO MAINTENANCE WORK BEING DONE ON THE DRYWELL FLOOR DRAIN TRANSMITTER, THE 1200 PUMPDOWN OF THE DRYWELL FLOOR DRAIN SUMP WAS NOT PERFORMED UNTIL 1410 (TECH SPEC 4.6.D.1). THE CALCULATED LEAKAGE OF THE 1410 PUMPDOWN WAS 1.73 GPM CONSTITUTING MINIMAL SAFETY SIGNIFICANCE. THIS IS THE FIRST OCCURRENCE OF THIS KIND. EXCESSIVE NOISE, BELIEVED TO BE CAUSED BY THE TRANSMITTER AMPLIFIER, SENT AN ELEVATED DC SIGNAL TO THE DRYWELL FLOOR DRAIN INTEGRATOR CAUSING IT TO RUN CONTINUOUSLY. THE AMPLIFIER WAS REPLACED. THE INTEGRATOR CONTINUED TO RUN WHICH LED TO THE REPLACEMENT OF THE ENTIRE TRANSMITTER, R.O. 83-77. THE INTEGRATOR THEN FUNCTIONED PROPERLY. NO FURTHER ACTION DEEMED NECESSARY.

[156] DRESDEN 2 DOCKET 50-237 LER 83-076 REV 1
UPDATE ON LEAKAGE FROM FEEDWATER.
EVENT DATE: 111983 REPORT DATE: 010384 NSSS: GE TYPE: BWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: VALVES
VENDOR: CRANE COMPANY

(NSIC 188668) DURING NORMAL OPERATION, UNIDENTIFIED DRYWELL LEAKAGE WAS CALCULATED TO BE 3.08 GPM (TECH SPEC 4.6.D.2). ISOTOPIC ANALYSIS WAS PERFORMED ON DRYWELL AIR AND WATER SAMPLES AND THE NRC INSPECTOR WAS NOTIFIED. WHEN LEAKAGE REACHED 3.8 GPM, AN ORDERLY SHUTDOWN WAS INITIATED. A DRYWELL ENTRY REVEALED LEAKAGE COMING FROM THE FEEDWATER CHECK VALVE 2-220-58B. LEAKAGE WAS CONTAINED WITHIN THE FLOOR DRAIN SYSTEM. PREVIOUS OCCURRENCE REPORTED BY R.O. 83-36 ON DOCKET 50-237. THE CAUSE OF THE LEAK WAS DUE TO A CUT IN THE SEAL RING SEATING AREA ON THE FEEDWATER CHECK VALVE BODY. THE CUT WAS SILVER SOLDERED AND A NEW SEAL RING WAS INSTALLED. VALVE WAS RETURNED TO SERVICE WITH NO FURTHER ABNORMALITIES NOTED.

[157] DRESDEN 2 DOCKET 50-237 LER 83-077 REV 1
UPDATE ON DRYWELL FLOOR DRAIN TRANSMITTER FAILURE.
EVENT DATE: 111983 REPORT DATE: 010384 NSSS: GE TYPE: BWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188465) DURING NORMAL OPERATION, ADDITIONAL MAINTENANCE WORK ON THE DRYWELL FLOOR DRAIN TRANSMITTER PREVENTED THE 1200 PUMPDOWN OF THE DRYWELL FLOOR DRAIN SUMP (TECH SPEC 4.6.D.1). CALCULATED LEAKAGE FROM THE PUMPDOWN (2.41 GPM) AT 1433 WAS WITHIN TECH SPEC LIMITS CONSTITUTING MINIMAL SAFETY SIGNIFICANCE. PREVIOUS OCCURRENCE REPORTED BY R.O. 83-75/03L ON DOCKET 50-237. THE NOISE THAT WAS SENDING AN ELEVATED DC SIGNAL TO THE DRYWELL FLOOR DRAIN INTEGRATOR DID NOT CEASE UPON REPLACEMENT OF THE TRANSMITTER AMPLIFIER THE PREVIOUS DAY. THE ENTIRE TRANSMITTER WAS REPLACED WITH A ROSEMOUNT DP TRANSMITTER AND THE INTEGRATOR FUNCTIONED PROPERLY. NO FURTHER ACTION DEEMED NECESSARY.

[158] DRESDEN 2 DOCKET 50-237 LER 83-078 REV 1
UPDATE ON LPCI VALVE FAILS TO OPEN.
EVENT DATE: 112183 REPORT DATE: 010384 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188669) DURING NORMAL PLANT OPERATION WHILE PREPARING TO LOWER SUPPRESSION POOL LEVEL, THE LPCI 1501-3A VALVE FAILED TO OPEN REMOTELY UPON STARTING OF THE "A" CONTAINMENT COOLING SERVICE WATER (CCSW) SYSTEM (TECH SPEC 5.5.B.2.B). THE "B" LPCI/CCSW SYSTEM WAS OPERABLE. SIMILAR OCCURRENCE REPORTED BY R.O. 83-24/03L-0 ON DOCKET 50-249. THE EVENT WAS CAUSED BY THE FEEDBACK POTENTIOMETER IN THE VALVE CONTROL CIRCUITRY DRIFTING OUT OF ADJUSTMENT. THE FEEDBACK POTENTIOMETER WAS SUBSEQUENTLY READJUSTED AND TIGHTENED. CONTAINMENT

COOLING SERVICE WATER PUMP TEST, DOS 1500-3, WAS PERFORMED TO VERIFY PROPER SYSTEM OPERATION.

[159] DRESDEN 2 DOCKET 50-237 LER 83-082
TURBINE CONTROL VALVE TEST SWITCH FAILS.
EVENT DATE: 122583 REPORT DATE: 012384 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: NAMCO CONTROLS

(NSIC 188466) DURING NORMAL PLANT OPERATION WHILE PERFORMING DOS 5600-2, WEEKLY AND DAILY TURBINE CHECKS, CONTROL VALVE NUMBER 4 FAILED TO GIVE HALF-SCRAM WHEN TESTED. THE THREE REMAINING CONTROL VALVES OPERATED SATISFACTORILY THUS MAINTAINING FULL SCRAM CAPABILITY. LAST SIMILAR OCCURRENCE WAS REPORTED BY DVR 12-3-82-54. THE PROBABLE CAUSE WAS FAILURE OF TEST SWITCH CVTS-4. STEAM FLOW WAS REDUCED TO LESS THAN 45 PERCENT PER TECH SPEC. FOLLOW-UP TESTING PRODUCED REPEATED HALF-SCRAMS. A SIMILAR INCIDENT OCCURRED ON JAN. 15, 1984 WITH IDENTICAL RESULTS. A RECORDER WAS INSTALLED TO MONITOR VALVE POSITION AND TEST SWITCH OPERATION IN ORDER TO CONTINUE THE INVESTIGATION INTO THE EXACT CAUSE OF THESE EVENTS.

[160] DRESDEN 2 DOCKET 50-237 LER 83-083
LPCI VALVE TRIPS ON THERMAL OVERLOAD.
EVENT DATE: 122683 REPORT DATE: 012484 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188467) DURING NORMAL PLANT OPERATION WHILE LOWERING SUPPRESSION POOL LEVEL, THE LOW PRESSURE COOLANT INJECTION (LPCI) 1501-3B VALVE TRIPPED ON THERMAL OVERLOAD (TECH SPEC 6.6.B.2.B). THE "A" LPCI/CCSW SYSTEM WAS OPERABLE. THIS EVENT WAS THE FIRST OCCURRENCE OF THIS TYPE. THE EVENT WAS CAUSED BY UNDERRATED THERMAL OVERLOAD HEATERS (G.E. CR 123 L1.74A) IN THE VALVE MOTOR OVERLOAD ASSEMBLY WHICH RESULTED DURING THE INSTALLATION OF ENVIRONMENTALLY QUALIFIED MOTORS. THE OVERLOAD HEATERS WERE REPLACED WITH THE APPROPRIATELY RATED (G.E. CR 123 L2.55A) OVERLOAD HEATERS. UNDERRATED OVERLOAD HEATERS IN OTHER PLANT SYSTEMS UTILIZING NEW E.Q. MOTORS WILL BE REPLACED.

[161] DRESDEN 2 DOCKET 50-237 LER 83-084
OXYGEN ANALYZER INOPERABLE.
EVENT DATE: 123083 REPORT DATE: 012584 NSSS: GE TYPE: BWR
SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: HEATERS,ELECTRIC
VENDOR: BECKMAN INSTRUMENTS, INC.

(NSIC 188670) DURING NORMAL OPERATION, PRIMARY CONTAINMENT OXYGEN SAMPLE FROM THE TORUS ALARMED ON LOW SAMPLE FLOW. THERE WAS MINIMAL SAFETY SIGNIFICANCE BECAUSE THE THREE REMAINING CONTAINMENT SAMPLE POINTS WERE OPERABLE AND READING WITHIN THE TECH SPEC LIMIT OF LESS THAN 4 PERCENT OXYGEN CONCENTRATION. THIS WAS THE FIRST OCCURRENCE OF THIS TYPE AT DRESDEN. EVENT WAS CAUSED BY MOISTURE IN THE SAMPLE LINE DUE TO HEAT TRACE LEADS BEING REMOVED. NO RECORD WAS FOUND IN THE JUMPER LOG AND DISCUSSIONS WITH POTENTIALLY INVOLVED DEPARTMENTS FAILED TO DETERMINE THE ROOT CAUSE OF THIS EVENT. THE LINE WAS DRAINED AND THE LEADS RECONNECTED. OTHER SAMPLE LINES WERE CHECKED FOR PROPER HEAT TRACING. CONSTRUCTION PRACTICES WILL BE REINFORCED WITH THE APPROPRIATE DEPARTMENTS.

[162] DRESDEN 3 DOCKET 50-249 LER 83-007
TORUS SPRAY ISOLATION VALVE FAILS OPEN.
EVENT DATE: 020883 REPORT DATE: 021583 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

VENDOR: GENERAL ELECTRIC CO.

(NSIC 188468) DURING NORMAL OPERATION WITH DOS 1500-1 (LPCI VALVE OPERABILITY TEST) IN PROGRESS BECAUSE THE UNIT 2/3 DIESEL GENERATOR WAS INOPERABLE FOR ROUTINE INSPECTION, TORUS SPRAY ISOLATION VALVE M03-1501-18A FAILED IN THE OPEN POSITION. SAFETY SIGNIFICANCE WAS MINIMAL SINCE VALVE M03-1501-19A WAS OPERABLE AND CLOSED IN THE AFFECTED LINE TO PROVIDE ISOLATION. LAST PREVIOUS OCCURRENCE REPORTED BY R.O. 83-06 ON DOCKET 50-249. CAUSE OF THE EVENT WAS DUE TO AN AUXILIARY CONTACT (CR 105X) IN THE CONTROL CIRCUITRY OF THE VALVE. THE EXACT TYPE OF CONTACT FAILURE COULD NOT BE DETERMINED BECAUSE THE CONTACT FUNCTIONED PROPERLY UPON REMOVAL AND TESTING. THE CONTACT WAS REPLACED AND THE VALVE WAS SUCCESSFULLY OPERATED FROM THE CONTROL ROOM.

[163] FARLEY 1 DOCKET 50-348 LER 83-010
RHR PUMP DECLARED INOPERABLE.
EVENT DATE: 030583 REPORT DATE: 040483 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

(NSIC 188625) AT 1841 ON 3/5/83, DURING THE PERFORMANCE OF FNP-1-STP-40.0 (SAFETY INJECTION WITH LOSS OF OFFSITE POWER TEST), 1B RHR PUMP WAS DECLARED INOPERABLE WHEN THE "B" TRAIN COMPONENT COOLING WATER PUMP BREAKER FAILED TO CLOSE. TECH SPEC 3.9.8.2, IN PART, REQUIRES THIS PUMP TO BE OPERABLE. TECH SPEC 3.9.8.2 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO A DESIGN ERROR WHICH LED TO DAMAGE TO THE "B" TRAIN CCW HANDSWITCH AS A RESULT OF SHORTING CONTROL POWER TO GROUND THROUGH THE SWITCH CONTACTS. FOLLOWING THE ALIGNMENT OF THE SWING COMPONENT COOLING WATER PUMP TO THE "B" TRAIN, THE 1B RHR PUMP WAS DECLARED OPERABLE AT 0102 ON 3/6/83. SUBSEQUENTLY, THE HANDSWITCH WAS REPAIRED AND THE DESIGN WAS CORRECTED. THE UNIT WAS SHUT DOWN FOR REFUELING (OPERATIONAL MODES 5 AND 6) THROUGHOUT THE PERIOD IN WHICH THE DESIGN MODIFICATION WAS IMPLEMENTED, CORRECTED AND TESTED SATISFACTORILY. THE TEST PROCEDURE VERIFYING PROPER DESIGN DID NOT REVEAL THE DESIGN ERROR SINCE EACH BREAKER WAS TESTED INDEPENDENTLY AND THE PROBLEM EXISTED ONLY WHEN TWO SPECIFIC BREAKERS WERE OPERATED CONCURRENTLY. THE DESIGN CHANGE WAS COMPLETED PRIOR TO THE SI-LOSP TEST TO ALLOW FOR A FINAL OPERABILITY VERIFICATION DURING INTEGRATED TESTING.

[164] FARLEY 1 DOCKET 50-348 LER 83-013
STEAM GENERATOR LEVEL TRANSMITTER INOPERABLE.
EVENT DATE: 032983 REPORT DATE: 042183 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188626) AT 2140 ON 3/29/83, THE INSTRUMENTATION LOOP ASSOCIATED WITH STEAM GENERATOR 1A LEVEL TRANSMITTER LT-475 WAS DECLARED INOPERABLE DUE TO A LOW INDICATION. TECH SPEC 3.3.1, IN PART, REQUIRES THE LT-475 INSTRUMENTATION LOOP TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO THE FAILURE OF A POWER SUPPLY CARD. THE CARD WAS REPLACED AND FOLLOWING THE PERFORMANCE OF FNP-1-STP-213.26 (STEAM GENERATOR 1A O1C22LT0475 LOOP CALIBRATION AND FUNCTIONAL TEST), THE LT-475 INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 0132 ON 3/30/83.

[165] FARLEY 1 DOCKET 50-348 LER 83-028
STEAM GENERATOR FLOW TRANSMITTER FAILURE.
EVENT DATE: 060183 REPORT DATE: 063083 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188627) AT 0415 ON 6/1/83, THE INSTRUMENTATION CHANNEL ASSOCIATED WITH 1C STEAM GENERATOR FLOW TRANSMITTER FT-495 WAS DECLARED INOPERABLE DUE TO ITS

ERRONEOUS INDICATION. TECH SPEC SECTIONS 3.3.1 AND 3.3.2, IN PART, REQUIRE THIS INSTRUMENTATION CHANNEL TO BE OPERABLE. TECH SPEC ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO DRIFT OF THE SQUARE ROOT EXTRACTION CARD. THE CARD WAS ADJUSTED AND FOLLOWING THE COMPLETION OF FNP-1-STP-213.24 (STEAM GENERATOR 1C Q1C22FT0495 LOOP CALIBRATION AND FUNCTIONAL TEST), FT-495 INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 0845 ON 6/1/83.

[166] FARLEY 1 DOCKET 50-348 LER 83-029
OVERPOWER DELTA TEMPERATURE CHANNEL DECLARED INOPERABLE.
EVENT DATE: 060183 REPORT DATE: 063083 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188628) AT 0416 ON 6/1/83 THE OVERPOWER DELTA TEMPERATURE CHANNEL I WAS DECLARED INOPERABLE UPON RECEIPT OF AN OVERPOWER DELTA T SINGLE INPUT ALERT WHEN AN ACTUAL OVERPOWER CONDITION DID NOT EXIST. TECH SPEC 3.3.1, IN PART, REQUIRES THIS INSTRUMENTATION TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO THE FAILURE OF THE OVERPOWER DELTA TEMPERATURE BISTABLE CARD. THE CARD WAS REPLACED AND FOLLOWING PERFORMANCE OF FNP-1-STP-201.18A (REACTOR COOLANT SYSTEM TE412A AND TE412D LOOP CALIBRATION AND FUNCTIONAL TEST), THE OVERPOWER DELTA TEMPERATURE CHANNEL I WAS DECLARED OPERABLE AT 0528 ON 6/1/83.

[167] FARLEY 1 DOCKET 50-348 LER 83-085
CONTAINMENT SPRAY SYSTEM VALVES NOT TESTED ON TIME.
EVENT DATE: 120483 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: VALVES
VENDOR: COPES-VULCAN, INC.

(NSIC 188517) AT 1330 ON 12/4/83, IT WAS DETERMINED THAT FNP-1-STP-16.7 (CONTAINMENT SPRAY SYSTEM VALVES INSERVICE TESTS) HAD NOT BEEN PERFORMED WITHIN THE ALLOWED TIME. THE CONTAINMENT SPRAY SYSTEMS WERE DECLARED INOPERABLE. DURING SUBSEQUENT PERFORMANCE OF FNP-1-STP-16.7, VALVE Q1E13V003B (CONTAINMENT SUMP TO CONTAINMENT SPRAY PUMP 1B SUCTION) FAILED TO STROKE PROPERLY AND WAS DECLARED INOPERABLE. TECH SPEC 3.0.3, 3.6.1.2, AND 3.6.3 ACTION STATEMENTS WERE MET. FNP-1-STP-16.7 WAS NOT PERFORMED WITHIN ITS ALLOWED TIME DUE TO PERSONNEL ERROR. FNP-1-STP-16.7 HAD BEEN COMPLETELY PERFORMED ON 6/17/83 AND HAD BEEN SCHEDULED FOR 9/17/83. ON 8/17/83 ONE SECTION OF FNP-1-STP-16.7 WAS PERFORMED ON ONE VALVE. THE ANNOTATION ON THE MASTER SCHEDULE WAS UNCLEAR AND THE PERSONNEL RESPONSIBLE FOR SCHEDULING MISUNDERSTOOD THE 8/17/83 ENTRY AND BELIEVED THAT FNP-1-STP-16.7 HAD BEEN PERFORMED COMPLETELY ON 8/17/83. THIS STP WAS RESCHEDULED FOR 11/17/83. FNP-1-STP-16.7 WAS SATISFACTORILY PERFORMED FOR THE A TRAIN CONTAINMENT SPRAY SYSTEM AND THE A TRAIN WAS DECLARED OPERABLE AT 1425. THE PERFORMANCE OF FNP-1-STP-16.7 FOR THE B TRAIN WAS SATISFACTORY FOR ALL VALVES EXCEPT Q1E13V003B. NO CAUSE DETERMINED FOR THIS VALVE FAILING TO STROKE PROPERLY. THE VALVE WAS SATISFACTORILY STROKED SEVERAL ADDITIONAL TIMES. THE SURVEILLANCE SCHEDULE HAS BEEN MODIFIED TO MORE CLEARLY INDICATE WHETHER THE STP WAS COMPLETELY OR ONLY PARTIALLY PERFORMED.

[168] FARLEY 1 DOCKET 50-348 LER 83-083
AUXILIARY BUILDING BATTERY HAS EXCESSIVE VOLTAGE DECREASE.
EVENT DATE: 120683 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: BATTERIES & CHARGERS

(NSIC 188349) AT 2215 ON 12/6/83, DURING PERFORMANCE OF FNP-1-STP-605.4 (AUXILIARY BUILDING BATTERY QUARTERLY VERIFICATION), THE B TRAIN AUXILIARY BUILDING BATTERY WAS DECLARED INOPERABLE DUE TO A VOLTAGE DECREASE FROM THE ORIGINAL ACCEPTANCE TEST ON CELL #1 (0.12 VOLTS ACTUAL DECREASE VERSUS LESS THAN

OR EQUAL TO 0.1 VOLTS DECREASE REQUIRED). TECH SPEC 3.8.2.3, IN PART, REQUIRES THIS BATTERY TO BE OPERABLE. TECH SPEC 3.8.2.3 ACTION STATEMENT REQUIREMENTS WERE MET. NO CAUSE FOR THIS EVENT COULD BE DETERMINED. THE AFFECTED CELL WAS PLACED ON A SINGLE CELL CHARGER AND FOLLOWING SATISFACTORY COMPLETION OF FNP-1-STP-605.4, THE B TRAIN AUXILIARY BUILDING BATTERY WAS DECLARED OPERABLE AT 2315 ON 12/6/83.

[169] FARLEY 1 DOCKET 50-348 LER 83-089
RADIATION MONITOR DECLARED INOPERABLE.
EVENT DATE: 121583 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: VALVES
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188445) AT 0800 ON 12/15/83, RADIATION MONITOR R-11 (CONTAINMENT ATMOSPHERE PARTICULATE ACTIVITY) WAS DECLARED INOPERABLE DUE TO AN IMPROPER VALVE LINEUP. TECH SPECS 3.3.3.1 AND 3.4.7.1, IN PART, REQUIRE THIS MONITOR TO BE OPERABLE. TECH SPEC ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY PERSONNEL ERROR. AT APPROXIMATELY 1620 ON 12/14/83, A HEALTH PHYSICS TECHNICIAN SHIFTED RADIATION MONITOR R-11 FROM THE OUTBOARD PUMP TO THE INBOARD PUMP TO ALLOW TROUBLESHOOTING BY ELECTRICAL MAINTENANCE. UPON COMPLETION OF A MOTOR CURRENT CHECK, THE SAME TECHNICIAN ATTEMPTED TO SHIFT R-11 BACK TO THE OUTBOARD PUMP. THE TECHNICIAN USED AN INCORRECT SECTION OF THE APPROVED PROCEDURE WHICH CAUSED HIM TO MISPOSITION THE PUMP INLET AND BYPASS VALVES. OPERATIONS PERSONNEL NOTICED AN ABNORMALLY LOW INDICATION ON RADIATION MONITOR R-11 AND CHECKS WERE MADE BY HEALTH PHYSICS PERSONNEL ON BOTH THE EVENING AND NIGHT SHIFTS. THESE CHECKS VERIFIED PROPER PUMP OPERATION BUT FAILED TO VERIFY INLET AND BYPASS VALVE POSITION. UPON DISCOVERY ON DAY SHIFT, THE VALVE LINEUP WAS CORRECTED AND RADIATION MONITOR R-11 WAS RETURNED TO SERVICE AT 0830 ON 12/15/83. THE PERSONNEL INVOLVED HAVE BEEN COUNSELED.

[170] FARLEY 1 DOCKET 50-348 LER 83-090
TWO RADIATION MONITORS DECLARED INOPERABLE.
EVENT DATE: 122483 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: PUMPS
VENDOR: CONDE PUMP COMPANY

(NSIC 188446) AT 0800 ON 12/24/83, RADIATION MONITORS R-11 (CONTAINMENT ATMOSPHERE PARTICULATE ACTIVITY) AND R-12 (CONTAINMENT ATMOSPHERE GASEOUS ACTIVITY) WERE DECLARED INOPERABLE WHEN THE VACUUM PUMP TRIPPED ON HIGH FLOW. TECH SPECS 3.3.3.1 AND 3.4.7.1, IN PART, REQUIRE THESE MONITORS TO BE OPERABLE. TECH SPEC ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS ATTRIBUTED TO PROCEDURAL INADEQUACY IN THAT THE FLOW RATE WAS SET TOO HIGH. FNP-O-RCP-27 (R-11/R-12 OPERATION) HAS BEEN REVISED TO MORE CLEARLY ILLUSTRATE THE PROPER METHOD FOR ADJUSTING THE MONITOR FLOW RATE. THE FLOW WAS ADJUSTED AND RADIATION MONITORS R-11 AND R-12 WERE DECLARED OPERABLE AT 1035 ON 12/24/83.

[171] FARLEY 1 DOCKET 50-348 LER 83-092
INSTRUMENTATION CHANNEL DECLARED INOPERABLE.
EVENT DATE: 122583 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188448) AT 0650 ON 12/25/83, THE INSTRUMENTATION CHANNEL ASSOCIATED WITH PRESSURE TRANSMITTER PT-494 (LOOP 3 STEAM PRESSURE) WAS DECLARED INOPERABLE DUE TO ERRONEOUS INDICATION. TECH SPEC 3.3.2, IN PART, REQUIRES THIS CHANNEL TO BE OPERABLE. TECH SPEC 3.3.2 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY LOCALIZED FREEZING IN THE TRANSMITTER SENSING LINES DUE TO UNUSUALLY COLD WEATHER. IN ADDITION THE THERMOSTAT FOR THE ASSOCIATED HEAT

TRACING IS LOCATED SUCH THAT IT DID NOT SENSE THE COLDEST TEMPERATURE EXPERIENCED BY THE SENSING LINES. THE SENSING LINES WERE THAWED OUT AND THE PT-494 INSTRUMENTATION CHANNEL WAS RETURNED TO SERVICE AT 1026 ON 12/25/83. THE HEAT TRACING THERMOSTAT SETPOINT HAS BEEN ADJUSTED TO COMPENSATE FOR THE THERMOSTAT LOCATION.

[172] FARLEY 1 DOCKET 50-348 LER 83-093
DIESEL GENERATOR DECLARED INOPERABLE.
EVENT DATE: 122583 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188786) AT 0400 ON 12/25/83, THE 1B DIESEL GENERATOR WAS DECLARED INOPERABLE WHEN IT WAS DETERMINED THAT THE SERVICE WATER SUPPLY HEADER INLET AND OUTLET ISOLATION VALVES WERE CLOSED. TECH SPEC 3.8.1.1, IN PART, REQUIRES THIS DIESEL GENERATOR TO BE OPERABLE. TECH SPEC 3.8.1.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY LOCALIZED FREEZING OF SWITCH Q1P16PDS621, WHICH PROVIDES AUTOMATIC CONTROL FOR THE AFFECTED VALVES, DUE TO UNUSUALLY COLD WEATHER. THE VALVE OPERATORS WERE DE-ENERGIZED, THE VALVES WERE OPENED MANUALLY AND THE 1B DIESEL GENERATOR WAS DECLARED OPERABLE AT 0430 ON 12/25/83. INVESTIGATION REVEALED THAT THE FREEZE PROTECTION CIRCUIT ASSOCIATED WITH SWITCH Q1P16PDS621 WAS DE-ENERGIZED DUE TO THE THERMOSTAT HAVING BECOME OUT OF ADJUSTMENT. THE THERMOSTAT WAS ADJUSTED AND THE CIRCUIT ALLOWED TO WARM UP. THE ISOLATION VALVES WERE THEN RETURNED TO AUTOMATIC CONTROL AND PROPER OPERATION WAS VERIFIED. NO CAUSE FOR THE THERMOSTAT DRIFT COULD BE DETERMINED.

[173] FARLEY 1 DOCKET 50-348 LER 83-091
RADIATION MONITOR DECLARED INOPERABLE.
EVENT DATE: 122683 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: AREA MONITORING SYSTEMS COMPONENT: OTHER COMPONENTS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188447) AT 1055 ON 12/26/83, RADIATION MONITOR R-5 (SPENT FUEL STORAGE AREA) WAS DECLARED INOPERABLE DUE TO ERRONEOUS INDICATION. TECH SPEC 3.3.3.1, IN PART, REQUIRES THIS MONITOR TO BE OPERABLE. TECH SPEC 3.3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. A SIMILAR OCCURRENCE WAS REPORTED IN LER 83-080/03L-0. THIS EVENT WAS CAUSED BY A FAULTY CONNECTION. THE CONNECTION WAS REPAIRED AND FOLLOWING SATISFACTORY PERFORMANCE OF FNP-1-STP-50.0 (RADIATION MONITOR MONTHLY SOURCE CHECK), RADIATION MONITOR R-5 WAS DECLARED OPERABLE AT 1517 ON 12/26/83.

[174] FARLEY 1 DOCKET 50-348 LER 83-094
ONE TRAIN OF CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM DECLARED INOPERABLE.
EVENT DATE: 122683 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: BLOWERS
VENDOR: TRANE COMPANY

(NSIC 188870) AT 1100 ON 12/26/83, THE B TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM WAS DECLARED INOPERABLE WHEN THE B TRAIN AIR CONDITIONER COMPRESSOR WOULD NOT START. TECH SPEC 3.7.7, IN PART, REQUIRES THIS SYSTEM TO BE OPERABLE. TECH SPEC 3.7.7 ACTION STATEMENT REQUIREMENTS WERE MET. THIS LER IS APPLICABLE TO BOTH UNITS 1 AND 2. THIS INCIDENT WAS CAUSED BY THE HI/LO OIL PRESSURE SWITCH TRIPPING. THE SWITCH WAS RESET AND FOLLOWING VERIFICATION OF PROPER OPERATION, THE B TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM WAS DECLARED OPERABLE AT 1120 ON 12/27/83. NO CAUSE COULD BE DETERMINED FOR THE SWITCH TRIPPING.

[175] FARLEY 1 DOCKET 50-348 LER 83-095
OVERTEMPERATURE DELTA TEMPERATURE CHANNEL INOPERABLE.
EVENT DATE: 122683 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188698) AT 2220 ON 12/26/83, THE LOOP 1 OVERTEMPERATURE DELTA TEMPERATURE INSTRUMENTATION CHANNEL WAS DECLARED INOPERABLE WHEN TEMPERATURE INDICATOR TI-412C (LOOP 1 OVERTEMPERATURE SETPOINT) FAILED LOW. TECH SPEC 3.3.1, IN PART, REQUIRES THIS CHANNEL TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY FAILURE OF A SUMMING AMP (NSA) CARD. THE CARD WAS REPLACED AND FOLLOWING SATISFACTORY PERFORMANCE OF FNP-1-STP-201.18 (REACTOR COOLANT SYSTEM TE-412 LOOP CALIBRATION AND FUNCTIONAL TEST), THE LOOP 1 OVERTEMPERATURE DELTA TEMPERATURE INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 0400 ON 12/27/83.

[176] FARLEY 1 DOCKET 50-348 LER 83-096
THE "A" TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM DECLARED INOPERABLE.
EVENT DATE: 123083 REPORT DATE: 013084 NSSS: WE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: VALVES
VENDOR: ASCO VALVES

(NSIC 188787) AT 1254 ON 12/30/83 AND 2050 ON 12/31/83, THE "A" TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM WAS DECLARED INOPERABLE DUE TO THE A TRAIN AIR CONDITIONER COMPRESSOR TRIPPING. TECH SPEC 3.7.7, IN PART, REQUIRES THIS SYSTEM TO BE OPERABLE. TECH SPEC 3.7.7 ACTION STATEMENT REQUIREMENTS WERE MET. THIS LER IS APPLICABLE TO BOTH UNITS 1 & 2. THESE EVENTS WERE CAUSED BY THE REFRIGERATION UNIT BEING LOW ON FREON. FOLLOWING THE FIRST EVENT, THE UNIT WAS REFILLED AND THE "A" TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM WAS DECLARED OPERABLE AT 2210 ON 12/30/83. FREON PRESSURE WAS MONITORED WITH NO DECREASE NOTED. FOLLOWING THE SECOND EVENT, IT WAS DETERMINED THAT THE HIGH PRESSURE VALVE WAS LEAKING. THE VALVE WAS TIGHTENED, THE REFRIGERATION UNIT WAS REFILLED AND THE "A" TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM WAS DECLARED OPERABLE AT 2145 ON 12/31/83.

[177] FARLEY 2 DOCKET 50-364 LER 83-001
HIGH BORON CONCENTRATION IN BORON INJECTION TANK.
EVENT DATE: 010583 REPORT DATE: 020483 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188793) AT 0125 ON 1/05/83, IT WAS DETERMINED THAT THE BORON CONCENTRATION IN THE BORON INJECTION TANK WAS 23,100 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. THE OUT-OF-SPEC CONDITION OCCURRED DURING MAKE-UP AND BATCHING TO THE SURGE TANK. NO SPECIFIC ACTION DURING THE BATCHING WAS DETERMINED TO CONTRIBUTE TO THE OUT-OF-SPEC CONDITION. THE BORON INJECTION TANK WAS DILUTED AND THE BORON CONCENTRATION RETURNED TO WITHIN TECH SPEC LIMITS AT 0705 ON 1/5/83.

[178] FARLEY 2 DOCKET 50-364 LER 83-004
INSTRUMENTATION CHANNEL ASSOCIATED WITH TAVG INDICATOR DECLARED INOPERABLE.
EVENT DATE: 020183 REPORT DATE: 022583 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188794) AT 0912 ON 2/1/83, THE INSTRUMENTATION CHANNEL ASSOCAITED WITH TAVG INDICATOR TI-412D WAS DECLARED INOPERABLE WHEN TI-412D FAILED HIGH. TECH SPEC 3.3.1, IN PART, REQUIRES THIS INSTRUMENTATION CHANNEL TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO THE FAILURE

OF A TRANSISTOR ON A LEAD LAG CARD. THE TRANSISTOR WAS REPLACED AND FOLLOWING THE SATISFACTORY PERFORMANCE OF FNP-2-STP-201, 18 (REACTOR COOLANT SYSTEM TE-412B AND TE-412D LOOP CALIBRATION AND FUNCTIONAL TEST), THE TI-412D INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 1650 ON 2/1/83.

[179] FARLEY 2 DOCKET 50-364 LER 83-005
INSTRUMENTATION LOOP ASSOCIATED WITH LEVEL TRANSMITTER DECLARED INOPERABLE.
EVENT DATE: 020583 REPORT DATE: 022583 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188795) AT 2340 ON 2/5/83, DURING THE PERFORMANCE OF FNP-2-STP-213.1 (STEAM GENERATOR 2A LT-474 LOOP CALIBRATION AND FUNCTIONAL TEST), THE INSTRUMENTATION LOOP ASSOCIATED WITH LEVEL TRANSMITTER LT-474 WAS DECLARED INOPERABLE DUE TO ITS TRIP SETPOINT BEING OUT OF TOLERANCE. TECH SPEC 3.3.1, IN PART, REQUIRES THIS CHANNEL TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO THE FAILURE OF A COMPARATOR CARD. THE CARD WAS REPLACED AND FOLLOWING THE PERFORMANCE OF FNP-2-STP-213.1, THE LT-474 INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 0200 ON 2/6/83.

[180] FARLEY 2 DOCKET 50-364 LER 83-011
MOTOR CONTROL CENTER DEENERGIZED.
EVENT DATE: 020883 REPORT DATE: 030883 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188701) AT 1050 ON 2/8/83, 600V LOAD CENTER 1 - 2R WAS DECLARED INOPERABLE WHEN ITS INCOMING POWER SUPPLY BREAKER ER02-1 OPENED. TECH SPEC 3.8.2.1, IN PART, REQUIRES THIS LOAD CENTER TO BE OPERABLE. TECH SPEC 3.8.2.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO PROCEDURAL INADEQUACY. A PREVENTATIVE MAINTENANCE TASK WAS BEING PERFORMED ON DC BREAKERS. THE PROCEDURE USED TO ESTABLISH THE PROPER PLANT CONDITIONS DID NOT SPECIFY THAT WHEN DC CONTROL POWER IS RESTORED TO THE NORMAL AC FEEDER BREAKER OF LOAD CENTER 1 -2R, THE NORMAL FEEDER BREAKER WILL TRIP AND THE ALTERNATE ABT ACTUATED FEEDER BREAKER WILL BE LOCKED OUT.

[181] FARLEY 2 DOCKET 50-364 LER 83-006
RWST LEVEL INDICATOR DECLARED INOPERABLE.
EVENT DATE: 020983 REPORT DATE: 030883 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188796) AT 1000 ON 2/9/83, THE INSTRUMENTATION CHANNEL ASSOCIATED WITH REFUELING WATER STORAGE TANK LEVEL INDICATOR LI 4075A WAS DECLARED INOPERABLE WHEN ERRONEOUS INDICATIONS WERE INTERMITTENTLY RECEIVED. TECH SPEC 3.3.3.8, IN PART, REQUIRES THIS INSTRUMENTATION CHANNEL TO BE OPERABLE. TECH SPEC 3.3.3.8 ACTION STATEMENT REQUIREMENTS WERE MET. NO CAUSE FOR THIS EVENT COULD BE DETERMINED. FOLLOWING THE SATISFACTORY PERFORMANCE OF FNP-2-STP-205.1 (REFUELING WATER STORAGE TANK LEVEL LOOP CALIBRATION), THE LI 4075A INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 0910 ON 2/10/83.

[182] FARLEY 2 DOCKET 50-364 LER 83-008
POWER RANGE HIGH SETPOINT TRIP LOGIC TRAIN DECLARED INOPERABLE.
EVENT DATE: 020983 REPORT DATE: 030883 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188798) AT 1730 ON 2/9/83, DURING THE PERFORMANCE OF FNP-2-STP-33.0 (SOLID

STATE PROTECTION SYSTEM TRAIN B OPERABILITY TEST), "B" TRAIN POWER RANGE HIGH SETPOINT TRIP LOGIC WAS DECLARED INOPERABLE WHEN A FAILED CARD INDICATION WAS RECEIVED BY THE AUTOMATIC TESTER. TECH SPEC 3.3.1, IN PART, REQUIRES THIS TRIP LOGIC TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY THE FAILURE OF UNIVERSAL CARD A404. THE CARD WAS REPLACED AND FOLLOWING THE SATISFACTORY PERFORMANCE OF FNP-2-STP-33.0, THE "B" TRAIN POWER RANGE HIGH SETPOINT TRIP LOGIC WAS DECLARED OPERABLE AT 1800 ON 2/9/83.

[183] FARLEY 2 DOCKET 50-364 LER 83-007
CONTAINMENT ISOLATION VALVE DECLARED INOPERABLE.
EVENT DATE: 021683 REPORT DATE: 030883 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: COPES-VULCAN, INC.

(NSIC 188797) AT 1125 ON 2/16/83, CONTAINMENT ISOLATION VALVE Q2E21HV8880 (NITROGEN SUPPLY TO ACCUMULATOR ISOLATION) WAS DECLARED INOPERABLE WHEN IT FAILED TO OPERATE PROPERLY. TECH SPEC 3.6.3, IN PART, REQUIRES THIS VALVE TO BE OPERABLE. TECH SPEC 3.6.3 ACTION STATEMENT REQUIREMENTS WERE MET. A SIMILAR OCCURRENCE WAS REPORTED IN LER 83-002/03L-0 (UNIT 2). AFTER CONSIDERABLE TROUBLESHOOTING AND SUBSEQUENT STROKING OF THE VALVE, A CAUSE FOR THIS EVENT COULD NOT BE DETERMINED. FNP-2-STP-10.3 (EMERGENCY CORE COOLING VALVES INSERVICE TEST) WAS SATISFACTORILY PERFORMED AND Q2E21HV8880 WAS DECLARED OPERABLE AT 1510 ON 2/16/83. THIS VALVE WILL BE CLOSELY MONITORED FOR POSSIBLE RECURRENCE DURING ANY SUBSEQUENT OPERATIONS

[184] FARLEY 2 DOCKET 50-364 LER 83-010
STEAM GENERATOR PRESSURE INDICATOR DECLARED INOPERABLE.
EVENT DATE: 021883 REPORT DATE: 031183 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188799) AT 0712 ON 2/18/83, THE INSTRUMENTATION LOOP ASSOCIATED WITH 2C STEAM GENERATOR PRESSURE INDICATOR P1494 WAS DECLARED INOPERABLE WHEN THE INDICATOR FAILED LOW. TECH SPEC 3.3.2, IN PART, REQUIRES THIS INSTRUMENTATION LOOP TO BE OPERABLE. TECH SPEC 3.3.2 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO THE FAILURE OF POWER SUPPLY CARD C2-345. THE CARD WAS REPLACED AND FOLLOWING THE SATISFACTORY COMPLETION OF FNP-2-STP-213.10A (S.G. 2C PT-494 LOOP CALIBRATION), THE PI494 INSTRUMENTATION LOOP WAS DECLARED OPERABLE AT 1100 ON 2/18/83.

[185] FARLEY 2 DOCKET 50-364 LER 83-012
ONE GROUP OF CONTROL RODS DECLARED INOPERABLE.
EVENT DATE: 022883 REPORT DATE: 031183 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188800) AT 1820 ON 2/28/83, DURING THE PERFORMANCE OF FNP-2-STP-5.0 (FULL LENGTH CONTROL ROD OPERABILITY TEST), SHUTDOWN BANK A, GROUP 1 CONTROL RODS WERE DECLARED INOPERABLE WHEN THE RODS WOULD NOT MOVE INWARD. TECH SPEC 3.1.3.1 IN PART, REQUIRES ALL FULL LENGTH CONTROL RODS TO BE OPERABLE. TECH SPEC 3.1.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO THE FAILURE OF THE C PHASE CONTROL CARD. FOLLOWING THE REPLACEMENT OF THE C PHASE CONTROL CARD, SHUTDOWN BANK A, GROUP 1 CONTROL RODS WERE DECLARED OPERABLE AT 2000 ON 2/28/83.

[186] FARLEY 2 DOCKET 50-364 LER 83-013
ROD CONTROL SYSTEM TWICE DECLARED INOPERABLE.
EVENT DATE: 030783 REPORT DATE: 040483 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 188801) AT 1610 ON 3/7/83, THE ROD CONTROL SYSTEM WAS DECLARED INOPERABLE UPON RECEIPT OF A FAILURE ALARM ON POWER CABINET 2AC. SUBSEQUENTLY, AT 0823 ON 3/28/83, DURING THE PERFORMANCE OF FNP-2-STP-5.0 (FULL LENGTH CONTROL ROD OPERABILITY TEST) THE ROD CONTROL SYSTEM WAS DECLARED INOPERABLE WHEN SHUTDOWN BANK B GROUP 1 RODS FAILED TO MOVE INWARD. TECH SPEC 3.1.3.1, IN PART, REQUIRES ALL CONTROL RODS TO BE OPERABLE. TECH SPEC 3.1.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. DURING TROUBLESHOOTING OF THE FIRST OCCURRENCE, FAILURE LIGHTS ON PHASE AND REGULATOR CARD 12 WERE FOUND LIT. NO CAUSE FOR THE FAILURE INDICATION COULD BE DETERMINED. WHEN THE ALARM WAS RESET, THE FAILURE LIGHTS AND THE ALARM CLEARED. FOLLOWING THE SATISFACTORY PERFORMANCE OF FNP-2-STP-5.0, THE ROD CONTROL SYSTEM WAS DECLARED OPERABLE AT 1655 ON 3/7/83.

[187] FARLEY 2 DOCKET 50-364 LER 83-017
HYDROGEN ANALYZER DECLARED INOPERABLE.
EVENT DATE: 032283 REPORT DATE: 042183 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: MOTORS
VENDOR: L & M - SURCO MANUFACTURING CO.

(NSIC 188802) AT 1741 ON 3/22/83, DURING THE PERFORMANCE OF FNP-2-STP-220.9 (POST ACCIDENT HYDROGEN ANALYZER 1A, 1B CALIBRATION AND FUNCTIONAL TEST), THE 1A HYDROGEN ANALYZER WAS DECLARED INOPERABLE WHEN ITS RECORDER FAILED TO RESPOND TO AN INPUT SIGNAL. TECH SPEC 3.6.4.1, IN PART, REQUIRES THE 1A HYDROGEN ANALYZER TO BE OPERABLE. TECH SPEC 3.6.4.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY THE FAILURE OF THE RECORDER BALANCING MOTOR. FOLLOWING REPLACEMENT OF THE MOTOR AND PERFORMANCE OF FNP-2-STP-220.9A, THE 1A HYDROGEN ANALYZER WAS DECLARED OPERABLE AT 2010 ON 3/24/83.

[188] FARLEY 2 DOCKET 50-364 LER 83-020
STEAM GENERATOR PRESSURE TRANSMITTER SETPOINT DRIFT.
EVENT DATE: 042083 REPORT DATE: 052083 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188702) AT 0440 ON 4/20/83 DURING THE PERFORMANCE OF FNP-2-STP-213.11 (SG 2A 02N11PT0475, SG 2B 02N11PT0485, SG 2C 02N11PT0495 LOOP CALIBRATION AND FUNCTIONAL TEST), STEAM GENERATOR PRESSURE TRANSMITTER PT485 INSTRUMENTATION LOOP WAS DECLARED INOPERABLE DUE TO THE OUT OF SPEC CONDITION OF THE BISTABLE TRIP SETPOINT. TECH SPEC 3.3.2, IN PART, REQUIRES THE PT485 INSTRUMENTATION LOOP TO BE OPERABLE. TECH SPEC 3.3.2 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO SETPOINT DRIFT OF A PRINTED CIRCUIT CARD. THE CARD WAS REPLACED AND FOLLOWING THE SATISFACTORY PERFORMANCE OF FNP-2-STP-213.11.PT 485 INSTRUMENTATION LOOP WAS DECLARED OPERABLE AT 1250 ON 4/20/83.

[189] FARLEY 2 DOCKET 50-364 LER 83-022
UNDERVOLTAGE RELAY SETPOINT DRIFTS.
EVENT DATE: 042883 REPORT DATE: 052083 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: RELAYS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188703) AT 0505 ON 4/28/83 DURING THE PERFORMANCE OF FNP-2-STP-612.0 (REACTOR COOLANT PUMP BUS REACTOR TRIP UNDERVOLTAGE RELAY CALIBRATION), 2B REACTOR COOLANT PUMP UNDERVOLTAGE RELAY 27-3 WAS DECLARED INOPERABLE DUE TO ITS OUT OF SPEC CONDITION (70.56 VOLTS ACTUAL VS. 75.43 VOLTS REQUIRED). TECH SPEC

3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS ATTRIBUTED TO SETPOINT DRIFT. FOLLOWING ADJUSTMENT OF THE RELAY SETPOINT, 2B REACTOR COOLANT PUMP UNDERVOLTAGE RELAY WAS DECLARED OPERABLE AT 0515 ON 4/28/83.

[190] FARLEY 2 DOCKET 50-364 LER 83-026
BATTERY HAS LOW VOLTAGE.
EVENT DATE: 060283 REPORT DATE: 063083 NSSS: WE TYPE: PWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: BATTERIES & CHARGERS
VENDOR: GOULD-NATIONAL BAIT

(NSIC 188704) AT 1040 ON 6/2/83 DURING THE PERFORMANCE OF FNP-2-STP-605.4 (AUX. BUILDING BATTERY QUARTERLY VERIFICATION), BATTERY BANK 2A WAS DECLARED INOPERABLE DUE TO A DECREASE IN VOLTAGE OF .11 VOLTS ON CELL #56 SINCE THE LAST QUARTERLY INSPECTION. TECH SPEC 3.8.2.3, IN PART, REQUIRES THE BATTERY BANK TO BE OPERABLE. TECH SPEC 3.8.2.3 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS DUE TO A DECREASE IN CELL VOLTAGE ON AN INDIVIDUAL CELL IN BATTERY BANK 2A. THE TOP OF THE CELL WAS CLEANED AND THE CELL WAS CHARGED. FOLLOWING THE SATISFACTORY PERFORMANCE OF FNP-2-STP-605.4 BATTERY BANK 2A WAS DECLARED OPERABLE AT 1110 ON 6/2/83.

[191] FARLEY 2 DOCKET 50-364 LER 83-038
SG LO-LO LEVEL INSTRUMENTATION CHANNEL DECLARED INOPERABLE.
EVENT DATE: 090883 REPORT DATE: 100483 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188803) AT 1000 ON 9/8/83, DURING PERFORMANCE OF FNP-2-STP-33.0 (SOLID STATE PROTECTION SYSTEM TRAIN A(B) OPERABILITY TEST), THE B TRAIN SSPS 2A STEAM GENERATOR LO-LO LEVEL INSTRUMENTATION CHANNEL WAS DECLARED INOPERABLE UPON RECEIPT OF A FAILURE LIGHT. TECH SPEC 3.3.1, IN PART, REQUIRES THIS CHANNEL TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY FAILURE OF THE UNIVERSAL CARD. THE CARD WAS REPLACED AND FOLLOWING SATISFACTORY COMPLETION OF FNP-2-STP-33.0, THE 2A STEAM GENERATOR LO-LO LEVEL INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 1037 ON 9/8/83.

[192] FARLEY 2 DOCKET 50-364 LER 83-054 REV 1
UPDATE ON FEEDWATER FLOW INSTRUMENTATION CHANNEL DECLARED INOPERABLE.
EVENT DATE: 102883 REPORT DATE: 121383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188876) AT 2112 ON 10/28/83 AND 1630 ON 11/3/83, THE INSTRUMENTATION CHANNEL ASSOCIATED WITH FLOW TRANSMITTER FT-496 (LOOP 3 FEED FLOW) WAS DECLARED INOPERABLE DUE TO ERRONEOUS INDICATION. TECH SPEC 3.3.1 AND 3.3.2, IN PART, REQUIRE THIS CHANNEL TO BE OPERABLE. TECH SPEC ACTION STATEMENT REQUIREMENTS WERE MET. NO CAUSE FOR THESE EVENTS COULD BE DETERMINED. FOLLOWING SATISFACTORY PERFORMANCE OF FNP-2-STP-215.5 (MAIN FEEDWATER FT-496 LOOP CALIBRATION AND FUNCTIONAL TEST N2C22FT0496) AND VERIFICATION OF PROPER INDICATION DURING PERFORMANCE OF FNP-2-STP-1.0 (OPERATIONS DAILY AND SHIFT SURVEILLANCE REQUIREMENTS), THE FT-496 INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 0150 ON 10/29/83 AND 0500 ON 11/4/83.

[193] FARLEY 2
MAIN STEAM FLOW IN
EVENT DATE: 121483 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 188449) AT 1325 ON 12/14/83, THE INSTRUMENTATION CHANNEL ASSOCIATED WITH

FLOW INDICATOR FI-474 (LOOP 1, STEAM FLOW) WAS DECLARED INOPERABLE DUE TO ITS DRIFTING OUT OF TOLERANCE. TECH SPECS 3.3.1 AND 3.3.2, IN PART, REQUIRE THIS CHANNEL TO BE OPERABLE. TECH SPEC ACTION STATEMENT REQUIREMENTS WERE MET. NO CAUSE FOR THIS EVENT COULD BE DETERMINED. FOLLOWING SATISFACTORY COMPLETION OF FNP-2-STP-213.19 (STEAM GEN. 2A FT-474 LOOP CALIBRATION AND FUNCTIONAL TEST Q2C22FT0474) AND VERIFICATION OF PROPER INDICATION, THE FI-474 INSTRUMENTATION CHANNEL HAD RETURNED TO NORMAL AND WAS DECLARED OPERABLE AT 0158 ON 12/15/83.

[194] FARLEY 2 DOCKET 50-364 LER 83-065
RCS TEMPERATURE INDICATION CHANNEL DECLARED INOPERABLE.
EVENT DATE: 122783 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188450) AT 0840 ON 12/27/83, THE INSTRUMENTATION CHANNEL ASSOCIATED WITH TEMPERATURE INDICATOR TI-432 (RCS LOOP 3 T-AVE) WAS DECLARED INOPERABLE DUE TO ERRONEOUS INDICATION. TECH SPEC 3.3.1, IN PART, REQUIRES THIS CHANNEL TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY DRIFT OF THE LEAD/LAG CARD GAIN. THE CARD WAS REPLACED AND FOLLOWING SATISFACTORY PERFORMANCE OF FNP-2-STP-201.20 (REACTOR COOLANT SYSTEM TE-432B AND TE-432D LOOP CALIBRATION AND FUNCTIONAL TEST), THE TI-432D INSTRUMENTATION CHANNEL WAS DECLARED OPERABLE AT 0540 ON 12/28/83.

[195] FARLEY 2 DOCKET 50-364 LER 83-068
DIESEL GENERATOR DECLARED INOPERABLE.
EVENT DATE: 123083 REPORT DATE: 013084 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: VALVE OPERATORS
VENDOR: LIMITORQUE CORP.

(NSIC 188805) AT 1400 ON 12/30/83, THE 2B DIESEL GENERATOR WAS DECLARED INOPERABLE WHEN IT WAS DETERMINED THAT VALVE Q2P16V536 (B TRAIN SERVICE WATER RETURN FROM THE DIESEL BUILDING) WAS CLOSED. TECH SPEC 3.8.1.1, IN PART, REQUIRES THIS DIESEL GENERATOR TO BE OPERABLE. THIS EVENT WAS CAUSED BY THE MOTOR OPERATOR FOR VALVE Q2P16V536 DRAWING EXCESSIVE CURRENT, WHICH RESULTED IN ITS POWER SUPPLY BREAKER TRIPPING OPEN WHILE THE VALVE WAS BEING REOPENED FOLLOWING A TIMED STROKE. THE VALVE WAS DISCOVERED CLOSED APPROXIMATELY 22 HOURS AFTER IT WAS STROKED. THAT THE VALVE WAS NOT OPEN WAS NOT IMMEDIATELY APPARENT BECAUSE OF A LACK OF INDEPENDENT MAIN CONTROL BOARD POSITION INDICATION AND A PLANT OPERATOR FAILING TO PERFORM A REQUIRED VERIFICATION.

[196] FARLEY 2 DOCKET 50-364 LER 83-066
INSTRUMENTATION CHANNEL DECLARED INOPERABLE.
EVENT DATE: 123183 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188451) AT 0817 ON 12/31/83, THE INSTRUMENTATION CHANNEL ASSOCIATED WITH FLOW TRANSMITTER FT-476 (LOOP 1 FEED FLOW) WAS DECLARED INOPERABLE DUE TO ERRONEOUS INDICATION. TECH SPEC 3.3.1, IN PART, REQUIRES THIS CHANNEL TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY DRIFT OF THE SQUARE ROOT EXTRACTION CARD. THE CARD WAS REPLACED AND FOLLOWING SATISFACTORY PERFORMANCE OF FNP-2-STP-215.1 (MAIN FEEDWATER FLOW FT-476 CALIBRATION AND FUNCTIONAL TEST N2C22FT0476), THE FT-476 INSTRUMENTATION CHANNEL WAS RETURNED TO SERVICE AT 1230 ON 1/1/84.

[197] FARLEY 2 DOCKET 50-364 LER 83-067
INSTRUMENTATION CHANNEL ASSOCIATED WITH POWER RANGE MONITOR DECLARED INOPERABLE.
EVENT DATE: 123183 REPORT DATE: 013084 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188804) AT 0730 ON 12/31/83, THE INSTRUMENTATION CHANNEL ASSOCIATED WITH POWER RANGE MONITOR N-44 WAS DECLARED INOPERABLE DUE TO THE HIGH VOLTAGE POWER SUPPLY SPIKING LOW. TECH SPEC 3.3.1, IN PART, REQUIRES THIS CHANNEL TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. EXTENSIVE TROUBLESHOOTING REVEALED NO CAUSE FOR THIS EVENT. THE N-44 INSTRUMENTATION CHANNEL STABILIZED AND FOLLOWING SATISFACTORY PERFORMANCE OF FNP-STP-228.8 (NUCLEAR INSTRUMENTATION SYSTEM POWER RANGE CHANNEL N-44 CALIBRATION AND FUNCTIONAL TEST Q2H11NGNIS2503D), WAS DECLARED AT 2200 ON 12/31/83.

[198] FITZPATRICK DOCKET 50-333 LER 81-080 REV 1
UPDATE ON SBGT PREHEATER FAILS.
EVENT DATE: 111781 REPORT DATE: 011182 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

(NSIC 188829) DURING NORMAL SHUTDOWN TEST OF THE 'A' STANDBY GAS TREATMENT PREHEATER REVEALED THAT THE HEATER WAS INOPERABLE AND THUS NOT CAPABLE OF MAINTAINING THE HEATER OUTLET HUMIDITY LESS THAN 70 PERCENT UNDER ALL INLET CONDITIONS AS REQUIRED BY TECH SPEC 4.7.8.1.A.2. THE REDUNDANT SYSTEM WAS FULLY OPERABLE. CAUSE OF THE FAILURE WAS FAILURE OF THE HEATER CONTROL CIRCUIT. TEMPORARY MODIFICATION (JUMPERING) OF THE CONTROL CIRCUIT RESTORED THE SYSTEM TO A FULLY OPERABLE STATUS LATER THE SAME DAY. A PERMANENT MODIFICATION AND PROPOSED TECH SPEC AMENDMENT TO CHANGE THE CONTROLS AND TEST METHOD HAVE BEEN INITIATED.

[199] FITZPATRICK DOCKET 50-333 LER 81-082 REV 2
UPDATE ON LOW VOLTAGE OF 24V DC BATTERIES.
EVENT DATE: 123081 REPORT DATE: 051683 NSSS: GE TYPE: BWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188888) UPDATE REPORT: DURING NORMAL SHUTDOWN OPERATIONS, PERSONNEL NOTED ERRATIC READING ON SRM AND IRM INSTRUMENTS PROVIDED WITH POWER FROM DIV. I 24V DC BATTERIES WHEN THE INSTRUMENTS WERE REQUIRED BY TECH SPEC TABLE 3.2-3. A REACTOR PROTECTION SYSTEM TRIP WAS INSERTED AND THE AFFECTED SIDE. DIVISION II INSTRUMENTS WERE OPERATING NORMALLY. CAUSE OF THE ERRATIC INSTRUMENT READINGS WAS LOW VOLTAGE ON THE 24V DC BATTERIES AS A RESULT OF THE CHARGER BEING OFF DURING PREVENTATIVE MAINTENANCE ON POWER SOURC BUS. BATTERY RECHARGE RESTORED THE SYSTEM TO NORMAL. PROCEDURES HAVE BEEN INSTITUTED WHICH REQUIRE THAT A TEMPORARY POWER SUPPLY BE CONNECTED TO BATTERY CHARGERS, AND THAT BATTERY VOLTAGE AND SPECIFIC GRAVITY BE MONITORED WHEN NORMAL POWER IS LOST TO BATTERY CHARGERS.

[200] FITZPATRICK DOCKET 50-333 LER 83-037
DRYWELL PRESSURE SWITCH SETPOINT DRIFTS.
EVENT DATE: 091583 REPORT DATE: 100583 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188516) DURING NORMAL OPERATION, WHILE CONDUCTING SURVEILLANCE TESTING ON DRYWELL HIGH PRESSURE SWITCHES FOR REACTOR PROTECTION (05-PS012B) AND AUTO DEPRESSURIZATION SYSTEM (10-PS-100 A & C) THE SETPOINT WAS FOUND LESS CONSERVATIVE THAN LESS THAN OR EQUAL TO 2.7 PSIG AS REQUIRED BY TECH SPEC TABLES 3.1-1 AND 3.2-2. OTHER TRIP CHANNELS OF THE SAME PARAMETER WERE AVAILABLE AND HAD SETPOINTS WITHIN TECH SPEC. THE AS FOUND VALUE WAS 2.84 PSIG FOR PS12B, 2.80 PSIG FOR PS100A & C. CORRECTIVE ACTION CONSISTED OF IMMEDIATE ADJUSTMENT OF THE

SETPOINT WITHIN THE TECH SPEC REQUIRED VALUE, INCREASED THE TEST FREQUENCY FOR TREND OBSERVATION AND CRITIQUE THE EVENT.

[201] FITZPATRICK DOCKET 50-333 LER 83-063
ONE LPCI INDEPENDENT POWER SUPPLY TRIPS.
EVENT DATE: 121583 REPORT DATE: 010684 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: GENERATORS
VENDOR: EXIDE INDUSTRIAL DIV

(NSIC 188578) DURING NORMAL PLANT OPERATION, THE "A" LPCI INDEPENDENT POWER SUPPLY TRIPPED. THE "A" LPCI BUS WAS PLACED ON MAINTENANCE POWER AND THE SURVEILLANCE TESTING WAS PERFORMED PER TECH SPEC 3.9.F.2. REDUNDANT ECCS EQUIPMENT WAS AVAILABLE. INVESTIGATION OF THE POWER SUPPLY REVEALED THAT THE UNIT TRIPPED AS THE BATTERY CHARGER SECTION SWITCHED FROM EQUALIZE VOLTAGE TO FLOAT VOLTAGE. NO DEFECTS WERE FOUND AND THE OCCURRENCE COULD NOT BE DUPLICATED. THE POWER SUPPLY WAS RETURNED TO SERVICE 3 HOURS AFTER THE EVENT AND WAS MONITORED CLOSELY DURING THE NEXT EQUALIZING CYCLE. NO FURTHER TRIPS WERE OBSERVED.

[202] FITZPATRICK DOCKET 50-333 LER 83-065
RADIATION MONITOR FAILS DUE TO SETPOINT DRIFT.
EVENT DATE: 121683 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188776) DURING NORMAL OPERATION, WHILE CONDUCTING SURVEILLANCE TESTING OF THE MAIN STEAM LINE RADIATION MONITORS, THE SETPOINT OF MONITOR 17-RM-251C WAS FOUND LESS CONSERVATIVE THAN THE TECH SPEC TABLE 3.1-1 REQUIRED SETTING OF 3X NORMAL FULL POWER BACKGROUND LEVEL. THE AS FOUND VALUE WAS 3.15X NORMAL. OTHER TRIP CHANNELS MONITORING THE SAME PARAMETER WERE AVAILABLE AND HAD SETPOINTS LESS THAN 3X NORMAL. INSTRUMENT DRIFT WAS THE CAUSE. CORRECTIVE ACTION CONSISTED OF IMMEDIATE ADJUSTMENT OF THE SETPOINT TO WITHIN THE REQUIRED VALUE AND INCREASING THE TEST FREQUENCY WHILE INVESTIGATING.

[203] FITZPATRICK DOCKET 50-333 LER 83-064
INSTRUMENT DRIFT CAUSES REACTOR LOW AND HIGH WATER LEVEL SWITCHES TO FAIL.
EVENT DATE: 122083 REPORT DATE: 010684 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188579) DURING NORMAL OPERATION, WHILE CONDUCTING SURVEILLANCE TESTING ON REACTOR LOW (RPS TRIP) AND HIGH (HPCI AND RCIC TURBINE TRIP) WATER LEVEL SWITCHES 02-3-LIS-101D, THE SETPOINT WAS FOUND LESS CONSERVATIVE THAN THE TECH SPEC TABLE 3-1.1 AND 3-2.2 REQUIRED SETTING OF GREATER THAN OR EQUAL TO 177.0 AND LESS THAN OR EQUAL TO 222.5 INCHES OF WATER. THE "AS FOUND" VALUE WAS 174.9 AND 226.6. OTHER TRIP CHANNELS MONITORING THE SAME PARAMETER WERE OPERABLE AND HAD SETPOINTS WITHIN TECH SPEC REQUIREMENTS. INSTRUMENT DRIFT WAS THE CAUSE. CORRECTIVE ACTION CONSISTED OF IMMEDIATE ADJUSTMENT OF THE SETPOINT TO WITHIN THE REQUIRED TECH SPEC VALUE AND INCREASING THE TEST FREQUENCY FOR TREND OBSERVATION.

[204] FITZPATRICK DOCKET 50-333 LER 83-067
RCIC TURBINE STEAM LINE HIGH FLOW SWITCH DRIFTS.
EVENT DATE: 122883 REPORT DATE: 012384 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188777) DURING NORMAL OPERATION, WHILE CONDUCTING SURVEILLANCE TESTING ON

REACTOR CORE INJECTION COOLANT (RCIC) TURBINE STEAM LINE HIGH FLOW SWITCH 13-DPIS-84, THE SETPOINT WAS FOUND LESS CONSERVATIVE THAN < OR = 282 INCHES OF WATER AS REQUIRED BY TECH SPEC TABLE 3.2-2. THE "AS FOUND" VALUE WAS 284 INCHES OF WATER. OTHER INSTRUMENTS MONITORING THE SAME PARAMETER WERE AVAILABLE AND HAD SETPOINTS WITHIN TECH SPEC VALUES. INSTRUMENT DRIFT WAS THE CAUSE. CORRECTIVE ACTION CONSISTED OF IMMEDIATE ADJUSTMENT OF THE SETPOINT TO WITHIN REQUIRED TECH SPEC VALUE AND INCREASED FREQUENCY OF THE INSTRUMENT FOR TREND OBSERVATION.

[205] FT. CALHOUN 1 DOCKET 50-285 LER 83-002
SNUBBER NOT REPLACED BEFORE RELOADING CORE.
EVENT DATE: 030783 REPORT DATE: 032283 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: BERGEN-PATTERSON PIPE SUPPORT CORPORATION

(NSIC 188849) WHILE THE CORE WAS OFF-LOADED FOR PERFORMANCE OF THE TEN YEAR ISI OF THE REACTOR VESSEL, SAFETY RELATED SHOCK SUPPRESSOR SIS-134 WAS REMOVED TO ACCOMODATE MAINTENANCE ON CEDM'S. THE SNUBBER WAS NOT REPLACED WITHIN 72 HOURS AFTER CORE RELOADING HAD BEGUN AS REQUIRED BY TECH SPEC 2.18. THE PROBABLE CONSEQUENCES WOULD HAVE BEEN THE INABILITY OF THE SNUBBER TO PERFORM ITS DESIRED FUNCTION DURING A SEISMIC EVENT. SIS-134 WAS REMOVED FROM ITS STATION WHILE THE CORE WAS OFF-LOADED. RELOADING OF THE CORE BEGAN AT 1830 ON 3-4-83 AND WAS COMPLETED AT 2030 ON 3-7-83. THE SNUBBER WAS REINSTALLED AT 2230 ON 3-8-83.

[206] FT. CALHOUN 1 DOCKET 50-285 LER 83-004 REV 1
UPDATE ON SETPOINT DRIFT OF CONTAINMENT PRESSURE SWITCHES.
EVENT DATE: 062983 REPORT DATE: 011284 NSSS: CE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARKSDALE COMPANY

(NSIC 188546) DURING PERFORMANCE OF SURVEILLANCE TEST ST-ESF-3, F.2, "CONTAINMENT PRESSURE CHANNEL CHECK," PRESSURE SWITCHES A/PC-742-1 AND A/PC-742-2 WERE FOUND TO BE INITIATING/ACTUATING ABOVE THE TECH SPEC LIMIT OF 5 PSIG. DURING THE TIME PRESSURE SWITCHES A/PC-742-1 AND A/PC-742-2 WERE CONSIDERED INOPERABLE, THE REMAINING PRESSURE SWITCHES FEEDING THE B, C AND D CHANNELS OF THE "A" AND "B" CONTAINMENT PRESSURE HIGH SIGNAL INITIATION MATRICES WERE OPERABLE, AVAILABLE AND FULLY CAPABLE OF INITIATING PROTECTIVE ACTIONS REQUIRED TO MITIGATE THE CONSEQUENCES OF AN ACCIDENT. THE PRESSURE SWITCHES A/PC-742-1 AND A/PC-742-2 WERE OUT OF CALIBRATION DUE TO INSTRUMENT DRIFT. THE OUT-OF-SPECIFICATION SWITCHES WERE IMMEDIATELY RECALIBRATED AND RETURNED TO OPERATION WITHIN SATISFACTORY OPERATING LIMITS. AN ENGINEERING EVALUATION AND ASSISTANCE REQUEST (EEAR) HAS BEEN SUBMITTED TO INITIATE FURTHER STUDIES PERTAINING TO ADEQUACY OF EXISTING PRESSURE SWITCHES VERSUS A NEW VARIETY.

[207] GINNA DOCKET 50-244 LER 83-029
UNRELIABLE TEMPERATURE USED FOR HEAT BALANCE CALCULATIONS.
EVENT DATE: 111683 REPORT DATE: 121683 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188835) DURING NORMAL OPERATIONS, WHILE AUDITING HEAT BALANCE CALORIMETRICS PERFORMED THE PREVIOUS TWO DAYS, IT WAS NOTED THAT UNRELIABLE FEEDWATER TEMPERATURE DATA WAS USED TO COMPUTE EACH CALORIMETRIC. THE RESULTANT EFFECT WAS THAT THE NUCLEAR POWER RANGES WERE NOT CALIBRATED PER TECH SPEC 4.1.1. THE CAUSE FOR USING UNRELIABLE FEEDWATER TEMPERATURE DATA AND SUBSEQUENT IMPROPER CALIBRATION OF THE POWER RANGES WAS DUE TO NOT HAVING THE COMPUTER RTD DATA POINTS PLACED ON SCAN. THE EVENTS LEADING TO THIS STEMMED FROM AN ADMINISTRATIVE PROCEDURE CHANGE ON 11/14/83 TO RECORD A MORE RELIABLE AND ACCURATE F.W. TEMP. WITH NEWLY INSTALLED RTD'S.

[208] GINNA DOCKET 50-244 LER 83-030
A TABLE IN TECH SPECS WAS NOT CHANGED.
EVENT DATE: 121683 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188836) DURING NORMAL OPERATION, WHILE REVIEWING TECH SPEC SECTION 3.5, IT WAS DISCOVERED THAT THE ACTUAL SETPOINT FOR PERMISSIVE CIRCUIT P-10 IS 8.0% RATHER THAN 10% OF FULL POWER AS REQUIRED BY TABLE 3.5-1 ITEMS 2 AND 3. PERMISSIVE CIRCUIT P-10 PERMITS THE BYPASSING OF THE POWER RANGE NUCLEAR FLUX (LOW SETTING) AND INTERMEDIATE RANGE NUCLEAR FLUX REACTOR TRIPS WHENEVER STARTUP PROTECTION IS NOT REQUIRED. A REVIEW OF THE FSAR ACCIDENT ANALYSES HAS SHOWN THAT ONLY THE CONTINUOUS ROD WITHDRAWAL TRANSIENT WOULD BE AFFECTED BY THIS LESS CONSERVATIVE INSTRUMENT SETTING. IN 1972 THE LICENSED THERMAL POWER LEVEL WAS INCREASED TO THE PRESENT 1520 MEGAWATTS. THIS POWER INCREASE NECESSITATED CHANGES TO CERTAIN REACTOR PROTECTION SYSTEM INSTRUMENT SETTINGS. ONE OF THESE SETTINGS WAS TO PERMISSIVE CIRCUIT P-7. P-7 PERMITS THE REACTOR TO TRIP ON LOW PRESSURIZER PRESSURE AND LOW REACTOR COOLANT FLOW IN BOTH LOOPS. THESE TRIPS ARE ALLOWED TO BE BYPASSED WHENEVER POWER RANGE NUCLEAR FLUX IS LESS THAN OR EQUAL TO 8.5% OF RATED POWER.

[209] GRAND GULF 1 DOCKET 50-416 LER 83-049 REV 2
UPDATE ON INOPERABLE DIESEL GENERATOR.
EVENT DATE: 040983 REPORT DATE: 111083 NSSS: GE TYPE: BWR
SYSTEM: COMPRESSED AIR SYSTEMS & CONT COMPONENT: VALVES
VENDOR: YARWAY CORP.

(NSIC 187977) ON 4-9-83, WHILE IN COLD SHUTDOWN, A "DIESEL GENERATOR (DG) 12 AUTO START NOT AVAILABLE" ALARM ACTUATED. AN INVESTIGATION REVEALED THE PRESSURE IN AIR START STORAGE TANK C TO BE LESS THAN 160 PSIG AND THE PRESSURE IN TANK D TO BE 210 PSIG. AN ATTEMPT TO RESTORE PRESSURE FAILED. DG 12 AND ITS ASSOCIATED DIVISION II ECCS SYSTEM WERE DECLARED INOPERABLE. THE PLANT WAS OPERATING UNDER ACTION "A" OF TECH SPEC 3.5.2 (LER 83-060/03 L-0). AS A RESULT OF THIS EVENT AN LCO WAS ENTERED UNDER ACTION "B" TO TECH SPEC 3.5.2. A CONDENSATE DRAIN VALVE DOWNSTREAM OF THE C TANK WAS FOUND NOT FULLY CLOSED (APPROX. 1/2 TURN OPEN). BOTH THE MOTOR DRIVEN COMPRESSOR AND THE DIESEL DRIVEN COMPRESSOR FAILED TO RESTORE PRESSURE DUE TO DAMAGED COMPONENTS. THE COMPRESSORS WERE REWORKED AND HAVE BEEN RETURNED TO SERVICE.

[210] GRAND GULF 1 DOCKET 50-416 LER 83-083 REV 2
UPDATE ON LOAD SHED AND SEQUENCING FAILURES.
EVENT DATE: 071683 REPORT DATE: 020184 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: RELAYS
VENDOR: AGASTAT RELAY CO.
VITRO ENGINEERING DIVISION

(NSIC 188930) ON JULY 16, 1983, A LOCA SIGNAL WAS SIMULATED FOR THE PERFORMANCE OF AN 18 MONTH EMERGENCY DIESEL GENERATOR FUNCTIONAL TEST. SEVERAL SSW VALVES DID NOT REPOSITION, THE LPCI "A" INJECTION VALVE DID NOT OPEN AND THE APPLICABLE DIVISION I ELECTRICAL LOADS DID NOT SHED AS REQUIRED. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.12.E AND TECH SPEC 6.9.1.12.I. THE CAUSE WAS A COMBINATION OF AGASTAT RELAY FAILURE AND AN APPARENT FLAW IN THE LOAD SHED AND SEQUENCING (LSS) PANEL SUPPLIED BY VITRA LABORATORIES. THE AGASTAT RELAY FAILURES WERE DUE TO A DEFICIENCY REPORTED IN LER 83-121 AND PRD 83/12. MODIFICATIONS AND RETESTING OF THE LSS PANEL ARE COMPLETE. THIS IS SUBMITTED AS A FINAL REPORT.

[211] GRAND GULF 1 DOCKET 50-416 LER 83-090 REV 1
UPDATE ON REACTOR WATER CLEANUP SYSTEM INOPERABLE.
EVENT DATE: 072283 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188720) ON JULY 22, 1983, WHILE PERFORMING A REMOTE OPERATED VALVE LINEUP FOR THE COMPONENT COOLING WATER SYSTEM IT WAS DISCOVERED THAT THE INLET VALVE (COOLING SUPPLY) TO THE RWCU NONREGENERATIVE HEAT EXCHANGER WAS CLOSED. THEREFORE, RWCU WAS NOT ACTUALLY OPERABLE WHEN RELIED UPON FOR AN ALTERNATE METHOD OF DECAY HEAT REMOVAL IN ACCORDANCE WITH ACTION 1 OF TECH SPEC 3.4.9.2. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.12.B. THE VALVE HAD ISOLATED WHEN A RELAY WAS REMOVED DURING TROUBLESHOOTING OF THE DIVISION I LSSS. THE RELAY WAS INSTALLED AND THE VALVE WAS OPENED AFTER DISCOVERING THAT IT HAD ISOLATED. CHANGES TO ADMINISTRATIVE CONTROLS GOVERNING WORK ARE BEING IMPLEMENTED. THIS IS A FINAL REPORT.

[212] GRAND GULF 1 DOCKET 50-416 LER 83-111 REV 1
UPDATE ON STANDBY GAS TREATMENT TRAIN ACTUATES.
EVENT DATE: 073083 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE
VENDOR: AMPHENOL

(NSIC 188817) DURING THE PERFORMANCE OF A WORK ORDER TO CORRECT A MALFUNCTION WITH THE DIVISION I ISOLATION RESET STATUS LIGHTS, AN AMPHENOL TYPE SIGNAL CABLE CONNECTOR IN A C/R PANEL WAS DISCONNECTED. UNEXPECTEDLY, THE SHUTDOWN COOLING AND CONTROL ROOM FRESH AIR HVAC SYSTEMS ISOLATED, AND SBGT "A" TRAIN INITIATED. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.C. THE CAUSE WAS PERSONNEL ERROR. THE IMPACT OF THE MWO WAS NOT REALIZED BEFORE THE FACT. CHANGES TO ADMINISTRATIVE CONTROLS GOVERNING MAINTENANCE ACTIVITIES ARE BEING IMPLEMENTED. THE AFFECTED SYSTEMS WERE RESTORED TO NORMAL. RELATED LERS ARE: 83-112, 83-116, AND 83-117.

[213] GRAND GULF 1 DOCKET 50-416 LER 83-112 REV 1
UPDATE ON ENGINEERED SAFEGUARDS SYSTEMS ACTUATION.
EVENT DATE: 073083 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188818) WHILE TROUBLESHOOTING THE NSSSS/ECCS INITIATION CIRCUITRY TO FIND THE REASON FOR IMPROPER OPERATION OF E12F087B & F025B PER AN APPROVED WORK ORDER, AN UNEXPECTED PARTIAL LOCA SIGNAL OCCURRED. SHUTDOWN COOLING "A", RWCU, AND AUX. BLDG. DIV. II AUTO ISOLATED, AND DIV. II D/G AND SBGT AUTO INITIATED. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B AND IS A FINAL REPORT. THE WORK ORDER WAS IN ERROR IN THAT IT DIRECTED INTERMEDIATE LOCA CIRCUIT RELAY K130B TO BE JUMPERED. THIS ENERGIZED RELAY K132 RESULTING IN THE ABOVE OCCURRENCE. CHANGES TO ADMINISTRATIVE CONTROLS GOVERNING WORK ARE BEING IMPLEMENTED. RELATED LERS ARE: 83-111, 83-116, AND 83-117.

[214] GRAND GULF 1 DOCKET 50-416 LER 83-116 REV 1
UPDATE ON INADVERTENT LOCA LOSS OF OFFSITE POWER SIGNAL.
EVENT DATE: 080983 REPORT DATE: 011284 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188819) DURING THE PERFORMANCE OF A MODIFICATION ON THE DIV. II LOAD SHEDDING PANEL, TEMP. JUMPERS WERE REMOVED PER INSTRUCTIONS. THIS CAUSED A PARTIAL LOCA/LOSP SIGNAL TO OCCUR. THE B DRYWELL PURGE COMPRESSOR AND THE B HYDROGEN ANALYZER STARTED, CERTAIN B SSW AND B PSW VALVES ISOLATED, AND THE B C/R VENTILATION AND B (FPCCU) FUEL POOL COOLING CLEANUP SYSTEMS TRIPPED. THE JUMPERS WERE CONNECTED TO THE TERMINAL BOARDS BY SPADE TYPE LUGS. THE SCREWS ON THE

TERMINALS WERE LOOSENED TO REMOVE THE JUMPERS. THIS CAUSED A MOMENTARY LOSS OF CONTINUITY BETWEEN THE TERMINALS & PERMANENT WIRING, RESULTING IN THE PARTIAL LOCA/LOSP SIGNAL TO DIV. II. CHANGES TO ADMINISTRATIVE CONTROLS GOVERNING WORK ARE BEING IMPLEMENTED.

[215] GRAND GULF 1 DOCKET 50-416 LER 83-117 REV 1
UPDATE ON DRYWELL PURGE COMPRESSOR AUTO STARTS.
EVENT DATE: 081283 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188820) DURING THE PERFORMANCE OF A MODIFICATION ON THE DIV. I LOAD SHEDDING PANEL, THE OUTPUT RELAYS WERE PULLED PER WORK AUTHORIZATIONS. THIS CAUSED THE "A" DRYWELL PURGE COMPRESSOR TO AUTO-START. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THIS IS A FINAL REPORT. THE WORK AUTHORIZATIONS DID NOT CAUTION THE ABOVE WOULD OCCUR AND THEREFORE WAS NOT PLANNED FOR. THE "A" DRYWELL PURGE COMPRESSOR WAS RETURNED TO NORMAL AFTER THE FALSE SIGNAL WAS VERIFIED. CHANGES TO ADMINISTRATIVE CONTROLS GOVERNING WORK ARE BEING IMPLEMENTED. RELATED LERS ARE: 83-111, 83-112, AND 83-116.

[216] GRAND GULF 1 DOCKET 50-416 LER 83-121 REV 2
UPDATE ON RELAY CONTACT FAILURES.
EVENT DATE: 081783 REPORT DATE: 011284 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
VENDOR: AGASTAT RELAY CO.

(NSIC 188635) ON AUGUST 17, 1983, DURING A SURVEILLANCE, THE M4-R4 CONTACTS IN AGASTAT RELAY 95X FOR MOV 1E22-F010 WERE FOUND FAILED IN THE OPEN STATE. THE CONTACTS MUST CLOSE TO REMOVE THE OVERLOAD PROTECTION FROM THE VALVE CIRCUIT AS REQUIRED BY TECH SPEC 3.8.4.2. THE AFFECTED SYSTEM WAS INOPERABLE FOR OTHER REASONS. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B AND WAS REPORTED IN PRD 83/12 UNDER 10 CFR 21. THIS IS A FINAL REPORT. THE RELAY FAILURE WAS DUE TO MECH. INTERFACE OF A NYLON MOVABLE CONTACT ARM & THE BARRIER STRIP ON THE MELAMINE PHENOL RELAY BASE. THE FAILURES ARE APPLICABLE TO AGASTAT GP SERIES RELAYS MANUFACTURED PRIOR TO 8/77. REPLACEMENT OF SAFETY-RELATED, NORMALLY ENERGIZED PRE 8/77 AGASTAT GP SERIES RELAYS IS EXPECTED TO BE COMPLETED PRIOR TO THE NEXT STARTUP.

[217] GRAND GULF 1 DOCKET 50-416 LER 83-130 REV 1
UPDATE ON SHUTDOWN COOLING SYSTEM TWICE ISOLATES.
EVENT DATE: 082983 REPORT DATE: 122083 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: ELECTRICAL CONDUCTORS

(NSIC 188721) ON AUGUST 29, 1983, THE SHUTDOWN COOLING SYSTEM ISOLATED TWICE WHEN THE SUCTION VALVE RECEIVED ISOLATION SIGNALS AT 1257 AND 1640 HOURS. THE FIRST ISOLATION OCCURRED DURING PERFORMANCE OF THE RCIC EQUIPMENT ROOM HIGH TEMPERATURE CHANNEL "A" CALIBRATION. THE SECOND OCCURRED DURING THE RWCU HIGH DIFFERENTIAL FLOW CALIBRATION. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE FIRST ISOLATION OCCURRED DUE TO PERSONNEL ERROR, WHEN THE INCORRECT LEADS WERE LIFTED, WHILE PERFORMING MAINTENANCE. THE SECOND ISOLATION WAS CAUSED BY THE USE OF ALLIGATOR CLIPS ON TEST EQUIPMENT. THE TECHNICIANS WERE REINSTRUCTED AND PERMANENT TYPE TEST CONNECTIONS WERE INSTALLED. THIS IS A FINAL REPORT.

[218] GRAND GULF 1 DOCKET 50-416 LER 83-136 REV 3
UPDATE ON DIESEL GENERATOR FAILURE.
EVENT DATE: 083083 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: DE LAVAL TURBINE, INC.

(NSIC 188821) ON 8-30-83, DURING A 24 HR SURVEILLANCE TEST RUN, THE DIV. I D/G WAS SHUTDOWN WHEN THE RB1 AND LB5 CYLINDER EXHAUST GASKETS FAILED AND A CRACK AND 2 BROKEN WELDS WERE DISCOVERED ON THE INTERCOOLERS. THE DIESEL WAS 98 MINUTES INTO THE TEST RUN. PER REG. GUIDE 1.108, PARA C.2.E.(3), THIS WAS A VALID SUCCESSFUL TEST. THIS IS REPORTED PURSUANT TO TECH SPEC 4.8.1.1.3. THIS IS AN INTERIM REPORT. THE GASKET FAILURES WERE CAUSED BY LOOSE MANIFOLD BOLTS AND HAVE BEEN REPLACED. A CRACK IN THE BASE METAL OF THE LB INTERCOOLER WAS CAUSED BY THE TURBOCHARGER MISALIGNMENT AND MOUNTING PROBLEMS REPORTED IN LER 83-107/03 X-1. TWO BROKEN STAY ROD WELDS ON THE RB INTERCOOLER WERE DUE TO INSUFFICIENT FILLER WELDS. THE CRACK AND WELDS WERE WELD REPAIRED.

[219] GRAND GULF 1 DOCKET 50-416 LER 83-142 REV 1
UPDATE ON RHR PRESSURE SWITCH OUT OF CALIBRATION.
EVENT DATE: 090383 REPORT DATE: 120283 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188722) ON 9/3/83, THE RHR (LPCI) "A" LOW PRESSURE ALARM TRIP UNIT SETPOINT WAS DISCOVERED TO BE LESS THAN THE ALLOWABLE OF TECH SPEC 4.5.1.C.2.A(2)(A) (GREATER THAN OR EQUAL TO 38 PSIG). THE INSTRUMENT SETPOINT IS CALIBRATED EVERY 30 DAYS. THE SETPOINT WAS RECALIBRATED 30 DAYS LATER AND FOUND CONSERVATIVELY SET TOO HIGH. THE TECH SPEC ALLOWABLE WAS NOT ACTUALLY EXCEEDED ON 9/3/83. THE TRIP UNIT WAS RECALIBRATED BACK TO WITHIN TOLERANCES. THE APPARENT LOW SETPOINT READING ON 9/3/83 WAS CAUSED BY AN UNSTABLE ROSEMOUNT READOUT ASSEMBLY USED FOR THE CALIBRATION. ALL INSTRUMENTS CALIBRATED WITH THE READOUT ASSEMBLY HAVE BEEN RECALIBRATED. THE SETPOINT DID NOT EXCEED TECH SPEC LIMITS ON 9/3/83. THIS IS A FINAL REPORT.

[220] GRAND GULF 1 DOCKET 50-416 LER 83-146 REV 1
UPDATE ON ISOLATED SHUTDOWN COOLING LOOP.
EVENT DATE: 091883 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188723) ON SEPT. 18, 1983, WHILE IN COLD SHUTDOWN, THE B SHUTDOWN COOLING LOOP PUMP WAS FOUND TRIPPED DUE TO AN ISOLATED SUCTION VALVE. THE RHR B OUT OF SERVICE ALARM WAS ALREADY ACTUATED BEFORE THE EVENT DUE TO A TAGGED OPEN BREAKER ON VALVE F052B. SDC LOOP B WAS RESTORED TO OPERATION WITHIN 5 MINUTES OF DISCOVERY IN COMPLIANCE WITH TECH SPEC 3.4.9.2 ACTION REQUIREMENTS. THIS IS A FINAL REPORT SUBMITTED PURSUANT TO TECH SPEC 6.9.1.13.B. AN INVESTIGATION REVEALED THAT THE C CHANNEL ISOLATION LOGIC TEST SWITCH HAD BEEN PLACED IN THE "TEST" POSITION FOR A SURVEILLANCE WHILE THE B CHANNEL ISOLATION LOGIC TEST SWITCH WAS ALSO IN TEST. THE SURVEILLANCE PROCEDURE WHICH VERIFIED OTHER CHANNEL TEST SWITCHES TO BE IN THE NORMAL POSITION WAS OUT OF SEQUENCE AND HAS BEEN REVISED.

[221] GRAND GULF 1 DOCKET 50-416 LER 83-163 REV 1
UPDATE ON RCIC TURBINE STOP VALVE FAILURE.
EVENT DATE: 101383 REPORT DATE: 020184 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188931) ON OCTOBER 13, 1983, WHILE PLACING RCIC IN THE STANDBY MODE, THE TURBINE TRIP THROTTLE VALVE FAILED TO RESET. SINCE THE VALVE WOULD NOT LATCH OPEN, THE SYSTEM WAS DECLARED INOPERABLE. RCIC REMAINED INOPERABLE FOR 10 DAYS 20.5 HOURS. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. A MAINTENANCE INSPECTION REVEALED THAT FAILED TRANSISTORS IN AN OPTICAL ISOLATOR CARD CAUSED THE INABILITY TO RESET THE VALVE. THE CARD WAS REPLACED. THE CAUSE OF THE FAILED TRANSISTORS COULD NOT BE ATTRIBUTED TO ANY EXTERNAL STIMULI. THIS IS SUBMITTED AS A FINAL REPORT.

[222] GRAND GULF 1 DOCKET 50-416 LER 83-166 REV 1
UPDATE ON 50 DEFECTIVE ESF TRIP DEVICES.
EVENT DATE: 102183 REPORT DATE: 122283 NSSS: GE TYPE: BWR
SYSTEM: ULTIMATE HEAT SINK FACILITILS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: BROWN BOVERI

(NSIC 188636) ON OCTOBER 21, 1983, SSW COOLING FAN C003D TRIPPED BREAKER 52-16506 ON SEVERAL START ATTEMPTS. SSW "B" WAS DECLARED INOPERABLE AND AN LCO WAS ENTERED PURSUANT TO TECH SPEC 3.7.1.3 AND 3.7.1.1.1. THIS ALSO RESULTED IN SHUTDOWN COOLING LOOP "B" BEING DECLARED INOPERABLE AT 0430 HOURS ON OCTOBER 22 WHEN THE REACTOR PRESSURE WAS LOWERED TO 135 PSIG IN MODE 3. THE REACTOR WATER CLEANUP SYSTEM WAS DEMONSTRATED AS AN ALTERNATE METHOD OF DECAY HEAT REMOVAL IN ACCORDANCE WITH TECH SPEC 3.4.9.1. THE ITE SOLID STATE TRIP DEVICE INSTALLED ON THE BREAKER WAS DEFECTIVE. THE MANUFACTURER INCORRECTLY INSTALLED A 30VDC 22UF CAPACITOR IN LIEU OF A REQUIRED 50VDC CAPACITOR. ALL C205 CAPACITORS IN ESF BREAKERS HAVE BEEN INSPECTED AND MODIFIED TRIP UNITS HAVE BEEN INSTALLED IN NONCONFORMING BREAKERS. SOME SPARES ARE AWAITING SHIPMENT FOR REWORK.

[223] GRAND GULF 1 DOCKET 50-416 LER 83-187
SPIKE IN REACTOR VESSEL LEVEL TRANSMITTER DUE TO MAINTENANCE ERROR.
EVENT DATE: 112283 REPORT DATE: 122283 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ROSEMOUNT, INC.

(NSIC 188361) ON NOV. 22, 1983 WHILE IN COLD SHUTDOWN, MAINTENANCE TECHNICIANS FILLING A REACTOR VESSEL LEVEL TRANSMITTER REFERENCE LEG CAUSED A SPIKE THAT RESULTED IN DIV. I AUTOMATIC ACTUATIONS INCLUDING AN INJECTION BY THE LOW PRESSURE CORE SPRAY PUMP AND AN ISOLATION OF SHUTDOWN COOLING. THE INJECTION LASTED FOR APPROXIMATELY 1 MINUTE AND 40 SECONDS. SHUTDOWN COOLING WAS RESTORED WITHIN ONE HOUR AS REQUIRED BY TECH SPEC 3.4.9.2. THIS IS SUBMITTED AS AN INTERIM REPORT PURSUANT TO TECH SPEC 6.9.1.13.B. THE CAUSE WAS PERSONNEL ERROR. THE REFERENCE LEG CHECK PROCEDURE WAS NOT BEING USED. THE PROCEDURE IS BEING REVISED TO PROVIDE MORE GUIDANCE. THE RESPONSIBLE SUPERVISOR IS BEING REPRIMANDED AND THE TECHNICIANS ARE BEING COUNSELED. I&C TECHNICIANS WILL BE INSTRUCTED TO USE THE PROCEDURE WHEN FILLING REFERENCE LEGS ASSOCIATED WITH VESSEL INSTRUMENTATION.

[224] GRAND GULF 1 DOCKET 50-416 LER 83-190
SHUTDOWN COOLING INOPERABLE.
EVENT DATE: 121483 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188887) ON DECEMBER 14, 1983, WHILE RESTORING DIVISION 2 POWER FOLLOWING A PLANNED MAINTENANCE OUTAGE, A DIVISION 2 ISOLATION OCCURRED CAUSING A LOSS OF SHUTDOWN COOLING WHEN PUMP SUCTION VALVE F009 ISOLATED. OTHER ACTUATIONS INCLUDED REACTOR WATER CLEANUP ISOLATION AND STANDBY GAS TREATMENT B INITIATION. AN LCO WAS ENTERED PURSUANT TO TECH SPEC 3.4.9.2. THE EVENT WAS REPORTED PURSUANT TO 10CFR 50.72 AND IS ALSO BEING REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE CAUSE OF THE ISOLATION IS UNDER INVESTIGATION. NO ACTUAL VALID ISOLATION SIGNAL WAS PRESENT. SHUTDOWN COOLING WAS RESTORED IN 15 MINUTES. THIS IS SUBMITTED AS AN INTERIM REPORT. AN UPDATE REPORT IS EXPECTED TO BE SUBMITTED BY FEBRUARY 29, 1984.

[225] GRAND GULF 1 DOCKET 50-416 LER 83-192
CONTAINMENT VENTILATION MONITORS NOT CHECKED.
EVENT DATE: 122383 REPORT DATE: 012384 NSSS: GE TYPE: BWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188462) ON DEC. 23, 1983, AT 2050 HOURS, A REVIEW OF THE DAILY OPERATING

LOGS REVEALED THAT THE FIRST SHIFT OF THE DAY FAILED TO ADEQUATELY PERFORM THE 12 HOUR CHANNEL CHECK OF TECH SPEC 4.3.7.1-1.7 FOR THE CONTAINMENT AND DRYWELL VENTILATION EXHAUST RADIATION MONITOR INSTRUMENTATION. CHANNEL A AND D READINGS WERE IN ERROR AND THE B AND C CHANNEL READINGS WERE NOT TAKEN. ALL SUBSEQUENT READINGS SHOWED THE INSTRUMENTS ACCEPTABLE. THE CURRENT CHANNEL CHECK IS PERFORMED THREE TIMES DAILY. THE CAUSE WAS DUE TO PERSONNEL ERROR. LICENSED PERSONNEL WERE REMINDED OF THEIR RESPONSIBILITY FOR THE ACTIONS OF UNLICENSED OPERATORS UNDER INSTRUCTION. THE DAILY OPERATING LOG IS BEING REVISED TO REQUIRE A LICENSED OPERATOR'S REVIEW OF EACH SHIFT'S ROUND IF THE CONTROL ROOM OPERATOR WAS NOT THE ONE PERFORMING THE SURVEILLANCE. ESTIMATED COMPLETION DATE IS MAR. 2, 1984.

[226] GRAND GULF 1 DOCKET 50-416 LER 83-193
BOTH LOOPS OF SDC SYSTEM ISOLATED.
EVENT DATE: 122783 REPORT DATE: 012684 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188822) ON DEC. 27, 1983, WHILE IN COLD SHUTDOWN AND PERFORMING AN INSTRUMENT SURVEILLANCE ON THE ISOLATION LOGIC FOR SHUTDOWN COOLING, THE OUTBOARD SUCTION VALVE (F008) CLOSED ISOLATING BOTH LOOPS OF THE SDC SYSTEM. BOTH SDC LOOPS ARE REQUIRED TO BE OPERABLE WITH ONE LOOP IN OPERATION PER TECH SPEC 3.4.9.2. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THIS IS A FINAL REPORT. THE ISOLATION WAS CAUSED BY THE TIP BREAKING OFF A MINI-TEST CLIP USED TO JUMPER A CONTACT IN THE ISOLATION LOGIC THUS ALLOWING A SURV. STEP TO CAUSE THE ISOLATION. THE SDC SYSTEM WAS RETURNED TO SERVICE IN 49 MIN. TO MINIMIZE RECURRENCE, SURV. ARE BEING REVIEWED FOR POINTS REQUIRING TEST CONNECTIONS AND BANANA JACKS ARE BEING INSTALLED WHERE NECESSARY.

[227] HATCH 1 DOCKET 50-321 LER 83-024
HYDROGEN AND OXYGEN ANALYZER SETPOINTS DRIFT.
EVENT DATE: 022483 REPORT DATE: 032283 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: HAYES CORP.

(NSIC 188511) WHILE PERFORMING THE "HYDROGEN AND OXYGEN ANALYZER INSTRUMENT" SURVEILLANCE PROCEDURE, THE "A" H202 ANALYZERS WERE FOUND TO BE OUT OF CALIBRATION. FOLLOWING THE RECALIBRATION OF THE "A" H202 ANALYZERS AND THEIR RETURN TO SERVICE, THE "B" 02 ANALYZER WAS FOUND TO BE OUT OF CALIBRATION. THESE EVENTS ARE CONTRARY TO THE REQUIREMENTS OF TECH SPEC 3.7.A.6.C. THIS REPETITIVE EVENT WAS LAST REPORTED ON LER 50-321/82-059. THE CAUSE OF THIS EVENT HAS BEEN ATTRIBUTED TO INSTRUMENT DRIFT. THE "A" HYDROGEN AND OXYGEN ANALYZERS AND THE "B" OXYGEN ANALYZER WERE RECALIBRATED BY PROCEDURE AND RETURNED TO OPERABLE STATUS ON 2/24/83. A DESIGN CHANGE REQUEST (DCR #81-132) HAS BEEN WRITTEN TO REPLACE THE HYDROGEN AND OXYGEN ANALYZER SYSTEM.

[228] HATCH 1 DOCKET 50-321 LER 83-039
TORUS TO DRYWELL DIFFERENTIAL PRESSURE BELOW LIMITS.
EVENT DATE: 032283 REPORT DATE: 041983 NSSS: GE TYPE: BWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: COMPONENT CODE NOT APPLICABLE
VENDOR: MCGRAW EDISON CO., POWER SYSTEMS DIV

(NSIC 188512) DURING NORMAL STEADY-STATE OPERATION, OPERATING PERSONNEL RECEIVED A GROUP II ISOLATION WHICH TRIPPED THE DRYWELL TO TORUS DIFFERENTIAL PRESSURE COMPRESSORS (T48-C001A&B). THE DRYWELL TO TORUS DIFFERENTIAL PRESSURE DROPPED BELOW MINIMUM REQUIREMENTS OF TECH SPECS SECTION 3.7.A.7. ON MAR. 22, 1983, AT 4:00 P.M. THE PLANT WAS PLACED IN A 6-HR LCO WITH DRYWELL TO TORUS DIFFERENTIAL PRESSURE BELOW 1.5 PSID. THIS IS A NON-REPETITIVE EVENT. THE CAUSE OF THIS EVENT WAS ATTRIBUTED TO A PROTECTIVE RELAY POWER FUSE (D11-F14A) FAILURE CAUSING

A GROUP II ISOLATION. THE BLOWN FUSE WAS REPLACED. PERSONNEL RESET GROUP II ISOLATION AND PLACED T48-C001A&B IN SERVICE. THE DRYWELL TO TORUS DIFFERENTIAL PRESSURE WAS RETURNED TO WITHIN TECH SPECS SECTION 3.7.A.7 LIMITS ON MAR. 22, 1983, AT 5:10 P.M.

[229] HATCH 1 DOCKET 50-321 LER 83-116
STEAM CONDENSING MODE FLOW CONTROL VALVE INOPERABLE.
EVENT DATE: 120283 REPORT DATE: 122283 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: STATES COMPANY, THE

(NSIC 188771) WHILE PERFORMING A LIFTED WIRE & JUMPER SHEET PER THE "LIFTED WIRE & TEMPORARY JUMPER CONTROL" PROCEDURE (HNP-504), PLANT PERSONNEL DETERMINED LINKS "K96A" AND "N" TO BE OPEN AT THE STEAM CONDENSING MODE FLOW CONTROL VALVE (1E11-F053A). THE REDUNDANT STEAM CONDENSING MODE FLOW CONTROL VALVE (E11-F053B) WAS OPERABLE. SIMILAR EVENTS: LER 50-321/1983-099. THE CAUSE OF THIS EVENT IS UNKNOWN. LINKS "K96A" AND "N" WERE CLOSED AT THE STEAM CONDENSING MODE FLOW CONTROL VALVE (1E11-F053A) AND VALVE OPERATION WAS VERIFIED PER THE "INSTRUCTION AND MAINTENANCE OF ASCO SOLENOID VALVES" PROCEDURE (HNP-6946).

[230] HATCH 1 DOCKET 50-321 LER 83-115
REACTOR WATER CLEANUP THERMOCOUPLES INOPERABLE.
EVENT DATE: 120683 REPORT DATE: 121683 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188690) DURING A ROUTINE WALKDOWN FOR A DESIGN CHANGE REQUEST, ARCHITECT ENGINEER (A/E) PERSONNEL DETERMINED THAT 4 SETS OF THE RWCU DIFFERENTIAL TEMPERATURE THERMOCOUPLES WERE INOPERABLE. ALSO, THE REMAINING 2 SETS OF THE RWCU DIFFERENTIAL TEMPERATURE THERMOCOUPLES WERE INOPERABLE AS INSTALLED. THUS, THE PLANT WAS UNABLE TO MEET THE REQUIREMENTS OF ITEM 10 OF TECH SPECS TABLE 3.2-1. THIS IS A NON-REPETITIVE EVENT. THE 4 SETS OF RWCU DIFFERENTIAL TEMPERATURE THERMOCOUPLES WERE INOPERABLE DUE TO IMPROPER DRAWINGS PROVIDED BY THE A/E AT STARTUP. THE CAUSE OF THE 2 SETS OF RWCU DIFFERENTIAL TEMPERATURE THERMOCOUPLES BEING INOPERABLE (DUE TO THEIR WIRES BEING REVERSED TO MATCH THE OTHER 4 SETS) IS UNKNOWN.

[231] HATCH 1 DOCKET 50-321 LER 83-124
TIP DETECTOR CABLE CANNOT BE WITHDRAWN.
EVENT DATE: 121583 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188570) ON 12/15/83 AT 2300 CST DURING PERFORMANCE OF THE COMPUTER PROGRAM OD-1, PERSONNEL DETERMINED THAT THE TRANSVERSE INCORE PROBE (TIP) "B" DETECTOR CABLE COULD NOT BE WITHDRAWN. CONSEQUENTLY, BALL VALVE C51-J004B COULD NOT BE CLOSED. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPECS SECTION 3.7.D-1. AN ORDERLY SHUTDOWN WAS INITIATED ON 12/16/83 AT 0800 CST PER TECH SPEC SECTION 3.7.D.3. THE CAUSE OF THIS EVENT IS COMPONENT FAILURE IN THAT THE TIP DRIVE CABLE WAS BINDING IN ITS INDEXING TUBE. THE "B" TIP DETECTOR, THE DRIVE CABLE, AND A SECTION OF INDEXING TUBE WAS REPLACED. THE "B" TIP SYSTEM WAS VERIFIED PER THE "OD-1 AND OD-2: TIP OPERATION FOR LPRM CALIBRATION AND BASE DISTRIBUTION" PROCEDURE (HNP-2-9503).

[232] HATCH 1 DOCKET 50-321 LER 83-113
THREE REACTOR BLDG VENT RADIATION MONITORS FOUND INOPERABLE.
EVENT DATE: 122083 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

VENDOR: GENERAL ELECTRIC CO.

(NSIC 188568) ON 12/20/83, DURING PERFORMANCE OF THE "REACTOR BUILDING VENT RADIATION AND ARM SYSTEM CALIBRATION" PROCEDURE (HNP-1-5114), SURVEILLANCE PERSONNEL NOTED THAT REACTOR BUILDING EXHAUST VENT RADIATION MONITORS 1D11-K609 A, B, AND C WERE INOPERABLE. THUS, THE PLANT COULD NOT SATISFY THE "REQUIRED OPERABLE CHANNELS PER TRIP SYSTEM" REQUIREMENT OF TECH SPEC TABLE 3.2-8, ITEM 3. THIS REPETITIVE EVENT WAS LAST REPORTED ON LER 50-321/1983-040, REV. 1. THIS EVENT IS THE RESULT OF MONITORS 1D11-K609, A, B AND C BEING OUT OF CALIBRATION DUE TO A DECREASED SENSITIVITY OF THE RESPECTIVE DETECTOR'S GEIGER MULLER TUBE. MONITORS 1D11-K609 A, B AND C WERE IMMEDIATELY RECALIBRATED PER HNP-1-5114 AND RETURNED TO SERVICE ON 12/20/83.

[233] HATCH 1 DOCKET 50-321 LER 83-122
HPCI DECLARED INOPERABLE.
EVENT DATE: 122883 REPORT DATE: 012484 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: TERRY STEAM TURBINE COMPANY

(NSIC 188569) DURING PERFORMANCE OF THE "HPCI QUICK START" PROCEDURE (HNP-1-3316), HIGH PRESSURE COOLANT INJECTION (HPCI) HAD AN ERRATIC RESPONSE AND WAS TRIPPED. HPCI WAS DECLARED INOPERABLE; THUS, THE UNIT WAS UNABLE TO MEET THE REQUIREMENTS OF TECH SPECS SECTION 3.5.D.1. THE PLANT REMAINED IN OPERATION, AND THE UNIT WAS PLACED INTO A 14-DAY LCO PER THE REQUIREMENTS OF TECH SPECS SECTION 3.5.D.2. THIS IS A NONREPETITIVE EVENT. THE CAUSE OF THIS EVENT WAS ATTRIBUTED TO FAILED RAMP GENERATOR SIGNAL CONVERTER UNIT WHICH WAS FOUND TO HAVE ERRATIC RESPONSE. ALSO, A HPCI'S OIL PRESSURE REGULATOR VALVE (SUPPLIES OIL TO HPCI'S PILOT VALVE) WAS TOO FAR OPEN TO ALLOW CORRECT PRESSURE TO THE PILOT VALVE.

[234] HATCH 1 DOCKET 50-321 LER 83-126
FOUR HPCI STEAM LINE PRESSURE SWITCHES DRIFT.
EVENT DATE: 122983 REPORT DATE: 012484 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARKSDALE COMPANY

(NSIC 188571) ON 12/29/83, DURING PERFORMANCE OF THE "HPCI STEAM LINE PRESSURE INSTRUMENT FT&C" PROCEDURE (HNP-1-3304), HPCI'S A, B, C, & D STEAM LINE PRESSURE SWITCHES (E41-N001 A, B, C, AND D) ACTUATED BELOW THE REQUIREMENTS OF TECH SPECS. TABLE 3.2-2, ITEM 10. RCIC, ADS, LPCI, AND CORE SPRAY REMAINED OPERABLE DURING THIS EVENT. THIS REPETITIVE EVENT WAS LAST REPORTED ON LER 50-321/1983-094. THIS EVENT WAS DUE TO THE SWITCHES' BEING OUT OF CALIBRATION DUE TO SETPOINT DRIFT. UPON DISCOVERY, THE SWITCHES WERE IMMEDIATELY RECALIBRATED AND FUNCTIONALLY TESTED SATISFACTORILY PER HNP-1-3304 AND RETURNED TO SERVICE ON 12/29/83.

[235] HATCH 2 DOCKET 50-366 LER 82-040 REV 1
UPDATE ON ERROR IN TRANSIENT ANALYSIS CODE.
EVENT DATE: 010783 REPORT DATE: 020383 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186706) IN A LETTER DATED MAY 5, 1982, PLANT HATCH WAS NOTIFIED BY GENERAL ELECTRIC OF A PROGRAMMING ERROR IN THE ODYN TRANSIENT ANALYSIS CODE WHICH WOULD BE EXPECTED TO RESULT IN AN INCREASE OF 0.01 IN THE CYCLE 3 MAXIMUM CRITICAL POWER RATIO (OLMCPR) FOR HATCH 2. THE UNIT HAS BEEN OPERATING WITH A 0.01 PENALTY IN THE OLMCPR VALVE IN THE PROCESS COMPUTER. THIS EVENT IS REPORTABLE PER TECH SPECS 6.9.1.8.H. THE CURRENT TECH SPECS LIMITS BECAME NON-CONSERVATIVE ON JANUARY 7, 1983. A TECH SPECS CHANGE WAS SUBMITTED TO THE NRC ON OCTOBER 4,

1982, WHICH WAS NOT APPROVED IN TIME. THE UNIT HAS BEEN OPERATING WITH THE PROPOSED CHANGE AND WITH A CONTROL ROD DENSITY LARGER THAN ANALYZED.

[236] HATCH 2 DOCKET 50-366 LER 83-138
DIESEL FAILS TO STOP.
EVENT DATE: 120683 REPORT DATE: 121683 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: WOODWARD GOVERNOR COMPANY

(NSIC 188705) DURING PERFORMANCE OF THE "DIESEL GENERATOR MANUAL START" PROCEDURE ON 12/06/83, OPERATING PERSONNEL FOUND THAT THE "2C" DIESEL GENERATOR (2R43-S001C) COULD NOT BE SHUTDOWN WITH EITHER THE LOCAL STOP SWITCH OR THE CONTROL ROOM STOP SWITCH. THE DIESEL GENERATOR WAS DECLARED INOPERABLE. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPECS SECTION 3.8.1.1.B. AN INVESTIGATION REVEALED THAT THE GOVERNOR SHUTDOWN SOLENOID HAD BECOME LOOSENED -- APPARENTLY BY ENGINE VIBRATION. THE SHUTDOWN SOLENOID WAS REPOSITIONED TO ITS PROPER POSITION. THE DIESEL GENERATOR WAS SATISFACTORILY FUNCTIONALLY TESTED AND RETURNED TO SERVICE ON 12/06/83 AT APPROXIMATELY 1145 CST.

[237] HATCH 2 DOCKET 50-366 LER 83-148
FIRE WATCH NOT IMPLEMENTED AFTER DOOR FAILURE.
EVENT DATE: 120883 REPORT DATE: 010784 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188522) WHILE REVIEWING A MAINTENANCE REQUEST TO REPAIR A FIRE DOOR (2L48-2R53) ON 01/03/84, PLANT PERSONNEL DETERMINED THAT THE LCO REQUIRED BY TECH SPECS SECTION 3.7.7, ACTION A (I.E., ESTABLISH A CONTINOUS FIRE WATCH WITHIN ONE HOUR) HAD NOT BEEN IMPLEMENTED WHEN THE DOOR WAS DETERMINED TO BE INOPERABLE. THIS IS A NON-REPETITIVE EVENT. THE CAUSE OF THIS EVENT WAS PERSONNEL ERROR AND COMPONENT FAILURE. THE RESPONSIBLE PERSON WAS DISCIPLINED ABOUT HIS ACTIONS. THE FIRE DOOR'S CLOSURE WAS ADJUSTED AND THE FIRE DOOR (2L48-2R53) WAS RETURNED TO SERVICE ON 01/04/84.

[238] HATCH 2 DOCKET 50-366 LER 83-139
DRYWELL VACUUM BREAKER DECLARED INOPERABLE.
EVENT DATE: 121483 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GPE CONTROLS

(NSIC 188587) DURING PERFORMANCE OF THE "SUPPRESSION CHAMBER TO DRYWELL VACUUM BREAKER SYSTEM OPERABILITY" PROCEDURE (HNP-2-3957) ON 12/14/83, PLANT PERSONNEL DETERMINED THAT THE POSITION OF VACUUM BREAKER 2T48-F323C COULD NOT BE CONFIRMED BECAUSE POSITION INDICATOR LIGHT FUSE 2T48-F1 HAD BLOWN. THE VACUUM BREAKER WAS DECLARED INOPERABLE AND AN LCO WAS ESTABLISHED. THIS EVENT IS CONTRARY TO TECH SPECS SECTION 3.6.4.1.B. AN INVESTIGATION REVEALED THAT THE VALVE POSITION SWITCH WAS SHORTED. THE SHORTED POSITION SWITCH BLEW THE VACUUM BREAKER'S POSITION INDICATOR LIGHT FUSE, THUS EXTINGUISHING THE POSITION INDICATING LIGHTS. THE POSITION SWITCH AND POSITION LIGHT FUSE WERE REPLACED. THE VACUUM BREAKER WAS SATISFACTORILY RETURNED TO SERVICE PER HNP-2-3957 ON 12/14/83.

[239] HATCH 2 DOCKET 50-366 LER 83-144
HYDROGEN RECOMBINER FAILS TO HEAT UP.
EVENT DATE: 121983 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GUARDIAN ELECTRIC

(NSIC 188590) DURING PERFORMANCE OF THE "PRIMARY CONTAINMENT HYDROGEN RECOMBINER

SYSTEM FUNCTIONAL TEST (HEATUP TO 600 F)" PROCEDURE (HNP-2-3606) ON 12/19/83, PLANT PERSONNEL DETERMINED THAT PRIMARY CONTAINMENT HYDROGEN RECOMBINER 2T49-B002A WOULD NOT HEAT UP. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPECS SECTION 3.6.6.2, ACTION A. THIS EVENT WAS CAUSED BY COMPONENT FAILURE. AN INVESTIGATION REVEALED THAT THE HYDROGEN RECOMBINER'S HEATER CONTROL RELAY CONTACTS WERE STUCK. THE CONTACTS WERE FREED BY LIGHTLY STRIKING THE RELAY. HYDROGEN RECOMBINER 2T49-B002A WAS THEN SATISFACTORILY FUNCTIONALLY TESTED PER HNP-2-3606 AND RETURNED TO SERVICE ON 12/21/83.

[240] HATCH 2 DOCKET 50-366 LER 83-140
TWO CRD SCRAM ACCUMULATORS HAVE LOW NITROGEN PRESSURE.
EVENT DATE: 122583 REPORT DATE: 012484 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: ACCUMULATORS

(NSIC 188588) DURING PERFORMANCE OF THE "CONTROL ROD EXERCISE-RX POWER GREATER THAN OR EQUAL TO 30%" PROCEDURE ON 12/25/83 AT APPROXIMATELY 0200 EST, A LOW NITROGEN PRESSURE ALARM WAS RECEIVED ON CONTROL ROD DRIVE (CRD) SCRAM ACCUMULATORS 2C11-18-43 AND 2C11-26-43. THE ACCUMULATORS WERE DECLARED INOPERABLE. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPECS SECTION 3.1.3.5. THE EXACT CAUSE OF THIS EVENT IS UNKNOWN. AFTER AN INVESTIGATION, THE SCRAM ACCUMULATORS WERE SERVICED WITH NITROGEN PER THE "PRECHARGING CRD SCRAM ACCUMULATORS" PROCEDURE (HNP-2-1425) AND SATISFACTORILY RETURNED TO SERVICE ON 12/25/83 AT APPROXIMATELY 0430 CST.

[241] HATCH 2 DOCKET 50-366 LER 83-143
PSW ISOLATION VALVE DECLARED INOPERABLE.
EVENT DATE: 122583 REPORT DATE: 012484 NSSS: GE TYPE: BWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188589) ON 12/25/83 OPERATING PERSONNEL DETERMINED THAT PLANT SERVICE WATER (PSW) VALVE 2P41-F316C HAD ISOLATED, THUS STOPPING THE PSW FLOW TO THE TURBINE BUILDING. VALVE 2P41-F316C WAS OPENED AND ITS MOTOR CIRCUIT BREAKER WAS MANUALLY TRIPPED, THUS CAUSING THE VALVE TO REMAIN OPEN. THE VALVE WAS DECLARED INOPERABLE. CONSEQUENTLY PSW LOOP "A" WAS RENDERED INOPERABLE. THIS EVENT IS CONTRARY TO TECH SPECS SECTION 3.7.1.2. ICE IN THE DIFFERENTIAL PRESSURE SWITCH'S (2P41-N307C) DIFFERENTIAL PRESSURE CELL CAUSED THIS EVENT. THE ICE IN THE PRESSURE CELL CAUSED A FALSE CLOSE SIGNAL TO ISOLATION VALVE 2P41-F316C. THE ICE WAS THAWED, THE VALVE MOTOR CIRCUIT BREAKER WAS TURNED ON, AND THE SYSTEM WAS DECLARED OPERABLE ON 12/25/83.

[242] HATCH 2 DOCKET 50-366 LER 83-149
SECONDARY CONTAINMENT INTEGRITY TWICE LOST.
EVENT DATE: 122983 REPORT DATE: 012784 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS,PRIMARY CONTAIN

(NSIC 188920) DURING TRANSPORT OF AN INJURED PERSON FROM THE RADWASTE BUILDING TO THE CONTROL BUILDING VIA THE UNIT 2 REACTOR BUILDING, TWO INSTANCES OCCURRED IN WHICH BOTH DOORS OF AN AIRLOCK FOR THE REACTOR BUILDING WERE OPENED. THUS, SECONDARY CONTAINMENT INTEGRITY WAS TECHNICALLY INOPERABLE WHICH IS CONTRARY TO THE REQUIREMENTS OF TECH SPECS SECTION 3.6.5.1. PLANT OPERATION WAS NOT AFFECTED BY THIS EVENT. THIS EVENT IS THE RESULT OF THE AIRLOCK DOORS' BEING OPENED BY PLANT PERSONNEL DUE TO THE PERSONNEL'S CONCERN FOR TRANSPORTING THE INJURED PERSON IN AN EXPEDIENT MANNER. THE AIRLOCKS' DOORS WERE RECLOSED IMMEDIATELY AFTER THE INJURED PERSON WAS CARRIED THROUGH.

[243] INDIAN POINT 2 DOCKET 50-247 LER 83-042
HEAT TRACE CIRCUIT HAS OPEN CIRCUIT.
EVENT DATE: 112383 REPORT DATE: 122383 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: HEATERS,ELECTRIC
VENDOR: CHROMALOX ELECTRIC HEAT

(NSIC 188892) DURING NORMAL OPERATION, ELECTRIC HEAT TRACE CIRCUIT 46B WAS FOUND TO HAVE AN INOPERABLE PRIMARY CIRCUIT. THIS CIRCUIT HEAT TRACES THE SAFETY INJECTION PUMP SUCTION HEADER FROM THE RHR HEAT EXCHANGER. THE BACK-UP CHANNEL FOR HEAT TRACING OF THE AFFECTED LINE WAS OPERABLE. THE PRIMARY CIRCUIT WAS REPAIRED AND RETURNED TO SERVICE WITHIN THE TIME LIMITS OF TECH SPECS 3.3.A.2. THE PRIMARY HEATING ELEMENT (STRIP HEATER) WAS FOUND TO HAVE AN OPEN CIRCUIT AND WAS REPLACED. THE CIRCUIT WAS RETURNED TO SERVICE. CHROMALOX HEATING ELEMENT MODEL PT-512. PREVIOUS EVENTS 74-26, 75-17, 79-14, 82-15, 83-08.

[244] INDIAN POINT 2 DOCKET 50-247 LER 83-044
ACOUSTIC MONITOR DRIFTS OUT OF CALIBRATION.
EVENT DATE: 113083 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188893) DURING NORMAL OPERATION, THE ACOUSTIC MONITOR CALIBRATION (FC-R27) WAS PERFORMED. THE RESULTS FOUND THE OPERABILITY CRITERIA FOR THE ACOUSTIC VALVE FLOW MONITORING SYSTEM FOR THE PRESSURIZER CODE SAFETY VALVES WERE NOT MET (TECH SPEC TABLE 3.5). THE ALARM ACTUATION POINT AND THE VALUES CALCULATED FOR GAIN, HAD DRIFTED OUTSIDE THE REQUIRED TOLERANCES. DURING THE CALIBRATION, ADJUSTMENTS WERE MADE TO THE APPROPRIATE POTENTIOMETERS TO ATTAIN THE DESIRED LIGHT INDICATION VALUE AND BIAS (FINE GAIN) TO BRING THESE VALUES WITHIN THE SPECIFIED TOLERANCES. THE VALVE FLOW MONITOR IS A TECH MODEL 911.

[245] INDIAN POINT 2 DOCKET 50-247 LER 83-045
SEAL ON INNER DOOR NOT FULLY SEATED.
EVENT DATE: 120883 REPORT DATE: 010784 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 188671) DURING NORMAL OPERATION, AND WHILE PERSONNEL WERE IN THE PROCESS OF ENTERING THE VAPOR CONTAINMENT TO PERFORM THE BIWEEKLY INSPECTION, A RUSH OF AIR WAS HEARD WHEN OPENING THE OUTER DOOR. ALTHOUGH THIS IS NORMALLY EXPERIENCED WHILE EQUALIZING THE AIRLOCK PRESSURE AND THE OUTSIDE PRESSURE, THE RUSH OF AIR IN THIS CASE DID NOT CEASE, INDICATING THAT THE SEAL ON THE INNER DOOR WAS NOT FULLY SEATED. THE MECHANICAL INTERLOCK, WHICH PROHIBITS BOTH OF THE PERSONNEL AIRLOCKS FROM OPENING SIMULTANEOUSLY, WAS EXAMINED FOR MALFUNCTION. THE AIRLOCK DOORS WERE CYCLED SEVERAL TIMES IN AN EFFORT TO IDENTIFY THE MALFUNCTION; HOWEVER, THE AIRLOCK DOORS OPERATED PROPERLY EACH TIME. SUBSEQUENTLY THE AIRLOCK DOORS HAVE BEEN CHECKED DURING ROUTINE CONTAINMENT ENTRIES WITHOUT A RECURRENCE OF THE PROBLEM. NO FURTHER CORRECTIVE ACTION IS CONTEMPLATED.

[246] INDIAN POINT 2 DOCKET 50-247 LER 83-046
REDUCTION IN OVERPOWER AND OVERTEMPERATURE DELTA TEMPERATURE SETPOINT.
EVENT DATE: 121783 REPORT DATE: 011684 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 188894) DURING NORMAL OPERATION LOOP #1 T AVERAGE SPIKED HIGH CAUSING A REDUCTION IN THE OVERPOWER AND OVER TEMPERATURE DELTA TEMPERATURE SETPOINT, WHICH RESULTED IN A TURBINE RUN BACK. DURING THE UP SCALE SPIKE, THE LOW TAVG. INPUT TO THE SAFETY INJECTION CIRCUIT WAS LESS CONSERVATIVE THAN SPECIFIED BY TECH SPEC (ITEM 1-E TABLE 3.3). SIMILAR EVENT LER 81-26. VOLTAGE TO CURRENT CONVERTER FOR

LOOPS #1 TM 412B (FOXBORO MODEL 66R) WAS FOUND DEFECTIVE. THE EQUIPMENT WAS REPAIRED, TESTED SATISFACTORILY AND RETURNED TO SERVICE.

[247] INDIAN POINT 2 DOCKET 50-247 LER 83-047
SOLENOID OPERATED VALVE FAILS.
EVENT DATE: 121983 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: ASCO VALVES

(NSIC 188727) DURING NORMAL OPERATION SOLENOID OPERATED VALVE (SOV 1280) WHICH PROVIDES WELD CHANNEL AND CONTAINMENT PENETRATION PRESSURIZATION SYSTEM (WCCPPS) PRESSURE BETWEEN THE FIRST AND SECOND PRESSURE RELIEF VALVES, PCV 1190 AND 1191, DID NOT ISOLATE WCCPPS DURING A CONTAINMENT RELIEF. (TECH SPEC 3.3.D.2.A). WCCPPS WAS MANUALLY ISOLATED FOR THE PRESSURE RELIEF. THE SOLENOID VALVE COIL WAS REPLACED, AND THE VALVE (SOV) WAS TESTED AND RETURNED TO SERVICE WITHIN THE TIME PERMITTED. SOV 1280 IS A THREE WAY 120V AC, NORMALLY OPEN, ASCO SOLENOID VALVE CAT. NO. WP8316A37.

[248] INDIAN POINT 2 DOCKET 50-247 LER 83-048
ROD POSITION INDICATORS LOSE POWER.
EVENT DATE: 122083 REPORT DATE: 011984 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188895) DURING FULL POWER OPERATION WHILE PERFORMING SURVEILLANCE TEST PTM 46, THE NORMAL SUPPLY BREAKER TO 480 V BUS 2A WAS OPENED. THE RESULTING POWER LOSS TO THE RPI SYSTEM GENERATED A ROD DROP TURBINE RUNBACK. THE REMAINING THREE 480 V BUSSES WERE NOT AFFECTED AND REMAINED ENERGIZED. DURING THE BRIEF POWER INTERRUPTION THE AUXILIARY ELECTRIC SYSTEM WAS LESS CONSERVATIVE THAN SPECIFIED IN TECH SPEC (3.7.A.4). INADVERTENT OPERATION OF THE NORMAL SUPPLY BREAKER CAUSED A MOMENTARY POWER LOSS TO BUS SECTION 2A AND RESULTED IN A TURBINE RUNBACK AND LOAD REDUCTION OF APPROXIMATELY 240 MWE. POWER WAS IMMEDIATELY RESTORED TO THE AFFECTED BUS SECTION AND FULL POWER OPERATION WAS RESUMED.

[249] INDIAN POINT 2 DOCKET 50-247 LER 83-049
SETPOINT DRIFT CAUSES BISTABLE TO FAIL HIGH.
EVENT DATE: 122183 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 188728) DURING NORMAL OPERATION WHILE PERFORMING PERIODIC SURVEILLANCE TEST PRM-12 STEAM GENERATOR 24 HIGH STEAM FLOW S.I. BISTABLE FC 449B SETPOINT WAS FOUND HIGHER THAN REQUIRED BY TABLE 3.1 ITEM 5 OF TECH SPEC. THE EFFECTIVENESS OF THE PROTECTION SYSTEM WAS PRESERVED SINCE THE REQUIREMENT OF TECH SPEC TABLE 3.3 ITEM 1E WAS MET. SIMILAR EVENT LER 83-020. THE CONDITION WAS CAUSED BY SETPOINT DRIFT IN BISTABLE FC 449B A FOXBORO MODEL M63. THE SETPOINT WAS ADJUSTED, THE BISTABLE TESTED SATISFACTORILY AND RETURNED TO SERVICE.

[250] INDIAN POINT 3 DOCKET 50-286 LER 83-007
TWENTY-SEVEN SNUBBERS FOUND FAILED.
EVENT DATE: 120583 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: OTHER SYSTEMS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: BERGEN-PATTERSON PIPE SUPPORT CORPORATION

(NSIC 188751) WHILE AT COLD SHUTDOWN, DURING PERFORMANCE OF SURVEILLANCE TEST 3PT-R38 (SEISMIC SNUBBERS) SEVERAL SNUBBERS DID NOT MEET ACCEPTABILITY CRITERIA. AS OF JANUARY 4, 1984, A TOTAL OF TWENTY-SEVEN SNUBBERS WERE FOUND TO HAVE FAILED

OPERABILITY CRITERIA. THESE SNUBBERS ARE LISTED IN TABLE 3.13-1 OF THE TECH SPECS. A SIMILAR EVENT OCCURRED ON NOVEMBER 23, 1979 (LER 79-018/03L-0). THE DEFECTIVE BERGEN-PATTERSON SNUBBERS ARE TO BE REPAIRED OR REPLACED AS APPROPRIATE IN ACCORDANCE WITH THE REQUIREMENTS OF TECH SPEC 4.11.4. UPON COMPLETION OF SURVEILLANCE TEST 3PT-R38, A COMPREHENSIVE UPDATE TO THIS LER OUTLINING SNUBBER FAILURES AND CORRECTIVE ACTIONS TAKEN WILL BE SUBMITTED.

[251] KEWAUNEE DOCKET 50-305 LER 83-027 REV 1
UPDATE ON COMPONENT COOLING WATER HEAT EXCHANGER REMOVED FROM SERVICE.
EVENT DATE: 102683 REPORT DATE: 120183 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PIPES,FITTINGS
VENDOR: PIONEER SERVICE & ENGINEERING COMPANY

(NSIC 188549) DURING FULL POWER OPERATION, THE 1A COMPONENT COOLING WATER (CCW) HEAT EXCHANGER WAS REMOVED FROM SERVICE TO REPAIR A LEAK ON ITS SERVICE WATER TEMPERATURE CONTROLLED BYPASS LINE. WITH THE 1A HEAT EXCHANGER OUT OF SERVICE THE PLANT WAS IN AN LCO PER TECH SPEC 3.3.C.2.B WHICH ALLOWS ONE CCW HEAT EXCHANGER TO BE OUT OF SERVICE FOR 48 HOURS AND IS REPORTABLE PER TECH SPEC 6.9.2.B.(2). THE 1B CCW HEAT EXCHANGER WAS IN SERVICE. THE LEAK WAS CAUSED BY SAND ERROSION DUE TO THE WATER TURBULENCE CREATED ON THE DISCHARGE SIDE OF THE THROTTLED TEMPERATURE CONTROLLED BYPASS VALVE, SW-1306A. THE LINE WAS PATCH WELDED AND TESTED UNDER OPERATING CONDITIONS. THE COMPONENT COOLING WATER HEAT EXCHANGER WAS RETURNED TO SERVICE WITHIN TECH SPEC TIME LIMITS. AN OEA (OPERATIONAL EXPERIENCE ASSESSMENT) HAS BEEN ISSUED TO INVESTIGATE POSSIBLE FUTURE CORRECTIVE ACTION.

[252] KEWAUNEE DOCKET 50-305 LER 83-033
MOTOR OPERATED ISOLATION VALVE FAILS TO OPEN.
EVENT DATE: 120583 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188402) DURING FULL POWER OPERATION, THE MOTOR OPERATED ISOLATION VALVE SI-2A IN THE BORIC ACID SUCTION LINE TO THE SI PUMPS FAILED TO OPEN AS REQUIRED DURING ITS MONTHLY SURVEILLANCE TEST. HOWEVER, IT COULD BE OPENED MANUALLY AND CYCLED CLOSED FROM THE CONTROL ROOM. THIS PLACED THE PLANT IN AN LCO PER TECH SPEC 3.3.A.2.D WHICH ALLOWS A VALVE REQUIRED TO FUNCTION DURING ACCIDENT CONDITIONS TO BE OUT OF SERVICE FOR 24 HOURS AND IS REPORTABLE PER TECH SPEC 6.9.2.B.(2). THE REDUNDANT VALVE, SI-2B, WAS DEMONSTRATED OPERABLE. FAILURE OF THE VALVE TO OPEN WAS DUE TO A BROKEN FINGER ON THE OPEN CONTACT IN THE AUXILIARY CONTACT BLOCK. THE AUXILIARY CONTACT BLOCK WAS REPLACED AND THE VALVE TESTED SATISFACTORILY. A REVIEW OF PAST WORK REQUESTS FOR SI-2A AND SI-2B SHOWED THAT THIS IS THE FIRST TIME A CONTACT HAS BROKEN. SI-2A IS CYCLED MONTHLY AND RECEIVES A BREAKER INSPECTION ANNUALLY, HENCE, NO FURTHER ACTION IS REQUIRED.

[253] KEWAUNEE DOCKET 50-305 LER 83-034
ONE CONTAINMENT FAN COIL UNIT REMOVED FROM SERVICE TO REPAIR SERVICE WATER LEAKS.
EVENT DATE: 120683 REPORT DATE: 010584 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: HEAT EXCHANGERS
VENDOR: AMERICAN AIR FILTER CO., INC.

(NSIC 188328) DURING FULL POWER OPERATION, THE 1D CONTAINMENT FAN COIL UNIT WAS REMOVED FROM SERVICE TO REPAIR SERVICE WATER LEAKS. THIS PLACED THE PLANT IN AN LCO PER TECH SPEC 3.3.B.2.A WHICH ALLOWS ONE FAN COIL UNIT TO BE OUT OF SERVICE FOR UP TO SEVEN DAYS AND IS REPORTABLE PER TECH SPEC 6.9.2.B(2) AS OPERATION IN A DEGRADED MODE PERMITTED BY AN LCO. THE OTHER THREE FAN COIL UNITS AND THE CONTAINMENT SPRAY PUMP WERE IN SERVICE. THE LEAKS WERE CAUSED BY SAND AND WATER EROSION OF THE RETURN BENDS IN THE SERVICE WATER COOLING COILS. THE AFFECTED

BENDS WERE CUT OUT AND REPLACED, THE COOLING COILS PASSED AN INSERVICE HYDROSTATIC TEST AND THE FAN COIL UNIT WAS RETURNED TO SERVICE WITHIN TECH SPEC TIME LIMITS. AN INVESTIGATION HAS BEEN INITIATED TO STUDY EROSION PROBLEMS IN SERVICE WATER HEAT EXCHANGERS. NO FURTHER UPDATE WILL BE MADE TO THIS LER.

[254] KEWAUNEE DOCKET 50-305 LER 83-036
SBV RECIRCULATION FAN FAILS TO START.
EVENT DATE: 121383 REPORT DATE: 011284 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: MOTORS
VENDOR: JOY MANUFACTURING CO.

(NSIC 188404) WHILE AT FULL POWER OPERATION THE 1A SBV RECIRC. FAN FAILED TO START DURING ITS MONTHLY SURVEILLANCE TEST. THE SP WAS PERFORMED FOLLOWING A TEST ON THE CHARCOAL FILTER HEAT DETECTORS AND DELUGE SYSTEM. FAILURE OF THE RECIRC. FAN TO START WAS DUE TO A PROCEDURAL ERROR, HENCE, THIS EVENT IS BEING REPORTED PER TECH SPEC 6.9.2.B(3) AS AN OBSERVED INADEQUACY IN PROCEDURAL CONTROLS WHICH THREATENS TO CAUSE A REDUCTION IN THE DEGREE OF REDUNDANCY OF AN ESF SYSTEM. THE 1B TRAIN WAS TESTED SATISFACTORILY PRIOR TO TESTING THE 1A TRAIN. THE RECIRC. FAN FAILED TO START BECAUSE THE DELUGE SYSTEM WAS NOT RESET FOLLOWING THE CHARCOAL FILTER HEAT DETECTOR TEST. THE DELUGE SYSTEM WAS RESET AND THE FAN TESTED SATISFACTORILY. THE CHARCOAL FILTER HEAT DETECTOR TEST PROCEDURE IS BEING REVISED TO ENSURE THAT THE DELUGE SYSTEM IS RESET. NO FURTHER ACTION IS REQUIRED.

[255] KEWAUNEE DOCKET 50-305 LER 83-037
SERVICE WATER PUMP TAKEN OUT OF SERVICE.
EVENT DATE: 121383 REPORT DATE: 011284 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: FILTERS
VENDOR: KINNEY, S.P. ENGINEERING, INC.

(NSIC 188405) DURING FULL POWER OPERATION THE 1A2 SERVICE WATER PUMP WAS TAKEN OUT OF SERVICE TO PERFORM MAINTENANCE ON ITS SERVICE WATER STRAINER. THIS PLACED THE PLANT IN AN LCO PER TECH SPEC 3.3.D.2.A AND IS REPORTABLE PER TECH SPEC 6.9.2.B(2) AS OPERATION IN A DEGRADED MODE PERMITTED BY AN LCO. THE OTHER THREE SERVICE WATER PUMPS WERE IN SERVICE. THE 1A2 SERVICE WATER PUMP WAS TAKEN OUT OF SERVICE DUE TO A PACKING LEAK ON THE SERVICE WATER STRAINER. THE STRAINER WAS REPACKED, THE PUMP TESTED AND PLACED BACK IN SERVICE WITHIN TECH SPEC LIMITS. NO FURTHER ACTION IS REQUIRED.

[256] KEWAUNEE DOCKET 50-305 LER 83-038
INADVERTENT START OF AFW PUMP.
EVENT DATE: 122983 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: PUMPS
VENDOR: PACIFIC PUMPS

(NSIC 188752) WHILE AT FULL POWER OPERATION, A MAINTENANCE PROCEDURE TO REPLACE A RELAY IN RPS RACK 133 CAUSED AN INADVERTENT START OF THE TURBINE DRIVEN AUXILIARY FEEDWATER (TDAFW) PUMP. THE MAINTENANCE PROCEDURE DIRECTED LIFTING LEADS IN A SEQUENCE SUCH THAT THE TDAFW PUMP RECEIVED A BUS 1&2 UNDERVOLTAGE SIGNAL AND STARTED. THE PUMP WAS STOPPED AND TAGGED OUT OF SERVICE TO ALLOW COMPLETION OF THE WORK. THIS PLACED THE PLANT IN AN LCO PER TECH SPEC 3.4.C AND IS REPORTABLE PER TECH SPEC 6.9.2.B(2). TWO MOTOR DRIVEN AFW PUMPS WERE IN SERVICE AND THE TDAFW PUMP WAS AVAILABLE IN MANUAL CONTROL. MAINTENANCE WAS REQUIRED TO REPLACE REACTOR PROTECTION LOGIC RELAY 27CB2XA WHICH WAS EXHIBITING SIGNS OF AGE RELATED DEGRADATION. THE RELAY WAS REPLACED AND THE PUMP PLACED BACK IN SERVICE WITHIN TECH SPEC TIME LIMITS. SINCE THE PROCEDURE WAS GENERATED AS A RESULT OF THIS WORK REQUEST AND WILL NOT BE USED IN THE FUTURE, NO PROCEDURE REVISION IS REQUIRED.

[257] LA SALLE 1 DOCKET 50-373 LER 83-017
LAKE BLOWDOWN FLOW INSTRUMENT PROBE AIRBOUND.
EVENT DATE: 022283 REPORT DATE: 032383 NSSS: GE TYPE: BWR
SYSTEM: OTHER AUX WATER SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: DIETERICH STANDARD CORP.

(NSIC 188879) TECH SPEC 3.3.7.10 REQUIRES THE LAKE BLOWDOWN FLOW INSTRUMENTATION TO BE OPERABLE. ON FEBRUARY 22, 1983, THE LAKE BLOWDOWN FLOW RECORDER WAS GIVING INCORRECT READINGS. FLOW ESTIMATES WERE TAKEN EVERY 4 HOURS WHILE DISCHARGING PER TECH SPEC 3.3.7.10. SAFE OPERATION OF THE PLANT WAS MAINTAINED AT ALL TIMES. THE LAKE BLOWDOWN FLOW INSTRUMENT PROBE WAS FOUND TO BE AIRBOUND PREVENTING THE CORRECT SIGNAL FROM BEING TRANSMITTED. MODIFICATION 1-0-82-125 WAS WRITTEN TO MODIFY THE EXISTING SYSTEM. A CHANGE TO TECH SPEC 3.3.7.10 HAS BEEN PROPOSED.

[258] LA SALLE 1 DOCKET 50-373 LER 83-032
TURBINE STOP VALVE POSITION SWITCH OUT OF SPECIFICATION.
EVENT DATE: 033183 REPORT DATE: 042783 NSSS: GE TYPE: BWR
SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: NAMCO CONTROLS

(NSIC 188709) ON MAR. 31, 1983, WHILE PERFORMING L.S.T. 83-37, THE #4 TURBINE STOP VALVE LIMIT SWITCH 1C71-N006G FOR THE REACTOR PROTECTION SYSTEM WAS FOUND OUT OF SPECIFICATION. TECH SPECS TABLE 2.2.1-1 TRIP SETPOINT OF LESS THAN OR EQUAL TO 5% CLOSED WAS EXCEEDED. THERE ARE 4 TURBINE STOP VALVES, EACH WITH ASSOCIATED LIMIT SWITCHES. ONLY 3 OUT OF 4 TURBINE STOP VALVES BEING SENSED LESS THAN OR EQUAL TO 5% OF FULL CLOSED ARE REQUIRED TO SCRAM THE REACTOR. THE 3 REMAINING TURBINE STOP VALVE LIMIT SWITCHES WERE IN SPECIFICATION. THE CAUSE WAS DETERMINED TO BE IMPROPER ALIGNMENT ON INITIAL INSTALLATION PREVENTING THE LIMIT SWITCH FROM ACTUATING AT THE REQUIRED TRIP SETPOINT. THE LIMIT SWITCH WAS REPOSITIONED AND A NEW ADJUSTABLE ACTUATING ARM INSTALLED TO PROVIDE FOR PROPER ACTUATING ARM TRAVEL. THE CORRECTIVE ACTION WAS PERFORMED ON THE 3 REMAINING TURBINE STOP VALVE LIMIT SWITCHES TO PREVENT FUTURE OCCURRENCES. W.R. L23708 WAS COMPLETED 4/3/83.

[259] LA SALLE 1 DOCKET 50-373 LER 83-051
CHLORINE DETECTOR FAILS.
EVENT DATE: 051383 REPORT DATE: 061383 NSSS: GE TYPE: BWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: ELECTRICAL CONDUCTORS

(NSIC 188379) ON MAY 15, 1983 AT 0500 HOURS WITH UNIT 1 IN COLD SHUTDOWN, THE "B" VC CHLORINE DETECTOR TRIPPED AND WOULD NOT RESET. ANOTHER TRAIN OF THE CONTROL ROOM HVAC SYSTEM WAS AVAILABLE AND OPERATING PROPERLY. THE CAUSE OF THIS OCCURRENCE WAS A LOOSE GROUND WIRE ON THE CIRCUIT BOARD. THE LOOSE GROUND WIRE WAS PROMPTLY TIGHTENED UNDER WORK REQUEST NUMBER L24705 AND PRESENTLY FUNCTIONS PROPERLY.

[260] LA SALLE 1 DOCKET 50-373 LER 83-105
REACTOR VESSEL HAS LOW WATER LEVEL.
EVENT DATE: 091483 REPORT DATE: 092783 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS

(NSIC 188880) A VALVE LINEUP WAS ESTABLISHED DURING THE PERFORMANCE OF LES-RH-01, RHR LOGIC TESTING, WHICH ALLOWED 50" OF VESSEL INVENTORY TO DRAIN VIA THE DRYWELL AND SUPPRESSION POOL SPRAY HEADERS. THE OPERATOR QUICKLY SECURED THE LINEUP AND STOPPED THE INVENTORY LOSS, WATER LEVEL DECREASED FROM +50" TO 0" UPSET RANGE. THE UNIT WAS IN COLD SHUTDOWN WITH HPCS AND LPCS AVAILABLE FOR EMERGENCY INJECTION. THE "B" LPCI INJECTION TESTABLE CHECK VALVE WAS STUCK OPEN. IT HAD BEEN IMPROPERLY TIMED FOLLOWING MAINTENANCE EARLIER IN THIS OUTAGE AND INHIBITED

VALVE CLOSURE. IT WAS ALSO FOUND THAT THE PACKING GLAND WAS ADJUSTED TOO TIGHTLY TO PERMIT FULL CLOSURE. ALL ECCS TESTABLE CHECK VALVES WERE INSPECTED FOR PROPER TIMING AND THEIR MAINTENANCE HISTORY WAS REVIEWED FOR WORK PERFORMED TO THE PACKING GLAND WITHOUT A SUBSEQUENT LOCAL LEAK RATE TEST (LLRT). ALL THE TESTABLE CHECKS WERE FOUND PROPERLY TIMED AND 2 TESTABLE CHECK VALVES REQUIRED ON LLRT TO VERIFY PACKING GLAND WORK. ALSO AN LLRT WAS PERFORMED ON THE TESTABLE CHECK VALVE THAT WAS STUCK OPEN - ALL LLRT'S WERE SUCCESSFUL. PROC. LES-RH-01 WILL BE CHANGED TO REQUIRE THE MANUAL INJECTION STOP VALVE CLOSED ON EACH RHR LOOP IN TEST AND PROC. LMP-TC-01 WILL ADD A REQUIREMENT TO LLRT THE VALVE IF PACKING GLAND WORK IS PERFORMED.

[261] LA SALLE 1 DOCKET 50-373 LER 83-120
WATER HAMMER DAMAGES 8 RHR PIPE SNUBBERS.
EVENT DATE: 101083 REPORT DATE: 110183 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: PACIFIC SCIENTIFIC COMPANY

(NSIC 187230) STRUT 1RH40-1562X ON LINE 1RH40AA-12" WAS FOUND BROKEN. FURTHER INSPECTION OF LINE REVEALED 8 DAMAGED SNUBBERS. TWO SETS OF ANCHOR BOLTS AND VARIOUS PIPE CLAMPS WERE ALSO FOUND LOOSENED. PIPING WAS REVIEWED BY S&L AND IT WAS DETERMINED THAT NO ADVERSE STRESSES OCCURRED DUE TO SELF WEIGHT OR DUE TO LOCKED UP SNUBBERS. PIPING WALKDOWN CONFIRMED NO ABNORMAL CONDITIONS EXISTED. NO SRV OPENING OR SEISMIC EVENT OCCURRED. PIPING WAS SUBJECTED TO HYDRAULIC TRANSIENT DURING OPERATION. A STEAM BUBBLE MAY HAVE FORMED WHEN SHUTDOWN COOLING WAS SECURED AND PARTIALLY DE-PRESSURIZED WHILE HOT. DAMAGED RESTRAINTS REPLACED UNDER W.R. L28191. NO FURTHER ACTION WAS NECESSARY PER S&L CALCULATIONS #EMD 045293. OPERATING PROCEDURE WILL BE REVISED UNDER AIR 1-1-83-67100 TO ENSURE PROPER CAUTION IS TAKEN WHEN FILLING AND VENTING SYSTEM.

[262] LA SALLE 1 DOCKET 50-373 LER 83-151
FUNCTIONAL TESTS NOT PERFORMED.
EVENT DATE: 112883 REPORT DATE: 122383 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188710) LIS-NR-02 FUNCTIONAL TEST REQUIRED FOR OPERATING CONDITIONS 2, 3, 4 & 5 DUE 11/25/83 WAS NOT PERFORMED UNTIL 11/28/83. WHEN IT WAS PERFORMED, NO PROBLEMS WERE NOTED AND SAFE OPERATION OF THE PLANT WAS MAINTAINED AT ALL TIMES. PERSONNEL ERROR WAS THE CAUSE AS THE LIS WAS OVERLOOKED DURING A HECTIC PERIOD PRECEDING A WEEKEND. ADMINISTRATIVE CHANCES WERE MADE WITHIN THE INSTRUMENT DEPARTMENT TO MAKE STRONGER EMPHASIS ON THE SURVEILLANCE PROGRAM AND IT'S TIMELY DEPLOYMENT.

[263] LA SALLE 1 DOCKET 50-373 LER 83-150
DETECTOR NOT FULL IN FUNCTIONAL TEST NOT PERFORMED.
EVENT DATE: 121283 REPORT DATE: 122383 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188255) TECH SPEC REQUIREMENTS OF TABLE 4.3.6-1 TRIP FUNCTION 3.A AND 4.A FOR "DETECTOR NOT FULL IN" FUNCTIONAL TEST WAS NOT DONE. NO SITUATIONS COULD BE RECALLED WHICH WOULD HAVE REQUIRED UTILIZATIONS OF THE ROD BLOCK CAPABILITIES OF SRM'S AND IRM'S. SAFE OPERATIONS OF THE PLANT WERE MAINTAINED AT ALL TIMES. THE TECHNIQUE USED BY THE INSTRUMENT DEPARTMENT TO IDENTIFY OUR REQUIREMENTS WAS FOUND TO BE FAULTY. CORRECTIVE ACTION WAS TO REVIEW THE TECH SPECS FOR OTHER ERRORS AND HAVE OPERATIONS WRITE NEW PROCEDURES TO SATISFY THE TECH SPEC REQUIREMENTS.

[264] LA SALLE 1 DOCKET 50-373 LER 83-155
CHANGE OF THERMAL OVERLOAD BYPASS LOGIC ON RHR MINIMUM FLOW BYPASS VALVES.
EVENT DATE: 122983 REPORT DATE: 012384 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: RELAYS

(NSIC 188881) ON SEPT. 30, 1983 AIR #01-83-67085 WAS INITIATED AT LA SALLE STATION AND ASSIGNED TO SNED TO "PROVIDE JUSTIFICATION FOR NO THERMAL OVERLOAD BYPASS ON RHR MINIMUM FLOW BYPASS VALVES, 1E12-F064A/B/C IN THE CLOSING DIRECTION." ON DEC. 29, 1983 LA SALLE STATION WAS TOLD BY SARGENT & LUNDY THAT AN ENGINEERING CHANGE NOTICE WAS FORTHCOMING TO CHANGE THE DESIGN. THE LSCS FSAR TABLE 6.3-5 STATES THAT WITH THE MIN. FLOW BYPASS VALVE OPEN ECCS FLOW WOULD BE DECREASED BY ONLY 10%. THE THERMAL OVERLOAD BYPASS CIRCUIT ON 1E12-F064A/B/C WAS ORIGINALLY DESIGNED TO BYPASS WHEN THE VALVE AUTO-OPENED ON A LOW FLOW SIGNAL TO PROTECT THE RHR PUMP. A RE-EVALUATION OF THE DESIGN DETERMINED THAT THE OVERLOAD BE BYPASSED WHEN AN ECCS SIGNAL WAS PRESENT TO ENSURE MAX. RHR FLOW TO THE REACTOR VESSEL. THE MODIFICATION WAS IMMEDIATELY IMPLEMENTED AND COMPLETED ON 12/30/83.

[265] LA SALLE 1 DOCKET 50-373 LER 83-156
REACTOR PROTECTION LIMIT SWITCH HAS OUT OF TOLERANCE SETPOINT.
EVENT DATE: 122983 REPORT DATE: 012784 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: NAMCO CONTROLS

(NSIC 188924) ON 12/29/83, DURING LES-MS-101, MSIV 1B21-F022A REACTOR PROTECTION LIMIT SWITCH #4 SETPOINT WAS FOUND TO EXCEED TECH SPEC 2.2.1 ALLOWABLE VALUE OF EQUAL TO OR LESS THAN 12% CLOSURE BY 0.7%. REDUNDANT LIMIT SWITCH #4 MSIV 1B21-F028A WAS OPERABLE AND WITHIN THE TECH SPEC VALUE. ALL OTHER MSIV RP TRIP FUNCTIONS WERE FOUND WITHIN THE TECH SPEC VALUE. SAFE PLANT OPERATION WAS MAINTAINED. CAUSE FOR THE OUT OF TOLERANCE SETPOINT COULD NOT BE DETERMINED. ALL SETSCREWS AND MOUNTING BRACKETS WERE FOUND TO BE TIGHT. THE LIMIT SWITCH WAS IMMEDIATELY READJUSTED ON 12/29/83 PER THE LES-MS-101 PROCEDURE.

[266] LACROSSE DOCKET 50-409 LER 83-008 REV 1
UPDATE ON CONTAINMENT ISOLATION CHECK VALVES LEAK.
EVENT DATE: 111083 REPORT DATE: 012784 NSSS: AC TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES
VENDOR: HANCOCK CO.
NUPRO COMPANY
POWELL, WILLIAM COMPANY, THE

(NSIC 188719) DURING TYPE A INTEGRATED LEAK RATE TEST, THE ALTERNATE CORE SPRAY (ACS) CHECK VALVES AND REACTOR COOLANT POST-ACCIDENT SAMPLING SYSTEM (PASS) DISCHARGE ISOLATION CHECK VALVE EXHIBITED LEAKAGE ABOVE ACCEPTANCE CRITERIA FOR INDIVIDUAL VALVES. SEAL INJECT MAKEUP CHECK VALVES ALSO EXHIBITED LEAKAGE DURING TYPE A TEST AND DID NOT PASS SUBSEQUENT TYPE C TEST. TYPE A TEST WAS ACCEPTABLE. FIRST TIME ACS CHECK VALVES OR PASS CHECK VALVE EXHIBITED LEAKAGE. SIMILAR OCCURRENCES FOR SEAL INJECT: 79-03, 78-02. DURING LAST REFUELING OUTAGE, NEW IN-SERVICE TESTING PROGRAM REQUIRED ACS VALVES TO BE DISASSEMBLED FOR FIRST TIME SINCE PLANT CONSTRUCTION. PROBABLY LED TO LEAKAGE. VALVES WERE RELAPPED. CAUSE OF FAILURE OF PASS CHECK VALVE WAS DIRT. VALVE WAS CLEANED. SEAL INJECT MAKEUP VALVES WERE LAPPED. RETESTS EXHIBITED ZERO LEAKAGE.

[267] LACROSSE DOCKET 50-409 LER 83-010
PERSONNEL AIRLOCK INNER DOOR EQUALIZING VALVE LEAKS AIR DURING LEAKAGE TEST.
EVENT DATE: 120583 REPORT DATE: 010384 NSSS: AC TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES
VENDOR: JAMES BURY CORP.

(NSIC 188360) DURING REFUELING OUTAGE, PERSONNEL AIRLOCK INNER DOOR EQUALIZING VALVE LEAKED AIR DURING TYPE B LEAKAGE TEST. INTEGRITY OF OUTER DOOR WAS SATISFACTORY. SIMILAR OCCURRENCES: RO 83-05, 82-03, 78-13, 77-02, AND 76-07. TAPE WAS FOUND IN EQUALIZING VALVE. DETERMINED TAPE WAS FROM FILTER TAPED TO END OF EQUALIZING LINE. PATHWAY FOR BLOWDOWN FOLLOWING INTEGRATED LEAK RATE TEST ON 11-18-83 WAS THROUGH EQUALIZING VALVE. POSTULATED AIR FLOW CARRIED FILTER THROUGH VALVE. REMOVED TAPE, REPLACED VALVE BALL AND SEATS. RETEST SATISFACTORY.

[268] LACROSSE DOCKET 50-409 LER 83-013
HIGH PRESSURE SERVICE WATER DIESEL STARTER FAILS.
EVENT DATE: 121283 REPORT DATE: 010684 NSSS: AC TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

(NSIC 188526) DURING A REFUELING OUTAGE, ONE OF TWO STARTER ENGAGEMENT SOLENOIDS ON THE 1A HIGH PRESSURE SERVICE WATER (HPSW) DIESEL FAILED IN A MODE WHICH CAUSED THE STARTER TO CONTINUE CRANKING WHEN THE DIESEL WAS TURNED OFF. THE 1B HPSW DIESEL WAS OPERABLE. CONTACTS ON SOLENOID HAD FUSED TOGETHER, KEEPING STARTER CIRCUIT ENERGIZED. FAILED STARTER ENGAGEMENT SOLENOID REPLACED. OTHER SOLENOID ON 1A HPSW DIESEL AND BOTH SOLENOIDS ON 1B HPSW DIESEL INSPECTED AND FOUND IN GOOD CONDITION.

[269] MAINE YANKEE DOCKET 50-309 LER 82-035 REV 3
UPDATE ON SETPOINT DRIFT OF RWST LEVEL SWITCHES.
EVENT DATE: 100382 REPORT DATE: 011684 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: UNITED ELECTRIC CONTROLS COMPANY

(NSIC 188832) WHILE PERFORMING SURVEILLANCE TESTING OF THE RECIRCULATION ACTUATION RWST LEVEL SWITCHES, SEVERAL SWITCHES WERE FOUND TO BE OUT OF TOLERANCE. ANALYSIS OF THE AS FOUND SWITCH SETTINGS SHOWED THAT AT LEAST 140,000 GAL WOULD HAVE BEEN TRANSFERRED FROM THE RWST BEFORE AUTO RAS. THE TECH SPEC SETPOINT IS BASED UPON A MINIMUM INJECTION OF 200,000 GAL. A REVIEW OF THE SAFETY ANALYSIS INDICATES THAT 140,000 GAL INJECTION WOULD BE ADEQUATE IN THE EVENT OF A LOCA. THE UNITED ELECTRIC MODEL J-110A-5-144 LEVEL SWITCHES WERE RECALIBRATED. SURVEILLANCE FREQUENCY OF THESE SWITCHES WAS INCREASED TO ONCE AFTER THE RWST WAS FILLED PRIOR TO START-UP AND ONCE PER WEEK THEREAFTER FOR TWO MONTHS.

[270] MAINE YANKEE DOCKET 50-309 LER 83-008
SAMPLING CONTAINMENT ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 022583 REPORT DATE: 032583 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: MASONEILAN INTERNATIONAL, INC.

(NSIC 188857) DURING ROUTINE STARTUP OPERATIONS, CIS/SIAS VALVE PS-A-8 FAILED TO CLOSE, RESULTING IN DEGRADED MODE OPERATION AS PERMITTED BY TECH SPEC 3.11.8. PS-A-8 DID NOT CLOSE DURING CYCLING DUE TO AN ADJUSTMENT TO THE VALVE PACKING MADE PRIOR TO SYSTEM HEATUP AND PACKING EXPANSION. A SIMILAR EVENT OCCURRED ON JULY 19, 1981 (81-014/01T-0). THE REDUNDANT CIS/SIAS VALVE REMAINED OPERABLE TO ENSURE CONTAINMENT ISOLATION CAPABILITY DURING THE INCIDENT. PS-A-8 FAILED BECAUSE PERSONNEL ADJUSTED PACKING TO PREVENT STEM LEAKAGE WHILE THE VALVE WAS COLD. SUBSEQUENT PACKING EXPANSION DURING SYSTEM HEATUP PREVENTED THE VALVE FROM CLOSING AFTER CYCLING OPEN. CONTAINMENT INTEGRITY WAS RE-ESTABLISHED UPSTREAM OF PS-A-8 BY MANUALLY CLOSING PS-6 AND PS-7. PS-A-8 PACKING WAS READJUSTED AND THE VALVE TESTED SATISFACTORILY WITH NO LEAKAGE. TO PREVENT FUTURE OCCURRENCE, TRAINING SCHEDULED FOR MAINTENANCE PERSONNEL WILL STRESS ACTION TO BE TAKEN FOR PACKING LEAKAGE FOLLOWING LONG TERM PLANT SHUTDOWN.

[271] MAINE YANKEE DOCKET 50-309 LER 83-028 REV 2
UPDATE ON FEEDWATER TRIP SYSTEM DESIGN DEFICIENCY.
EVENT DATE: 080283 REPORT DATE: 121983 NSSS: CE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: BATTERIES & CHARGERS

(NSIC 188550) DURING A POST IMPLEMENTATION NRC REVIEW OF A BACKFIT TO THE MAIN FEEDWATER TRIP SYSTEM, MAINE YANKEE DETERMINED THAT IN SEVERAL SPECIFIC INSTANCES THE DESIGN DID NOT MEET SINGLE FAILURE CRITERIA. THE SPECIFIC INSTANCES ARE: A. A FAILURE OF BATTERY BUS NO. 1 WOULD PREVENT THE FEEDWATER TRIP SYSTEM FROM TRIPPING MAIN FEEDWATER FLOW TO STEAM GENERATOR NO. 2. B. A FAILURE OF BATTERY BUS NO. 3 WOULD PREVENT THE FEEDWATER TRIP SYSTEM FROM TRIPPING MAIN FEEDWATER FLOW TO STEAM GENERATOR NO. 3. C. A FAILURE OF BATTERY BUS NO. 1 OR 3 WOULD PREVENT THE FEEDWATER TRIP SYSTEM FROM TRIPPING THE ELECTRIC DRIVEN AUXILIARY FEED PUMPS IF THEY WERE RUNNING. THE BACKFIT TO THE FEEDWATER TRIP SYSTEM WAS ORIGINALLY INSTALLED TO INCREASE THE RELIABILITY OF THE SYSTEM. THE BACKFIT WAS TO ELIMINATE THE POTENTIAL FOR CONTINUED FEEDING OF A STEAM LINE BREAK DUE TO A SINGLE FAILURE OF THE FEEDWATER REGULATING VALVE. THE DEFICIENCY IN THE FEEDWATER TRIP SYSTEM LOGIC RESULTED FROM ERRORS MADE DURING THE SYSTEM DESIGN. THE DESIGN CHANGE DESCRIBED IN MAINE YANKEE LETTER DATED NOV. 2, 1983 WAS IMPLEMENTED TO REMOVE THE SINGLE FAILURE VULNERABILITIES IDENTIFIED IN THE MAIN FEEDWATER TRIP SYSTEM. A COMPLETE REVIEW OF THE MAIN FEEDWATER TRIP SYSTEM WAS CONDUCTED TO ENSURE THAT NO OTHER SIMILAR DEFICIENCIES EXIST.

[272] MAINE YANKEE DOCKET 50-309 LER 83-032 REV 1
UPDATE ON TURBINE RESPONSE TO CEA DROP NOT ANALYZED.
EVENT DATE: 090983 REPORT DATE: 092383 NSSS: CE TYPE: PWR
SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: TURBINES
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188329) A REVIEW OF SAFETY ANALYSIS INPUTS REVEALED THAT TURBINE OPERATION IN THE IMPULSE IN MODE MAY RESULT IN GOVERNOR VALVE RESPONSE LESS CONSERVATIVE THAN THAT ASSUMED IN THE CEA DROP ANALYSIS. THE PRESENT ANALYSIS ASSUMES FIXED TURBINE GOVERNOR VALVE POSITION THROUGHOUT THE CEA DROP INCIDENT SEQUENCE. THIS EFFECTIVELY LIMITS THE MAXIMUM POWER DURING THE TRANSIENT TO THE INITIAL LEVEL. THE TURBINE GOVERNOR VALVES COULD OPEN IN IMPULSE IN MODE DURING A CEA DROP, POSSIBLY RESULTING IN A REACTOR POWER LEVEL HIGHER THAN ASSUMED IN THE PRESENT ANALYSIS. MAINE YANKEE OPERATES IN THE OPERATOR AUTO MODE OF TURBINE CONTROL MOST OF THE TIME; IMPULSE IN MODE IS USED ONLY BRIEFLY EACH MONTH DURING TURBINE VALVE TESTING. MAINE YANKEE HAS NEVER EXPERIENCED A DROPPED CEA WHILE IN THE IMPULSE IN MODE. ADMINISTRATIVE CONTROLS HAVE BEEN IMPLEMENTED WHICH WILL PRECLUDE ANY IMPACT ON THE CEA DROP ANALYSIS RESULTS. THE EFFECT OF THE IMPULSE IN MODE OF TURBINE CONTROL ON THE CEA DROP ANALYSIS HAS NOT PREVIOUSLY BEEN CONSIDERED. THE TURBINE GOVERNOR VALVES ARE PRESENTLY ASSUMED TO REMAIN FIXED AT A POSITION CORRESPONDING TO THE INITIAL POWER LEVEL.

[273] MAINE YANKEE DOCKET 50-309 LER 83-034 REV 1
UPDATE ON PENETRATION LEAKS.
EVENT DATE: 101483 REPORT DATE: 102883 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN
VENDOR: WOOLLEY, W. J. COMPANY

(NSIC 188858) WHILE AT STEADY-STATE FULL POWER OPERATION, MAINE YANKEE INADVERTENTLY COMPROMISED CONTAINMENT INTEGRITY SEVERAL TIMES BETWEEN OCTOBER 12 AND OCTOBER 14, 1983. TECH SPEC 3.11 REQUIRES ONE CONTAINMENT PERSONNEL HATCH DOOR CLOSED AND PROPERLY SEALED TO ENSURE CONTAINMENT INTEGRITY. ON OCTOBER 12, 1983, THE OUTER PERSONNEL HATCH DOOR FAILED A FULL HATCH LEAK RATE PRESSURIZATION SURVEILLANCE TEST. THE INNER PERSONNEL HATCH DOOR WAS SUBSEQUENTLY OPENED FOR BRIEF PERIODS DURING CONTAINMENT ENTRIES, THEREBY COMPROMISING CONTAINMENT INTEGRITY. THE FAILURE OF THE AIR LOCK TO PROPERLY SEAL WAS ATTRIBUTED TO A WORN

ANTIFRICTION RING IN THE DOOR LOCKING MECHANISM. THE GENERAL CAUSE OF THIS EVENT WAS THAT NECESSARY STEPS TO BE TAKEN IN THE EVENT OF HATCH PRESSURIZATION TEST FAILURE WERE NOT CLEARLY DEFINED.

[274] MAINE YANKEE DOCKET 50-309 LER 83-038 REV 1
UPDATE OF SINGLE FAILURE COULD CAUSE PRESSURE/TEMPERATURE LIMIT CURVES TO BE EXCEEDED.
EVENT DATE: 111983 REPORT DATE: 112883 NSSS: CE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188859) TO PROVIDE ADDITIONAL FLEXIBILITY DURING HEATUPS AND COOLDOWNS DURING CORE CYCLE 7 OPERATION, AN INTERMEDIATE SETPOINT FOR THE PRESSURIZER POWER OPERATED RELIEF VALVES (PORVS) WAS IMPLEMENTED IN AUGUST OF 1983. THIS INTERMEDIATE SETPOINT IS ESTABLISHED FOR A RELATIVELY SHORT TIME FRAME BY RESETTING THE NORMAL HIGH PRESSURE SETPOINT OF THE PORVS DURING THE PROCESS OF PLANT COOLDOWN OR HEATUP. CONCURRENT WITH THE ABOVE INTERIM ACTION, DEVELOPMENT OF A PERMANENT MODIFICATION WAS INITIATED. IN THE PROCESS OF DEVELOPING THIS NEW LTOP SYSTEM, IT WAS DETERMINED THAT OPERATING WITH THE PORVS RESET TO THE INTERMEDIATE SETPOINT DID NOT PROVIDE PROTECTION AGAINST A POSTULATED SINGLE FAILURE IN ALL CASES AS WAS ASSUMED IN THE ORIGINAL LTOP SYSTEM SAFETY ANALYSIS. ALTHOUGH SENSING AND LOGIC CIRCUITRY UTILIZED THE REACTOR PROTECTION SYSTEM (RPS) EQUIPMENT, THE ULTIMATE ACTUATION OF BOTH PORVS IS DEPENDENT UPON A SINGLE RELAY. THE SINGLE FAILURE VULNERABILITY WAS RECOGNIZED ON OCTOBER 25, 1983.

[275] MAINE YANKEE DOCKET 50-309 LER 83-047
RWST LEVEL TRANSMITTER AND LEVEL SWITCHES FOUND FROZEN.
EVENT DATE: 122083 REPORT DATE: 012084 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: UNITED ELECTRIC CONTROLS COMPANY

(NSIC 188753) WHILE THE PLANT WAS OPERATING AT FULL POWER, AN ELECTRICIAN WAS SENT TO INSPECT AN INSTRUMENTATION CABINET FOR THE REFUELING WATER STORAGE TANK (RWST) TRAIN B INSTRUMENTATION. IT WAS BELIEVED THAT TWO OF THE FOUR CABINET HEATERS WERE NOT FUNCTIONING. THE CABINET IS LOCATED OUTSIDE AND THE INSTRUMENTATION IS SUSCEPTIBLE TO THE COLD IF THE CABINET HEATERS FAIL TO FUNCTION. OUTSIDE TEMPERATURE AT THE TIME WAS SLIGHTLY LESS THAN TEN DEGREES F. INVESTIGATION REVEALED THAT THE B TRAIN LEVEL TRANSMITTER AND LEVEL SWITCHES HAD FROZEN. THE RWST LEVEL SWITCHES ACT TO PROVIDE A RECIRCULATION ACTUATION SIGNAL (RAS) WHEN THE LEVEL IN THE TANK IS APPROXIMATELY 102,000 GALLONS. LER 82-035/03X-3 DESCRIBES A SIMILAR EVENT. THE B TRAIN RWST LEVEL SWITCHES FROZE BECAUSE A MAINTENANCE WORKER LEFT THE INSTRUMENTATION CABINET DOORS OPEN IN EXTREMELY COLD WEATHER WHILE HE LEFT TO SECURE THE PARTS TO REPAIR THE CABINET HEATERS.

[276] MCGUIRE 1 DOCKET 50-369 LER 83-001
SAFETY INJECTION PUMP DISCHARGE NOT FLOW BALANCED.
EVENT DATE: 010583 REPORT DATE: 020483 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PUMPS

(NSIC 188706) ON 1/5/83, DURING A REVIEW OF TEST PROCEDURE "SAFETY INJECTION (SI) PUMPS AND FLOW ADJUSTMENT FUNCTIONAL TEST II," A DISCREPANCY BETWEEN THE TEST DATA AND AN OMITTED ACCEPTANCE CRITERIA WAS DISCOVERED. THIS CRITERIA REQUIRING EACH SI PUMP TO DELIVER 462 GPM THROUGH THE 3 LOWEST FLOW INJECTION LINES WAS NOT SATISFIED FOR SI PUMP 1A (457.4 GPM), WHICH IS REPORTABLE PER TECH SPEC 6.9.1.13(C). THE EMERGENCY CORE COOLING FUNCTION OF THE SI PUMPS HAS NOT BEEN NEEDED, AND SI PUMP 1B HAS BEEN FULLY OPERABLE. ADDITIONALLY, SINCE 4 INJECTION LINES WERE OPERABLE SI PUMP A WOULD PERFORM ITS EMERGENCY FUNCTION. THE INFORMATION, CONTAINED IN THE PROCEDURAL COMMENTARY, WAS NOT INCORPORATED INTO

THE ACCEPTANCE CRITERIA OF THE SI PUMP BALANCING TEST BECAUSE IT WAS MISTAKENLY THOUGHT TO BE A REDUNDANT REQUIREMENT ADDRESSED BY A "155 GPM PLUS OR MINUS 5 GPM" CRITERIA FOR EACH COLD LEG BRANCH LINE. REBALANCING OF SI PUMP DISCHARGE WILL BE PERFORMED (UNDER A CORRECTED PROCEDURE) DURING THE CURRENT OUTAGE.

[277] MCGUIRE 1 DOCKET 50-369 LER 83-010
TWO RADIATION MONITORS DECLARED INOPERABLE.
EVENT DATE: 021683 REPORT DATE: 032183 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188806) WHILE IN MODE 6, CONTROL ROOM OUTSIDE AIR INTAKE RADIATION MONITORS 1EMF-43A AND 43B WERE DECLARED INOPERABLE ON 2/16/83 AFTER THEY WERE IDENTIFIED AS HAVING EXCEEDED THEIR MAXIMUM ALLOWABLE SURVEILLANCE PERIODS (INCLUDING MAX. ALLOWABLE EXTENSION OF 25%, DATES WERE 2/14 AND 2/13/83, RESPECTIVELY). THIS VIOLATES TECH SPEC 3.3.3.1 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.13(B). BOTH EMF'S WERE FOUND TO MEET ALL REQUIREMENTS DURING THEIR FUNCTIONAL TESTS. THIS INCIDENT WAS DUE TO PERSONNEL ERROR, IN THAT THE PREVENTATIVE MAINTENANCE PROGRAM WORK REQUESTS FOR THE EMF'S WERE INADVERTENTLY MISPLACED. AFTER THE EMF'S WERE DECLARED INOPERABLE, THE CONTROL AREA VENTILATION SYSTEM INLET VALVES WERE CLOSED AS REQUIRED BY TECH SPEC ACTION STATEMENT #27. THE MONITORS WERE RETURNED TO SERVICE AND THE INLET VALVES OPENED AFTER TESTING OF THE EMF'S WAS SUCCESSFULLY COMPLETED.

[278] MCGUIRE 1 DOCKET 50-369 LER 83-052 REV 1
UPDATE ON SEVERAL FIRE DETECTORS DECLARED INOPERABLE.
EVENT DATE: 070783 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188591) WHILE IN MODE 1, FIRE DETECTION ZONES (EFA) 150 (ON 7/7/83 AND AGAIN ON 7/10/83), 90 (ON 7/15/83), AND 101 (ON 7/16/83) WERE DECLARED INOPERABLE DUE TO INVALID ALARMS. THESE CONSTITUTE DEGRADATION OF FIRE DETECTION INSTRUMENTATION (TECH SPEC 3.3.3.7) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO'S 369/83-25, 83-33, 83-40, AND 370/83-13, 83-24, 83-30. FIRE WATCHES AND CONTAINMENT TEMPERATURE MONITORING WERE ESTABLISHED AS NECESSARY DURING THE TIMES THE ZONES WERE INOPERABLE, RESTORING EARLY WARNING CAPABILITY. EFA 150 (7/7/83) INOPERABILITY WAS DUE TO A BENT CONTACT ON ONE OF THE DETECTORS. THE DETECTOR (HONEYWELL TC 100A) WAS REPLACED AND THE ZONE DECLARED OPERABLE. EFA 90 DUE TO DIRT ACCUMULATION IN THE DETECTOR (FIREMARK 9620). THE DETECTOR WAS REPLACED. EFA 101'S ALARM WAS APPARENTLY SPURIOUS. THE ALARM WAS RESET. EFA 150 ALARM OF 7/10/83 CAUSE IS CORROSION ON DETECTOR BASE RESULTING FROM MOISTURE ACCUMULATION FROM LEAKAGE OF VALVE 1NC-18 (REF. RO--369/83-62). THE DETECTOR BASE WAS REPLACED.

[279] MCGUIRE 1 DOCKET 50-369 LER 83-061 REV 1
UPDATE ON FUEL BUILDING RADIATION ALARM DECLARED INOPERABLE.
EVENT DATE: 071983 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: AREA MONITORING SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188592) WHILE IN MODE 3, RADIATION MONITOR EMF-17 (SPENT FUEL BUILDING BRIDGE AREA RADIATION MONITOR) WAS IN ALARM DUE TO AN INCREASE IN THE GENERAL AREA BACKGROUND ACTIVITY. SINCE THE MONITOR, ALTHOUGH OPERATING PROPERLY, WOULD NOT PERFORM ITS INTENDED FUNCTION WHILE IN ALARM, IT WAS DECLARED INOPERABLE. THIS DEGRADATION OF THE RADIATION MONITORING FOR PLANT OPERATIONS (TECH SPEC 3.3.3.1) IS REPORTABLE PER TECH SPEC 6.9.1.11(B). A PORTABLE EMF WAS PLACED IN THE FUEL POOL AREA PER TECH SPEC ACTION STATEMENTS UNTIL EMF-17 COULD BE RESTORED TO SERVICE. BACKGROUND ACTIVITY HAD INCREASED BECAUSE OF SPENT FUEL RECEIVED FROM OCONEE AND NORMAL PLANT OPERATION. STANDARD PROCEDURE IS TO EVALUATE RADIATION HAZARDS WHEN AN EMF ALARMS AND ADJUST SETPOINTS IF NECESSARY. THE TRIP SETPOINTS

WERE SET HIGHER AND THE ALARMS CLEARED. BACKGROUND ACTIVITY IS MONITORED AND SETPOINTS ADJUSTED AS NECESSARY FOR PROCESS MONITORS PER THE PERIODIC TEST"CORRELATION OF EMFS". HOWEVER, AREA MONITORS CAN ALSO BE EVALUATED PER THIS PROCEDURE.

[280] MCGUIRE 1 DOCKET 50-369 LER 83-080
TWO ICE CONDENSER DOORS FREEZE CLOSED.
EVENT DATE: 090983 REPORT DATE: 100783 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188707) WHILE IN MODE 1, DURING PERFORMANCE OF THE PERIODIC "ICE CONDENSER INTERMEDIATE DECK DOOR AND MONITORING SYSTEM INSPECTION," 2 INTERMEDIATE DECK DOORS WERE DISCOVERED FROZEN SHUT. THIS CONSTITUTES A DEGRADATION OF ICE CONDENSER DOORS (TECH SPEC 3.6.5.3) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.11(D). DELAY OF 2 OF THE TOTAL OF 192 DOORS TO OPEN WOULD HAVE HAD NEGLIGIBLE IMPACT UPON THE ABILITY OF THE ICE CONDENSER TO MITIGATE PEAK PRESSURE IN THE CASE OF A LOCA. THE ICE CONDENSER BED TEMPERATURE WAS MONITORED EVERY 4 HOURS IN ACCORDANCE WITH THE ACTION STATEMENTS. THIS IS ATTRIBUTED TO UNUSUAL SERVICE CONDITIONS. HUMID AIR ENTERING THE ICE CONDENSER VENT CURTAIN IS THOUGHT TO HAVE CONDENSED ON THE UNDERSIDE OF THE TOP DECK PRIOR TO ENTERING THE AIR HANDLING UNITS AND DRIPPED ON THE AFFECTED DOORS, ALLOWING THE ACCUMULATION OF ICE. THERE HAVE BEEN NO PAST INCIDENTS OF SIMILARLY INOPERABLE DECK DOORS. ICE AROUND THE EDGES OF THE 2 DOORS WAS REMOVED, AND THE DOORS DECLARED OPERABLE.

[281] MCGUIRE 1 DOCKET 50-369 LER 83-114
SEQUENCER FAILS TO MEET LOADING TIME.
EVENT DATE: 112883 REPORT DATE: 122883 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: OTHER COMPONENTS
VENDOR: AGASTAT RELAY CO.

(NSIC 188355) DURING PERFORMANCE OF THE 18 MONTH "DIESEL GENERATOR (D/G) LOAD SEQUENCER TEST", LOAD SEQUENCING TIMES FOR SEQUENCER 1B LOAD GROUPS 1,5 AND 10 FAILED TO MEET THE REQUIRED LOADING TIMES ACCORDING TO TECH SPEC 4.8.1.1.2.D.3, TABLE 4.8-2 (1.018 SEC. VS. 1.0 SEC., 19.725 SEC, VS. 19.6 SEC., AND 122.148 SEC VS. 119.3 SEC.) D/G LOAD SEQUENCER 1B WAS DECLARED INOPERABLE, RENDERING D/G 1B INOPERABLE. THIS CONSTITUTES A DEGRADATION OF A.C. SOURCES (TECH SPEC 3.8.1.1) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO-369/82-36. THE DESIGN CRITERIA OF FSAR TABLE 8.1.2-1 (MAXIMUM ALLOWABLE LOADING TIMES) WERE STILL MET. THIS IS ATTRIBUTED TO COMPONENT MALFUNCTION BECAUSE THE TIMERS (AGASTAT MODEL 7000, PNEUMATIC TYPE) REQUIRED ADJUSTMENT TO COMPLY WITH SPECIFICATIONS. THE "ESSENTIAL AUXILIARY POWER SYSTEM POWER SOURCE VERIFICATION" TEST WAS PERFORMED ON D/G 1A WITHIN 1 HOUR, VERIFYING ITS OPERABILITY IN ACCORDANCE WITH THE TECH SPEC ACTION STATEMENT. AFTER ADJUSTING THE TIMERS, THE SEQUENCER TEST WAS SATISFACTORILY COMPLETED AND D/G 1B DECLARED OPERABLE.

[282] MCGUIRE 1 DOCKET 50-369 LER 83-115
ANNULUS DOOR SEALS FAIL.
EVENT DATE: 112983 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: OTHER COMPONENTS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188878) ON 11/19/83, DURING PERFORMANCE OF THE "ANNULUS VENTILATION (VE) SYSTEM PERFORMANCE TEST," VE TRAIN A WAS UNABLE TO MEET THE REQUIRED VACUUM DECAY TIME AND WAS DECLARED INOPERABLE. ON 12/2/83, VE TRAIN B WAS DECLARED INOPERABLE DUE TO FAILURE OF THE RECIRCULATION/EXHAUST DAMPERS TO ALLOW ACCEPTABLE VACUUM DECAY. ON 12/5/83 VE TRAIN B AGAIN FAILED TO MEET THE REQUIRED VACUUM DECAY TIME. THESE CONSTITUTE DEGRADATION OF THE ANNULUS VENTILATION SYSTEM (TECH SPEC 3.6.1.8) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(D). POSSIBLE INCREASES IN

POST-ACCIDENT RADIOACTIVE DISCHARGES WOULD HAVE BEEN MINIMAL. THE VACUUM DECAY TIME FAILURES FOR BOTH VE TRAINS ARE ATTRIBUTED TO POOR SEALING PROVIDED BY THE ANNULUS DOORS. SEALS ON THE FOUR ANNULUS DOORS WERE REPLACED, SHIMMED, AND ADJUSTED. THE FAILURE OF THE AUTOMATIC DAMPER ALIGNMENT FOR VE TRAIN B IS ATTRIBUTED TO COMPONENT FAILURE DUE TO THE LOSS OF REPEATABILITY BY THE ANNULUS PRESSURE TRANSMITTER (ITT BARTON MODEL 386A). THE TRANSMITTER WAS REPLACED. THE SEALS WILL BE INSPECTED AND REPAIRED AT 6 MONTH INTERVALS.

[283] MCGUIRE 1 DOCKET 50-369 LER 83-118
FIRE ALARM RECEIVED IN CONTROL ROOM TWICE.
EVENT DATE: 120683 REPORT DATE: 010684 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: HONEYWELL CORP.

(NSIC 188593) WHILE IN MODE 1, ON 12/6/83 AND AGAIN ON 12/8/83, A FIRE ALARM FOR FIRE DETECTION ZONE EFA77 (716' ELEVATION RECIPROCATING CHARGING PUMP ROOM) WAS RECEIVED IN THE CONTROL ROOM WHICH WOULD NOT RESET. EFA77 WAS DECLARED INOPERABLE EACH TIME. THESE CONSTITUTE DEGRADATION OF THE FIRE DETECTION INSTRUMENTATION (TECH SPEC 3.3.3.7) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO PREVIOUS INCIDENTS REFERENCED IN RO-369/81-113. HOURLY FIRE WATCH PATROLS WERE ESTABLISHED IN ACCORDANCE WITH THE TECH SPEC ACTION STATEMENT, RESTORING EARLY DETECTION CAPABILITY. THE 12/6/83 INCIDENT IS ATTRIBUTED TO UNUSUAL SERVICE CONDITIONS DUE TO WATER ACCUMULATION IN ONE OF THE TWO DETECTORS (HONEYWELL TC100A) AND BASE. THE WATER LEAKED INTO THE ROOM FROM A HIGHER ELEVATION THROUGH A CRACK AROUND THE CEILING HATCH PLUG. THE SOURCE OF WATER COULD NOT BE DETERMINED. THE CAUSE OF THE OTHER DETECTOR'S 12/8/83 ALARM COULD NOT BE DETERMINED. BOTH DETECTORS WERE REPLACED, SEALANT APPLIED TO THE DETECTOR'S ELECTRICAL BOXES, AND THE ZONE DECLARED OPERABLE.

[284] MCGUIRE 1 DOCKET 50-369 LER 83-117
CONTROL ROD BANK EXCEEDS INSERTION LIMITS.
EVENT DATE: 120983 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 188922) WHILE OPERATING AT 96% THERMAL POWER, SPEED CONTROL OF THE "B" FEEDWATER PUMP WAS INADVERTENTLY LOST AND THE PUMP WAS MANUALLY TRIPPED, INITIATING AN AUTOMATIC RUNBACK TO 50% POWER. CONTROL ROD BANK D WAS INSERTED TO 46 STEPS WITHDRAWN DURING THE RUNBACK WHICH EXCEEDS THE ROD INSERTION LIMITS (> OR = 50 STEPS AT 50% REACTOR POWER) OF TECH SPEC 3.1.3.6 (CONTROL ROD INSERTION LIMITS). THIS IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.11(B). AN ANALYSIS BY DUKE POWER COMPANY INDICATES THAT THE 1600 PCM SHUTDOWN MARGIN REQUIRED BY TECH SPECS WAS NOT COMPROMISED DURING THIS INCIDENT. THE AMOUNT OF ROD INSERTION REQUIRED DURING A RUNBACK INCREASES WITH CORE BURNUP. THEREFORE, THE POTENTIAL FOR VIOLATING THE ROD INSERTION LIMITS DURING A RUNBACK INCREASES TOWARD THE END OF LIFE. CONTROL RODS WERE WITHDRAWN TO > OR = 50 STEPS AS BORON WAS ADDED TO THE REACTOR COOLANT SYSTEM. RESULTS OF ONGOING DUKE POWER COMPANY AND VENDOR ANALYSIS WILL BE RELATED IN A FOLLOWUP REPORT.

[285] MCGUIRE 1 DOCKET 50-369 LER 83-119
INVALID FIRE ALARM RECEIVED IN CONTROL ROOM.
EVENT DATE: 121483 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: HONEYWELL CORP.

(NSIC 188453) WHILE IN MODE 1, AN INVALID FIRE ALARM FOR FIRE DETECTION ZONE EFA 76 (CENTRIFUGAL CHARGING PUMP 1A ROOM, 716' ELEVATION) WAS RECEIVED IN THE CONTROL ROOM WHICH WOULD NOT RESET. EFA 76 WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE FIRE DETECTION INSTRUMENTATION (TECH SPEC

3.3.3.7) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO PREVIOUS INCIDENTS REFERENCED IN RO-369/83-81 AND 83-112. HOURLY FIRE WATCH PATROLS WERE ESTABLISHED IN ACCORDANCE WITH THE TECH SPEC ACTION STATEMENT, RESTORING EARLY DETECTION CAPABILITY. THIS IS ATTRIBUTED TO COMPONENT MALFUNCTIONING DUE TO THE SPURIOUS ALARM. ALTHOUGH INVESTIGATION FOUND NONE OF THE ZONE'S DETECTORS IN ALARM, CORROSION AND DIRT WERE FOUND INSIDE A DETECTOR BASE. THE DETECTOR (HONEYWELL TC100A) AND DETECTOR BASE WERE REPLACED, THE ALARM RESET, AND THE DETECTION SYSTEM RETURNED TO SERVICE.

[296] MCGUIRE 1 DOCKET 50-369 LER 83-120
FIRE BARRIER PENETRATION DECLARED INOPERABLE.
EVENT DATE: 122183 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS,PRIMARY CONTAIN

(NSIC 188807) WHILE IN MODE 1, THE FIRE RETARDANT PACKING OF A FIRE BARRIER PENETRATION (AN APPROXIMATELY 3 1/2" DIAMETER OPENING ON THE NORTH CENTRAL STAIRWELL OF THE AUXILIARY BUILDING WHICH ACCOMODATES A 3"X1" CABLE TRAY) WAS DISCOVERED MISSING. THE PENETRATION WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF FIRE BARRIER PENETRATIONS (TECH SPEC 3.7.11) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B). THE SMALL SIZE OF THE PENETRATION WOULD HAVE MADE FIRE SPREAD THROUGH IT UNLIKELY. IN ADDITION, NO COMBUSTIBLE MATERIAL EXISTS INSIDE THE STAIRWELL. ALL FIRE BARRIER PENETRATIONS (INCLUDING THIS ONE) WERE IDENTIFIED, INSPECTED AND LABELLED JAN - FEB 1983. INVESTIGATION COULD NOT ESTABLISH A TIME OR REASON FOR REMOVAL OF THE ORIGINAL FIRE RETARDANT PACKING. DURING THE TIME THE PENETRATION WAS INOPERABLE, THE OPERABILITY OF THE FIRE DETECTION SYSTEM IN THE AREA WAS VERIFIED, AND AN HOURLY FIRE WATCH PATROL ESTABLISHED. NEW PACKING WAS INSTALLED AND THE PENETRATION TESTED AND DECLARED OPERABLE.

[287] MCGUIRE 1 DOCKET 50-369 LER 83-121
INVALID FIRE ALARM RECEIVED IN CONTROL ROOM.
EVENT DATE: 123183 REPORT DATE: 013084 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: HONEYWELL CORP.

(NSIC 188808) WHILE IN MODE 1, AN INVALID FIRE ALARM FOR FIRE DETECTION ZONE EFA 116 (HEATING VENTILATION EQUIPMENT AREA ON 767' ELEVATION) WAS RECEIVED IN THE CONTROL ROOM. EFA 116 WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE FIRE DETECTION INSTRUMENTATION (TECH SPEC 3.3.3.7) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO PREVIOUS EVENTS REFERENCED IN RO-370/83-91. HOURLY FIRE WATCH PATROLS WERE INITIATED PER TECH SPEC ACTION STATEMENT, RESTORING EARLY DETECTION CAPABILITY. INVESTIGATION FOUND ONE DETECTOR IN ALARM WHICH WAS COVERED WITH CARBON DUST (WHICH CAUSED THE DETECTOR TO ALARM). THE CARBON DUST CAME FROM CHANGING OUT THE CARBON FILTER IN THE AREA. THE DETECTOR (HONEYWELL TC 100A IONIZATION TYPE), ALONG WITH THE OTHER DETECTORS LOCATED IN THE ZONE, WAS CLEANED, AND THE ALARM RESET. PROPER ALARM FUNCTIONS WERE VERIFIED AND THE ZONE DECLARED OPERABLE.

[288] MCGUIRE 2 DOCKET 50-370 LER 83-057 REV 1
UPDATE OF CLOSED FIRE PROTECTION VALVE.
EVENT DATE: 100983 REPORT DATE: 011684 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES

(NSIC 188708) ON OCT. 9, 1983, DURING A CHECK OF THE POSITION OF ALL LOCKED VALVES IN THE PLANT CONDUCTED AS A RESULT OF A RECENT SIMILAR INCIDENT (REF. RO 370/83-53), FIRE PROTECTION SYSTEM VALVE 1RF989 (UNIT 2 ANNULUS SPRINKLER SYSTEM ISOLATION VALVE) WAS FOUND CLOSED INSTEAD OF LOCKED OPEN AS REQUIRED. THIS INOPERABILITY OF THE SPRAY AND/OR SPRINKLER SYSTEMS (TECH SPEC 3.7.10.2) IS

REPORTABLE PURSUANT TO TECH SPEC 6.9.1.10(B). HAD A FIRE OCCURRED IN THE ANNULUS WHILE THE SPRINKLER SYSTEM WAS ISOLATED, SMOKE DETECTORS WOULD HAVE PROVIDED AN ALARM ENABLING CORRECTIVE MEASURES TO BE TAKEN. THIS IS ATTRIBUTED TO PROCEDURAL DEFICIENCY BECAUSE A TEST PROCEDURE REQUIREMENT TO LOCK THE VALVE CLOSED WAS ERRONEOUS. A MAJOR CONTRIBUTING FACTOR IS THE FAILURE OF DISCOVERY DURING ROUTINE SURVEILLANCES DUE TO THE INDIVIDUAL WHO PERFORMED THE CHECKS FAILING TO ACTUALLY VERIFY THE VALVE'S POSITION. THE VALVE WAS CORRECTLY POSITIONED AND SECURED BY LOCK AND CHAIN, THE SURVEILLANCE CORRECTLY PERFORMED, AND THE TEST PROCEDURE REVISED. RO 370/83-53 GIVES ADDITIONAL CORRECTIVE MEASURES.

[289] MCGUIRE 2 DOCKET 50-370 LER 83-079
PRESSURIZER LEVEL INDICATOR FAILS TWICE.
EVENT DATE: 111483 REPORT DATE: 122083 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: PIPES,FITTINGS
VENDOR: PARKER HANNIFIN CORP.

(NSIC 188356) WHILE IN MODE 1, ON 11/14/83 (90% POWER) AND AGAIN ON 11/20/83 (89% POWER), PERFORMANCE OF THE "SEMI-DAILY SURVEILLANCE ITEMS" PERIODIC TEST REVEALED THAT PRESSURIZER LEVEL INSTRUMENTATION CHANNEL II INDICATED >4% HIGHER THAN THE AVERAGE OF THE OTHER 2 CHANNELS AND WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE REACTOR TRIP SYSTEM INSTRUMENTATION (TECH SPEC 3.3.1) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO'S 369/81-140, 81-169, 82-49, AND 370/83-68. THE CHANNEL WAS PLACED IN THE "TRIP" CONDITION MAKING THE TRIP LOGIC MORE CONSERVATIVE. THESE ARE ATTRIBUTED TO COMPONENT FAILURE. ONE LEAK WAS FOUND AROUND A SOLID PLUG IN THE SIDE OF THE MANIFOLD VALVE. THE PLUG WAS TIGHTENED, THE REFERENCE LEG REFILLED AND THE CHANNEL DECLARED OPERABLE (11/17/83). ONE LEAK AT A TUBING FITTING (PARKER HANNIFIN COMPRESSION FITTING) WAS FOUND (11/23/83) ON THE HIGH SIDE IMPULSE LINE. A SECTION OF IMPULSE LINE WAS REPLACED AND NEW FITTINGS INSTALLED. COUPLINGS ON IMPULSE LINES WILL BE WELDED TO PREVENT FURTHER LEAKS.

[290] MCGUIRE 2 DOCKET 50-370 LER 83-084
CVCS CONTAINMENT ISOLATION VALVE FAILS STROKE TEST.
EVENT DATE: 120683 REPORT DATE: 010584 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

(NSIC 188454) WHILE IN MODE 1, DURING PERFORMANCE OF THE "CHEMICAL AND VOLUME CONTROL SYSTEM (CVCS) VALVE STROKE TIMING-QUARTERLY" TEST, VALVE 2NV-842A,C (STANDBY MAKEUP PUMP SUCTION CONTAINMENT ISOLATION INSIDE) FAILED TO CLOSE WITHIN THE REQUIRED CLOSURE TIME OF < OR = 15 SECONDS AND WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF CONTAINMENT ISOLATION VALVES (TECH SPEC 3.6.3) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(D). TRANSFER TUBE ISOLATION VALVE 2KF-122 WAS OPERABLE AND CAPABLE OF ISOLATING THE SPENT FUEL POOL FROM THE ANNULUS IF NEEDED. AN ELECTRICAL CONTACT IN THE VALVE CLOSURE CIRCUIT FAILED IN THE OPEN POSITION, PREVENTING VALVE CLOSURE. THE FAILED CONTACT (SYLVANIA NORMALLY CLOSED AUXILIARY CONTACT, CAT. NO. KTM-11,10A, 600V) WAS EXAMINED AND APPEARED TO FUNCTION PROPERLY AND NO EXPLANATION COULD BE MADE FOR ITS FAILURE TO CLOSE. SIMILAR CONTACTS AT MCGUIRE HAVE FAILED, BUT THE FAILURE RATE IS NOT EXCESSIVE. THE CONTACT WAS REPLACED, AND THE VALVE SATISFACTORILY TESTED.

[291] MCGUIRE 2 DOCKET 50-370 LER 83-085
RCS HAS EXCESSIVE LEAKAGE.
EVENT DATE: 120683 REPORT DATE: 010684 NSSS: WE TYPE: PWR
SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: VALVES
VENDOR: DRESSER INDUSTRIAL VALVE & INST DIV

(NSIC 188455) WHILE IN MODE 1, INCREASED MAKE-UP FREQUENCY TO THE VOLUME CONTROL

TANK AND CONTAINMENT AND EQUIPMENT SUMP 2A HAVING BEEN PUMPED OUT SEVERAL TIMES INDICATED A LEAKAGE PROBLEM. SUBSEQUENT PERFORMANCE OF A REACTOR COOLANT SYSTEM (RCS) LEAKAGE CALCULATION INDICATED THAT UNIDENTIFIED LEAKAGE WAS GREATER THAN THE 1 GPM (ACTUALLY 2.051 GPM) LIMIT ALLOWED BY TECH SPEC 3.4.6.2 (OPERATIONAL LEAKAGE) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(D) AND SIMILAR TO RO'S 369/82-25 AND 370/83-26. THE LEAKAGE RATE WAS WELL WITHIN THE CAPABILITY OF THE CHARGING PUMPS AND SYSTEM PRESSURE WAS UNAFFECTED. THIS IS ATTRIBUTED TO COMPONENT MALFUNCTION, INVESTIGATION REVEALED THAT THE LEAKAGE RESULTED WHEN VALVE 2NM-68, REACTOR COOLANT HOT LEG SAMPLE LINE RELIEF, LIFTED. THE LEAKAGE WAS STOPPED BY ISOLATING THE SAMPLE LINE (LEAKAGE CALCULATION INDICATED 0.061 GPM). THE VALVE WILL BE REMOVED DURING THE CURRENT MAINTENANCE OUTAGE, AND BYPASS INSTALLED AROUND 2NM-22A (HOT LEG #1 SAMPLE LINE INSIDE CONTAINMENT).

[292] MCGUIRE 2 DOCKET 50-370 LER 83-086
INVALID FIRE ALARM RECEIVED TWICE.
EVENT DATE: 121283 REPORT DATE: 011184 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188456) WHILE IN MODE 1, ON 12/12/83 AND AGAIN ON 12/13/83, AN INVALID FIRE ALARM FOR FIRE DETECTION ZONE EFA 107 (MCC 2EMXA (600V) CABINET ON THE 750; ELEVATION) WAS RECEIVED IN THE CONTROL ROOM WHICH WOULD NOT RESET. EFA 107 WAS DECLARED INOPERABLE EACH TIME. THESE CONSTITUTE DEGRADATION OF THE FIRE DETECTION INSTRUMENTATION (TECH SPEC 3.3.3.7) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO PREVIOUS INCIDENTS REFERENCED IN RO-369/83-116. HOURLY FIRE WATCH PATROLS WERE ESTABLISHED PER TECH SPEC ACTION STATEMENT, RESTORING EARLY DETECTION CAPABILITY. ONE DETECTOR (FIREMARK 9620) WAS FOUND IN ALARM ON 12/12/83, AND AFTER CLEANING IT THE ALARM CLEARED AND EFA 107 WAS RETURNED TO SERVICE. HOWEVER, THE SAME DETECTOR WAS IN ALARM THE NEXT DAY AND IT WAS DISCOVERED THAT SEVERAL OF THE IONIZATION CHAMBER MOUNTING PINS WERE BROKEN (CAUSE UNKNOWN) CREATING A GAP THROUGH WHICH BROKEN PIECES OF THE PINS (OR DUST, ETC COULD ENTER, GENERATING AN ALARM. THE DETECTOR WAS REPLACED AND THE ALARM RESET.

[293] MCGUIRE 2 DOCKET 50-370 LER 83-087
HYDROGEN ANALYZER COUND NOT BE CALIBRATED.
EVENT DATE: 121583 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: DELPHI INDUSTRIES

(NSIC 188457) WHILE IN MODE 1, DURING PERFORMANCE OF THE MONTHLY FUNCTIONAL TEST "CONTAINMENT HYDROGEN ANALYZER CALIBRATION", ANALYZER 2B COULD NOT BE SATISFACTORILY CALIBRATED BECAUSE ADJUSTMENT OF THE HYDROGEN "ZERO" POTENTIOMETER TO OBTAIN A 0% READING ON THE LOCAL PANEL METER, CONTROL ROOM INDICATION AND COMPUTER WAS UNSUCCESSFUL. ANALYZER 2B WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF HYDROGEN MONITORS (TECH SPEC 3.6.4.1) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) DURING THE TIME ANALYZER 2B WAS INOPERABLE, REDUNDANT ANALYZER 2A WAS OPERABLE. THIS IS ATTRIBUTED TO COMPONENT MALFUNCTION DUE TO FAULTY CONNECTION TO AMPLIFIER CONTROL CARD IN THE REMOTE PANEL. IT IS SUSPECTED THAT OXIDATION ACCUMULATED ON THE CARD EDGE CONTACTS BUT NO APPRECIABLE OXIDATION WAS OBSERVED. THE CARD (DELPHI MODEL 1429 B5) EDGE CONTACTS WERE CLEANED, THE 0% HYDROGEN INDICATION ADJUSTED SATISFACTORILY, AND THE ANALYZER DECLARED OPERABLE.

[294] MCGUIRE 2 DOCKET 50-370 LER 83-088
INVALID FIRE ALARM RECIEVED FOR FIRE DETECTION ZONE.
EVENT DATE: 121983 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188809) WHILE IN MODE 1, AN INVALID FIRE ALARM FOR FIRE DETECTION ZONE EFA 128 (716' CABLE ROOM, UNIT 2 NUCLEAR SAMPLING (NM) LAB, UNIT 2 NUCLEAR SERVICE WATER PUMPS) WAS RECEIVED IN THE CONTROL ROOM WHICH WOULD NOT RESET. EFA 128 WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE FIRE DETECTION INSTRUMENTATION (TECH SPEC 3.3.3.7) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B). HOURLY FIRE WATCH PATROLS WERE ESTABLISHED PER TECH SPEC ACTION STATEMENT, RESTORING EARLY DETECTION CAPABILITY. THIS IS ATTRIBUTED TO A SPURIOUS ALARM. THE DETECTOR (FIREMARK 9620) IN ALARM WAS LOCATED NEAR AN OPEN PENETRATION IN THE BACK OF THE NM LAB. REPLACING THE DETECTOR DID NOT CLEAR THE ALARM. THE LAB DOOR REMAINED OPEN WHILE WORK WAS BEING PERFORMED ON EFA 128 AND IT IS BELIEVED THAT THE ALARM RESULTED FROM A DRAFT (THROUGH THE PENETRATION) CAUSED BY THE OPEN DOOR. THE ALARM WAS LATER RESET WITH NO MAINTENANCE BEING PERFORMED.

[295] MCGUIRE 2 DOCKET 50-370 LER 83-089
INVERTER TRIPS.
EVENT DATE: 122283 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: GENERATORS
VENDOR: SOLID STATE CONTROLS, INC.

(NSIC 188810) FOLLOWING QUARTERLY PREVENTATIVE MAINTENANCE, 120 VAC VITAL INSTRUMENT AND CONTROL POWER SYSTEM BATTERY INVERTER 2EVIB TRIPPED UPON BEING ENERGIZED AND WAS THEREFORE INOPERABLE. THIS DEGRADATION OF ONSITE POWER DISTRIBUTION (TECH SPEC 3.8.3.1) IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO'S 369/82-52, 82-53. SINCE 2EVIB WAS NOT RETURNED TO SERVICE WITHIN THE REQUIRED 24 HOUR LIMIT OF TECH SPEC 3.8.3.1 ACTION STATEMENT B, THE UNIT WAS SHUT DOWN (6 HOURS BEFORE A SCHEDULED OUTAGE). DURING THE TIME 2EVIB WAS OUT OF SERVICE, ITS ALTERNATE SOURCE, 120 VAC REGULATED POWER DISTRIBUTION CENTER 2KRP, PROVIDED POWER TO THE CHANNEL #2 A.C. VITAL LOADS. THIS IS ATTRIBUTED TO NUMEROUS COMPONENT FAILURES (POSSIBLY DUE TO POWER SURGE UPON BEING ENERGIZED) IN THE 10KVA BATTERY INVERTER (SOLIDSTATE CONTROLS, INC.) INVOLVING 3 BAD CAPACITORS (SCI 5400 MFD., 200VDC) AND 6 OTHER WEAK, A SCR SHORTING BOARD (V065C-2), 4 WEAK SCRS (SCI-235525N15), ONE BAD CLAMPING DIODE (SCI-70D30), AND A D.C. VOLTAGE SENSING BOARD (V108). THE FAILED AND QUESTIONABLE COMPONENTS WERE REPLACED, 2EVIB FUNCTIONALLY TESTED AND DECLARED OPERABLE.

[296] MCGUIRE 2 DOCKET 50-370 LER 83-090
BUS LINE ISOLATED AND TRANSFORMER DE-ENERGIZED.
EVENT DATE: 122383 REPORT DATE: 020384 NSSS: WE TYPE: PWR
SYSTEM: OTHER ELEC POWER SYS & CONTROL COMPONENT: RELAYS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188811) WHILE IN MODE 3 (PREPARING FOR COLD SHUTDOWN), AN ISOLATION TRANSFORMER FOR A CIRCUIT CONTAINING THE 2A GENERATOR BREAKER SYNCHRONIZATION CHECK RELAYS OVERHEATED AND BEGAN TO EMIT SMOKE. IN RESPONSE, OPERATORS SWAPPED 6.9 KV BUSSES 2TA (WHICH FEEDS 2ETA, 4.16KV ESSENTIAL POWER TRAIN A) AND 2TC TO BUS LINE 2B AND THEN ISOLATED BUS LINE 2A, THUS DE-ENERGIZING THE TRANSFORMER. ISOLATION OF BUS LINE 2A CONSTITUTED A DEGRADED CONDITION OF THE A.C. SOURCES-OPERATING (TECH SPEC 3.8.1.1) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B). DURING THIS INCIDENT, ONE OFFSITE POWER SOURCE WAS OPERABLE AT ALL TIMES, AND BOTH DIESEL GENERATORS WERE OPERABLE. IT IS THOUGHT THAT ONE OF THE SOLID STATE SYNCHRONIZATION CHECK RELAYS (GE MODEL SLJ99AA1A) SHORTED, CAUSING THE ISOLATION TRANSFORMER TO OVERHEAT DUE TO INCREASED CURRENT IN THE TRANSFORMER SECONDARY. THIS FAILURE IS NOT CONSIDERED TO BE GENERIC. THE FAILED RELAY AND THE OVERHEATED ISOLATION TRANSFORMER (JENKINS ELECTRIC MODEL MT-19T) WERE REPLACED. BUS LINE 2A WAS RETURNED TO SERVICE.

[297] MCGUIRE 2 DOCKET 50-370 LER 83-091
INVALID FIRE ALARM RECEIVED FOR FIRE DETECTION ZONE.
EVENT DATE: 122483 REPORT DATE: 012384 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188812) WHILE IN MODE 4, AN INVALID FIRE ALARM FOR FIRE DETECTION ZONE EFA 170 (AREA BENEATH THE UNIT 2 REACTOR BUILDING OPERATING FLOOR AT 329 DEGREES - 347 DEGREES, INCLUDING THE 2D SAFETY INJECTION ACCUMULATOR ROOM) WAS RECEIVED IN THE CONTROL ROOM WHICH WOULD NOT RESET. EFA 170 WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE FIRE DETECTION INSTRUMENTATION (TECH SPEC 3.3.3.7) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO EVENTS REFERENCED IN RO-369/83-116. FIRE WATCH PATROLS WERE INITIATED EVERY 8 HOURS IN ACCORDANCE WITH THE TECH SPEC ACTION STATEMENT, RESTORING EARLY DETECTION CAPABILITY. THIS IS ATTRIBUTED TO UNUSUAL SERVICE CONDITIONS DUE TO DUST ACCUMULATION IN ONE OF THE DETECTORS AS A RESULT OF MAINTENANCE ACTIVITIES (FILTERS IN AN AIR HANDLING UNIT IN THE SI ACCUMULATOR ROOM WERE BEING CHANGED). IN ADDITION, THE DETECTOR WAS NEAR ONE OF THE VENTS OF THE AIR HANDLING UNIT. THE DETECTOR (FIREMARK 9620) WAS REPLACED, THE ALARM RESET, AND EFA 170 TESTED AND DECLARED OPERABLE.

[298] MCGUIRE 2 DOCKET 50-370 LER 83-092
RHR PUMP HAS LOW FLOW.
EVENT DATE: 123183 REPORT DATE: 020884 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: PUMPS

(NSIC 188923) DURING DRAINING OPERATIONS OF THE REACTOR COOLANT SYSTEM, RESIDUAL HEAT REMOVAL (RHR) PUMP B WAS OBSERVED TO HAVE ZERO DISCHARGE FLOW AND WAS SUBSEQUENTLY TRIPPED AND RHR TRAIN B DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE REACTOR COOLANT SYSTEM (COLD SHUTDOWN-LOOPS NOT FILLED, TECH SPEC 3.4.1.4.2) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO LER 370/84-01 AND 369/82-24. IMMEDIATE ACTION WAS TAKEN TO RESTORE BOTH RHR LOOPS TO OPERABLE STATUS (RESTORED IN 43 MINUTES). HAD THE RETURN TO SERVICE BEEN FURTHER DELAYED, CORE COOLING COULD HAVE BEEN PROVIDED BY ADDITIONAL VALVE CYCLING. THIS IS ATTRIBUTED TO PROCEDURAL DEFICIENCIES, DUE TO INADEQUATE GUIDELINES REGARDING THE WATER LEVEL TO BE MAINTAINED IN THE REACTOR COOLANT (RCS) LOOPS DURING RHR OPERATION. THE FUELING WATER STORAGE TANK TO RHR PUMP ISOLATION VALVE WAS CYCLED TO PROVIDE CORE COOLING AND RAISE RCS LEVEL UNTIL FLOW WAS RESTORED. PROCEDURES WILL BE REVISED BY MARCH 31, 1984. ADDITIONAL CORRECTIVE ACTIONS ARE DETAILED IN LER 370/84-01.

[299] MILLSTONE 1 DOCKET 50-245 LER 83-012 REV 2
UPDATE ON LPCI PERMISSIVE SWITCH VALVED OUT OF SERVICE.
EVENT DATE: 032683 REPORT DATE: 012384 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188837) ON MARCH 26, 1983, AT 1135 WHILE VALVING OUT INSTRUMENTS FOR REPAIR OF CONTAINMENT LEAKAGE, A LPCI/CS VALVE PERMISSIVE INTERLOCK SWITCH, 263-52B, WAS FOUND VALVED OUT OF SERVICE. THE SWITCH WAS IMMEDIATELY PLACED BACK IN SERVICE AND AN INVESTIGATION INITIATED. EVEN THOUGH THE TECH SPEC REQUIREMENT FOR THE MINIMUM NUMBER OF OPERABLE CHANNELS PER TRIP SYSTEM WAS MET, THE POTENTIAL TO REDUCE THE DEGREE OF REDUNDANCY IN THE EMERGENCY CORE COOLING SYSTEM LOGIC EXISTED. IT IS BELIEVED THAT DURING THE MOST RECENT LPCI/CS VALVE PERMISSIVE INTERLOCK SURVEILLANCE ON FEB. 28, 1983, PRESSURE SWITCH 263-52B WAS NOT RESTORED TO THE PROPER LINEUP AT THE CONCLUSION OF THE TEST. THE I&C TECHNICIANS WERE REINSTRUCTED ON PROPER RESTORATION PRACTICES WHEN PERFORMING SURVEILLANCES. ADDITIONALLY, AS OF DEC. 1, 1983 PROCEDURES WERE MODIFIED TO CLARIFY VALVE RESTORATION AT EVERY COMPONENT CALIBRATION.

[300] MILLSTONE 2 DOCKET 50-336 LER 82-019 REV 1
UPDATE ON FUEL CLADDING FAILURES.
EVENT DATE: 060982 REPORT DATE: 120183 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS

(NSIC 188661) THIS LER IS AN INFORMATIONAL REPORT. HIGHER THAN NORMAL CONCENTRATIONS OF IODINE-131 IN THE REACTOR COOLANT SYSTEM DURING CYCLE 5 OPERATION INDICATED PROBABLE FUEL CLAD FAILURES. AT THE END OF CYCLE 5, FUEL SIPPING WAS PERFORMED ON THE ENTIRE CORE AND REVEALED 26 FUEL ASSEMBLIES WITH FAILED CLAD. IN ADDITION, VISUAL AND ULTRASONIC EXAMINATIONS WERE PERFORMED. THE ULTRASONIC EXAMINATIONS REVEALED 32 FAILED FUEL RODS IN THE 26 FAILED FUEL ASSEMBLIES. THE IDENTIFIED FUEL ROD FAILURES APPEAR TO BE FROM MULTIPLE SOURCES AND DO NOT INDICATE A SITUATION WHICH WILL LEAD TO CONTINUED DEGRADATION OF THE FUEL CLAD. ALL FAILED FUEL ASSEMBLIES, EXCEPT ONE ASSEMBLY WHICH HAS 1 LEAKING FUEL ROD, WERE REMOVED FROM THE REVISED CYCLE 6 LOADING PATTERN.

[301] MILLSTONE 2 DOCKET 50-336 LER 82-036 REV 1
UPDATE ON CRACK FOUND IN CHARGING PUMP BLOCK.
EVENT DATE: 082582 REPORT DATE: 020684 NSSS: CE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: PUMPS
VENDOR: GAULIN CORP.

(NSIC 188696) WITH THE PLANT AT 100 PERCENT POWER LEVEL AND DURING A ROUTINE PACKING REPLACEMENT OF THE 'A' CHARGING PUMP, A CRACK WAS DISCOVERED IN THE 'A' CHARGING PUMP BLOCK. THE CRACK WAS ANALYZED AND IT WAS DETERMINED THAT THE PUMP COULD BE SAFELY OPERATED UP TO 10 HOURS. BOTH 'B' AND 'C' CHARGING PUMPS WERE VERIFIED OPERABLE SO NO OPERATIONAL LCO RESULTED. THE 'A' CHARGING PUMP WAS REPACKED AND RETURNED TO SERVICE WITHIN 48 HOURS. SIMILAR LER'S: 79-14. THE INDEPENDENT LAB ANALYSIS OF THE CRACKED CHARGING PUMP BLOCK REVEALED THE CAUSE AS A HIGH CYCLE FATIGUE FAILURE WHICH INITIATED AT A SMALL AREA OF POROSITY WITHIN THE BLOCK FORGING. THIS DEFECT (.025 INCHES) IS NOT DETECTIBLE BY THE NORMAL NONDESTRUCTIVE METHODS, THEREFORE DESTRUCTIVE METHODS WERE UTILIZED. NO FURTHER CORRECTIVE ACTIONS ARE REQUIRED.

[302] MILLSTONE 2 DOCKET 50-336 LER 82-043 REV 1
UPDATE ON BROKEN SNUBBER STUD.
EVENT DATE: 110282 REPORT DATE: 122783 NSSS: CE TYPE: PWR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: ITT GRINNELL

(NSIC 188345) DURING POWER ASCENSION, A BROKEN HYDRAULIC SNUBBER STUD (1-1/4 INCH DIAMETER) WAS DISCOVERED AND TRACED TO HANGER 490001 ON A MAIN STEAM LEAD TO THE HIGH PRESSURE TURBINE. THE PLANT COMPLIED WITH TECH SPEC 3.7.8.1 AND WAS IN THIS ACTION STATEMENT FOR 30-3/4 HOURS WHILE REPAIRS WERE MADE. SIMILAR EVENT 80-11 (4/11/80). THE STUD FAILED DUE TO CONSTANT HIGH VIBRATION AND INCREASED LOADS DURING PLANT TRIPS. THE STUD WAS REPLACED AND THE SNUBBER WAS FUNCTIONALLY TESTED. ADJACENT SNUBBER STUDS WERE VISUALLY INSPECTED. THE PIPE HANGERS ON THE MAIN STEAM LINES HAVE BEEN REDESIGNED AND MODIFICATIONS HAVE BEEN COMPLETED DURING THE 1983 REFUEL OUTAGE TO PREVENT RECURRENCE.

[303] MILLSTONE 2 DOCKET 50-336 LER 83-007 REV 1
UPDATE ON NONCONSERVATIVE SAFETY ANALYSIS.
EVENT DATE: 031883 REPORT DATE: 120983 NSSS: CE TYPE: PWR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188867) A NONCONSERVATIVE SAFETY ANALYSIS ASSUMPTION WAS DISCOVERED BY NNECO IN MILLSTONE 2 STEAM GENERATOR TUBE RUPTURE ANALYSIS. THESE ASSUMPTIONS INVOLVED THE USE OF A LOW STEAM GENERATOR PRESSURE AND ATMOSPHERIC STEAM DUMPS IN

MANUAL MODE. UTILIZING MORE CONSERVATIVE ASSUMPTIONS INCREASE THE RADIOLOGICAL DOSE DURING A POSTULATED TUBE RUPTURE EVENT. RECENT TESTS SHOW ADDITIONALLY THE MAIN STEAM SAFETY VALVES MAY RELEASE MORE STEAM THAN ORIGINALLY ASSUMED. THIS COULD RESULT IN FURTHER INCREASES IN THE RAD DOSE HOWEVER STILL A SMALL FRACTION OF 10 CFR 100 LIMITS. SIMILAR LERS: NONE. THE CURRENT SGTR ANALYSIS DID NOT CONSIDER THE IMPACT OF A HIGH INITIAL STEAM GENERATOR PRESSURE AND ATMOSPHERIC STEAM DUMP VALVES IN AUTOMATIC. ALSO RECENT VALVE MANUFACTURER TESTS INDICATE A LARGER SAFETY VALVE BLOWDOWN THAN PREVIOUSLY CONSIDERED IN REANALYSIS. NNECO IS CURRENTLY ANALYZING THE RADIOLOGICAL CONSEQUENCES OF THE SGTR REANALYSIS.

[304] MILLSTONE 2 DOCKET 50-336 LER 83-014
REACTOR BUILDING VENTILATION SYSTEM FAILURE.
EVENT DATE: 032983 REPORT DATE: 042883 NSSS: CE TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVE OPERATORS
VENDOR: HONEYWELL CORP.

(NSIC 188619) DURING ROUTINE OPERATION, FACILITY I OF THE ENCLOSURE BUILDING FILTRATION SYSTEM WAS DECLARED INOPERABLE. INOPERABILITY WAS DECLARED WHEN 2-EB-50, INLET DAMPER TO THE PLENUM, FAILED TO OPEN DURING A TRAINING EVOLUTION. THE OPERATION OF FACILITY II WAS PROVEN AND THE UNIT OPERATED UNDER ACTION STATEMENT 3.6.5.1 OF THE TECH SPEC FOR 6 HOURS. SIMILAR LERS: NONE. INVESTIGATION OF THE PROBLEM SHOWED THE MOTOR OPERATOR TO 2-EB-50 HAD FAILED. THE FAILURE IS ATTRIBUTED TO A RANDOM FAILURE IN THE HONEYWELL MOTOR OPERATOR. THE MOTOR WAS SUBSEQUENTLY REPLACED. NO FURTHER CORRECTIVE ACTION IS REQUIRED.

[305] MILLSTONE 2 DOCKET 50-336 LER 83-020 REV 1
UPDATE ON DEGRADATION OF 2557 STEAM GENERATOR TUBES.
EVENT DATE: 061383 REPORT DATE: 021384 NSSS: CE TYPE: PWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: HEAT EXCHANGERS
VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 188914) DURING SCHEDULED INSERVICE EDDY CURRENT EXAMINATIONS OF STEAM GENERATOR TUBING, 2557 DEGRADED TUBES WERE IDENTIFIED. OF THESE, 2139 HAD DEFECTS > 40% THROUGH WALL, 77 HAD DISTORTED SIGNALS (DTS) AND 11 TUBES COULD NOT BE INSPECTED. THUS THE STEAM GENERATORS WERE IN CATEGORY C-3 OF TECH SPEC TABLE 4.4.6. THIS CONSTITUTED AN ABNORMAL DEGRADATION OF THE REACTOR COOLANT SYSTEM PRESSURE BOUNDARY. SPECIFIC CAUSE OF THE DEGRADATION IS UNKNOWN. IT IS CHARACTERIZED AS SMALL VOLUME PITS ORIGINATING IN THE SLUDGE PILE REGION OF THE STEAM GENERATOR. ALL STEAM GENERATOR TUBES WERE INSPECTED. ALL TUBES WITH FLAWS > OR EQUAL TO 40% THROUGH WALL, DTS OR EDDY CURRENT PROBE RESTRICTIONS WERE REPAIRED. A TOTAL OF 2422 TUBES WERE SLEEVED ON THE COLD LEG SIDE AND 192 TUBES WERE PLUGGED ON BOTH ENDS AS SPECIFIED IN TECH SPEC 4.4.5.1.4.B.

[306] MILLSTONE 2 DOCKET 50-336 LER 83-025 REV 1
UPDATE ON FIFTEEN BROKEN HOLD DOWN SPRINGS ON FUEL ASSEMBLIES.
EVENT DATE: 081183 REPORT DATE: 120183 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS

(NSIC 188694) SPENT FUEL VISUAL INSPECTIONS PERFORMED AT THE END OF CYCLE 5 HAVE IDENTIFIED 15 WESTINGHOUSE MANUFACTURED FUEL ASSEMBLIES EACH WITH ONE BROKEN HOLD DOWN SPRING. IN ADDITION, NOTICEABLE HOLD DOWN SPRING TO TOP NOZZLE POST WEAR WAS IDENTIFIED ON A NUMBER OF WESTINGHOUSE MANUFACTURED FUEL ASSEMBLIES. THE PROBABLE CAUSE OF THE SPRING FAILURE IS SYSTEM FLOW INDUCED VIBRATION, NEAR THE CORE PERIPHERY, LEADING TO FATIGUE FAILURE. WITH THE EXCEPTION OF ASSEMBLY F-73, ALL OF THE BROKEN SPRINGS WERE LOCATED ADJACENT TO THE CORE SHROUD IN EITHER CYCLE 4 OR CYCLE 5. STARTING IN CYCLE 6, ALL NEW FUEL WILL HAVE A NEW SPRING DESIGN TO REDUCE SPRING VIBRATION AND RESIST FATIGUE FAILURE.

[307] MILLSTONE 2 DOCKET 50-336 LER 83-026 REV 1
UPDATE ON FUEL ASSEMBLY COMPONENTS BINDING.
EVENT DATE: 090283 REPORT DATE: 120183 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188695) DURING SPENT FUEL VISUAL INSPECTIONS PERFORMED AT THE END OF CYCLE 5, EVIDENCE OF BINDING OF THE TOP NOZZLE FLOWER TO THE TOP NOZZLE POSTS WAS OBSERVED IN WESTINGHOUSE MANUFACTURED FUEL. BINDING OF THE FLOWER TO THE TOP NOZZLE POSTS IN FUEL ASSEMBLY F-73 HAS RESULTED IN DAMAGE TO THE FLOWER. IN ADDITION, RESTRICTED FLOWER MOVEMENT RELATIVE TO ONE TOP NOZZLE POST IN FUEL ASSEMBLY F-37 HAS RESULTED IN THE DEFORMATION OF A GUIDE TUBE. RESTRICTED MOTION OF THE FLOWER WHEN IT WAS CONTACTED BY THE FUEL ALIGNMENT PLATE RESULTED IN BENDING THE FLOWER IN ASSEMBLY F-73 IN A CEA LOCATION, AND DEFORMATION OF THE GUIDE TUBE IN ASSEMBLY F-37 IN A NON-CEA LOCATION. TESTS WERE PERFORMED TO VERIFY FREE TRAVEL OF THE FLOWERS IN ALL IRRADIATED WESTINGHOUSE CYCLE 6 ASSEMBLIES. F-73 AND F-37 WERE ELIMINATED FROM CYCLE 6.

[308] MONTICELLO DOCKET 50-263 LER 83-002
RCIC DECLARED INOPERABLE.
EVENT DATE: 010983 REPORT DATE: 020883 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: PACIFIC ELECTRIC MANUFACTURING

(NSIC 188474) DURING NORMAL PLANT STARTUP, WHILE PERFORMING A SURVEILLANCE TEST, A RESISTOR IN THE RCIC GOVERNOR CONTROL SYSTEM FAILED RESULTING IN LOSS OF DC POWER TO THE SYSTEM. THE RCIC SYSTEM WAS DECLARED INOPERABLE AND THE HPCI SYSTEM WAS DEMONSTRATED OPERABLE. RCIC IS REQUIRED TO BE OPERABLE PER TECH SPEC 3.5.F.1. SIMILAR EVENT OCCURRED IN HPCI SYSTEM (RO-77-20). THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.7.B.2.B. A PACIFIC ELECTRIC MGF CO. 200 OHM 70 WATT RESISTOR FAILED RESULTING IN LOSS OF SUPPLY POWER TO THE GOVERNOR CONTROL SYSTEM. FAILED RESISTOR WAS REPLACED WITH VARIABLE RESISTOR OF IMPROVED DESIGN. RCIC SYSTEM OPERABILITY WAS VERIFIED AFTER INSTALLATION OF THE RESISTOR.

[309] MONTICELLO DOCKET 50-263 LER 83-004
STANDBY GAS TREATMENT TRAIN HAS LOW FLOW.
EVENT DATE: 021083 REPORT DATE: 031183 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: FILTERS
VENDOR: YORK, O. H. COMPANY

(NSIC 188476) WHILE PERFORMING WEEKLY TEST, THE FLOW THROUGH "B" TRAIN STANDBY GAS TREATMENT (SBGT) WAS NOTICED TO BE LESS THAN MINIMUM TECH SPEC (4.7.B.1) SURVEILLANCE REQUIREMENTS OF 3150 CFM. MEASURED FLOW WAS 3100 CFM, WHICH IS 98.4% OF TECH SPEC MINIMUM REQUIREMENTS. FLOW THROUGH "A" TRAIN SBGT STILL SATISFIED TECH SPEC REQUIREMENTS. NO PREVIOUS EVENTS HAVE OCCURRED WITH A SIMILAR CAUSE. UNUSUAL SERVICE FACTOR - EXTENSIVE OPERATION OF SBGT SYSTEM FOR TESTING AND VENTING DRYWELL DURING PLANT OUTAGES RESULTED IN DEMISTERS (A FILTER-LIKE DEVICE) BECOMING CLOGGED WITH DIRT, WHICH RESULTED IN A REDUCTION IN FLOW ON BOTH SBGT TRAINS. DEMISTERS WERE CLEANED AND RETURNED TO SERVICE. PROCEDURE TO BE REVISED TO CHECK DP ACROSS DEMISTERS. DEMISTERS MANUFACTURED BY OTTO H. YORK CO. - MODEL #321-SR.

[310] MONTICELLO DOCKET 50-263 LER 83-007
ESSENTIAL SUPPLY BREAKER TRIP DE-ENERGIZES SEVERAL SYSTEMS.
EVENT DATE: 041183 REPORT DATE: 051183 NSSS: GE TYPE: BWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188477) DURING NORMAL OPERATIONS, A TRIP OF ESSENTIAL MCC133A SUPPLY BREAKER 52-304 RESULTED IN OPERATION IN A DEGRADED MODE FOR 15 MIN. DEGRADED 'A' DIVISION SYSTEMS WERE: CORE SPRAY (TECH SPEC 3.5.A.2), RHR AND RCIC ISOLATION VALVES (TECH SPEC 3.7.D.1), SBLC (TECH SPEC 3.4.B.1), SBGTS (TECH SPEC 3.7.B.1.A) AND EMERG. D.G. (TECH SPEC 3.9.B.3). REDUNDANT SYSTEMS WERE UNAFFECTED AND OPERABLE. TWO PREVIOUS EVENTS (RO-78-009 AND RO-78-016). BREAKER WAS RECLOSED AND, LATER THE SAME DAY, WAS REPLACED WITH SPARE. STANDARD CHECKS WERE MADE INVOLVING THE BREAKER AND BREAKER CUBICLE. RIGHT PHASE OVERCURRENT TRIP DEVICE HAD DRIFTED OUT OF ADJUSTMENT AND WAS REPLACED WITH SPARE UNIT. MONITORING EQUIPMENT SHOWED THAT MOTOR CONTROL CENTER LOADS WERE NOT EXCESSIVE.

[311] MONTICELLO DOCKET 50-263 LER 83-008
FEEDWATER EXTRACTION STEAM LINE LEAKS.
EVENT DATE: 041383 REPORT DATE: 051383 NSSS: GE TYPE: BWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: PIPES,FITTINGS
VENDOR: SOUTHWEST FABRICATING & WELDING CO., INC.

(NSIC 188478) DURING NORMAL OPERATION, ROUTINE INSPECTION FOUND A LEAK ON THE 15A FEEDWATER EXTRACTION STEAM LINE DRAIN. THE LEAK WAS FROM A 1 1/4 INCH LONGITUDINAL THROUGH-WALL CRACK AT THE BOTTOM SOCKET WELD SEAM ON THE TREE JOINT DOWNSTREAM OF STEAM TRAP ST 1929. REPORTABLE UNDER TECH SPEC 6.7.B.2.D. THERE HAS BEEN ONE SIMILAR OCCURRENCE ON THIS DRAIN LINE WHERE STEAM EROSION HAD CAUSED A THROUGH-WALL LEAK ON STEAM TRAP ST 1929 (M-RO-79-17). THE CAUSE OF THE LEAK WAS STEAM EROSION. STEAM TRAP ST 1929 WAS FOUND PASSING STEAM TO CONDENSER. LEAKING PIPE SECTION WAS REPLACED. A PROGRAM TO IDENTIFY, MONITOR, OR REPLACE EROSION SUSCEPTIBLE LINES AND STEAM TRAPS EXISTS. THE PROGRAM WILL BE ACCELERATED AND EXPANDED.

[312] MONTICELLO DOCKET 50-263 LER 83-009
HPCI GOVERNOR ACTUATOR COIL SHORTS.
EVENT DATE: 050483 REPORT DATE: 051883 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: MECHANICAL FUNCTION UNITS
VENDOR: WOODWARD GOVERNOR COMPANY

(NSIC 188479) DURING INVESTIGATION OF A 250V DC BATTERY GROUND FAULT, IT WAS DISCOVERED THAT THE HPCI WOODWARD GOVERNOR EGR HYDRAULIC ACTUATOR COIL WAS GROUNDED. OCCURRENCE REPORTABLE UNDER TECH SPEC 6.7.B.1.E. REDUNDANT SYSTEMS DEMONSTRATED OPERABLE, AS REQUIRED BY TECH SPEC 4.5.D.2. ONE PREVIOUS SIMILAR OCCURRENCE, RO-83-06. THE HPCI EGR COIL FAILURE WAS APPARENTLY CAUSED BY FAULTY WIRE LEAD INSULATION ALLOWING A GROUND FAULT TO THE EGR HOUSING. THE EGR AND HPCI LUBE OIL WERE REPLACED. HPCI WAS SATISFACTORILY TESTED. EGR AND LUBE OIL SAMPLE BEING SENT TO MANUFACTURER'S FOR FURTHER ANALYSIS. FURTHER ACTIONS WILL BE DETERMINED BASED ON MANUFACTURER'S ANALYSIS.

[313] MONTICELLO DOCKET 50-263 LER 83-011
MOISTURE SEPARATOR DRAIN VALVE PIPE LEAKS.
EVENT DATE: 051983 REPORT DATE: 061683 NSSS: GE TYPE: BWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: PIPES,FITTINGS
VENDOR: CRANE MIDWEST FITTING CORPORATION

(NSIC 188480) DURING NORMAL OPERATION, ROUTINE INSPECTION FOUND A STEAM LEAK ON A REDUCER AT THE D MOISTURE SEPARATOR DRAIN VALVE CV-3134. THE LEAK WAS A HOLE APPROXIMATELY 1/8" X 3/16" ON A 6"-4" CARBON STEEL REDUCER JUST DOWNSTREAM OF CV-3134. REPORTABLE UNDER TECH SPEC 6.7.B.2.D. THERE HAVE BEEN NO PREVIOUS SIMILAR OCCURRENCES FOR THIS SYSTEM. THE CAUSE OF THE LEAK WAS WET STEAM EROSION CAUSED FROM FLASHING STEAM DOWNSTREAM OF CV-3134 AT 380 F AND 195 PSI. THE SPECIFICATION CALLS FOR STAINLESS STEEL PIPING DOWNSTREAM OF CV-3134 WHERE THE CARBON STEEL REDUCER WAS FOUND. ALL MOISTURE SEPARATOR DRAIN VALVES WITH CARBON

STEEL REDUCERS WERE UT INSPECTED AND FOUND IN GOOD CONDITION. THE CARBON STEEL REDUCERS WILL BE REPLACED WITH STAINLESS.

[314] MONTICELLO DOCKET 50-263 LER 83-013
MSIV CLOSES TOO QUICKLY.
EVENT DATE: 051983 REPORT DATE: 061683 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVE OPERATORS
VENDOR: ATWOOD & MORRILL CO., INC.

(NSIC 188481) DURING SPECIAL SURVEILLANCE TESTING, DUE TO TREND IN VALVE TIMING, INBOARD MSIV AO-2-80D CLOSED FASTER THAN VALUE STATED IN TECH SPEC TABLE 3.7.1. REDUNDANT VALVE WAS OPERABLE. TWO PREVIOUS SIMILAR EVENTS (SOE-37 AND RO-83-10). 3/4" AUTO-PONENT MODEL K.F. FLOW CONTROL VALVE. FAST CLOSURE CAUSED BY LEAKAGE OF OIL FROM CONTROL VALVE HOUSING TO BODY THREADED CONNECTION DUE TO INADEQUATE MAINTENANCE/INSPECTION. THREAD SEALANT APPLIED, HOUSING TIGHTENED, FLUID REPLACED, CLOSURE TIME ADJUSTED. ALL SIMILAR COMPONENTS INSPECTED. MAINTENANCE PROCEDURE TO BE INITIATED.

[315] MONTICELLO DOCKET 50-263 LER 83-014
HPCI ISOLATES ON HIGH STEAM FLOW.
EVENT DATE: 060183 REPORT DATE: 061583 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: ANCHOR/DARLING VALVE CO.

(NSIC 188482) DURING NORMAL OPERATION WHILE PERFORMING SURVEILLANCE TEST, HPCI ISOLATED ON HIGH STEAM FLOW. OCCURRENCE REPORTABLE UNDER TECH SPEC 6.7.B.1.E. RCIC, LPCI AND BOTH CORE SPRAY LOOPS WERE DEMONSTRATED TO BE OPERABLE. ONE SIMILAR REPORTABLE OCCURRENCE, AO-28. LEAKAGE OF 12-INCH, 600 LB. INBOARD INJECTION GATE VALVE, MO-2068, CAUSED STEAM VOID IN HPCI INJECTION LINE WHICH AFFECTED TURBINE STARTUP CHARACTERISTICS. PROCEDURES CHANGED TO OPERATE WITH OUTBOARD INJECTION VALVE CLOSED, THUS PREVENTING VOID FORMATION. VALVE REPAIR DURING NEXT REFUEL OUTAGE.

[316] MONTICELLO DOCKET 50-263 LER 83-016
FEEDWATER EXTRACTION STEAM LINE DRAIN PIPES LEAK.
EVENT DATE: 061483 REPORT DATE: 071383 NSSS: GE TYPE: BWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: PIPES,FITTINGS
VENDOR: BECHTEL CORP.

(NSIC 188483) DURING NORMAL OPERATION, ROUTINE INSPECTION FOUND LEAKS ON 15A AND 15B FEEDWATER EXTRACTION STEAM LINE DRAINS. THE LEAK ON 15A EXTRACTION LINE WAS AT THE FOURTH ELBOW DOWNSTREAM OF STEAM TRAP ST1929. THE LEAK ON 15B EXTRACTION DRAIN WAS AT THE DOWNSTREAM WELD ON BYPASS VALVE TE 11-2. REPORTABLE UNDER TECH SPEC 6.7.B.2.D. THERE HAS BEEN TWO SIMILAR OCCURRENCES; M-RO-79-17 AND M-RO-83-08. THE CAUSE OF THE LEAKS WAS STEAM EROSION. LEAKING PIPE SECTION ON 15A EXTRACTION DRAIN WAS REPLACED. BOTH 15A AND 15B EXTRACTION DRAINS HAVE BEEN CLOSED TO FLOW. THE 15B EXTRACTION DRAIN TO BE REPAIRED DURING NEXT OUTAGE. A PROGRAM TO IDENTIFY, MONITOR, OR REPLACE EROSION SUSCEPTIBLE LINES AND STEAM TRAPS EXISTS. THE PROGRAM WILL BE ACCELERATED AND EXPANDED.

[317] MONTICELLO DOCKET 50-263 LER 83-017
HPCI ISOLATES ON HIGH STEAM FLOW.
EVENT DATE: 070683 REPORT DATE: 072683 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: MECHANICAL FUNCTION UNITS
VENDOR: WOODWARD GOVERNOR COMPANY

(NSIC 188484) DURING NORMAL OPERATION, WHILE PERFORMING SURVEILLANCE TEST, HPCI

ISOLATED ON HIGH STEAM FLOW. OCCURRENCE REPORTABLE UNDER TECH SPEC 6.7.B.2.B. RCIC, LPCI, AND BOTH CORE SPRAY LOOPS WERE DEMONSTRATED TO BE OPERABLE. TWO SIMILAR REPORTABLE OCCURRENCES, AO-28 AND RO-83-014. HPCI REMOTE SERVO, P/N 8250-079 DUE TO MINOR OIL LEAK WAS REPLACED ON JULY 5, 1983 WITH NEW REMOTE SERVO FROM STOCK. SURVEILLANCE TEST ON JULY 6 WAS PERFORMED PRIOR TO DECLARING HPCI SYSTEM OPERABLE. SERVO OPERATION STIFF AND STICKY, DUE TO OLD OIL RESIDUE, AND THIS AFFECTED TURBINE STARTUP CHARACTERISTICS. SERVO REPLACED AND HPCI SATISFACTORILY TESTED ON JULY 9, 1983.

[318] NINE MILE POINT 1 DOCKET 50-220 LER 83-013
LOCK ON CORE SPRAY VALVE BREAKER MISSING.
EVENT DATE: 061083 REPORT DATE: 061683 NSSS: GE TYPE: BWR
SYSTEM: OTHER SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 188463) DURING ROUTINE SURVEILLANCE, THE LOCK WAS FOUND TO BE MISSING ON THE BREAKER FOR THE OUTSIDE INLET VALVE 40-12 FOR THE CORE SPRAY SYSTEM. THIS IS IN VIOLATION OF TECH SPEC 3.1.4.G, WHICH STATES THAT VALVES 40-02 AND 40-12 ARE TO BE IN THE OPEN POSITION AND THEIR BREAKERS ARE TO BE OPEN AND LOCKED. BOTH THE VALVE AND THE BREAKER WERE IN THE OPEN POSITION. THE LOCK WAS MISSING FOR NO MORE THAN 15 DAYS BASED ON A PREVIOUS SURVEILLANCE ON THE SYSTEM. THE LOCK WAS REPLACED IN COMPLIANCE WITH TECH SPEC 3.1.4.G. THE PROCEDURAL CONTROLS, WHICH INCLUDE DOUBLE VERIFICATION BY LICENSED OPERATORS, HAVE BEEN REVIEWED AND HAVE BEEN DETERMINED TO BE ADEQUATE. THIS APPEARS TO BE AN ISOLATED INCIDENT AND NOT A BREAKDOWN OF ADMINISTRATIVE CONTROL.

[319] NINE MILE POINT 1 DOCKET 50-220 LER 83-042
FUEL ZONE WATER LEVEL MEASURING SYSTEM REMOVED FROM SERVICE.
EVENT DATE: 112283 REPORT DATE: 120983 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188311) DURING NORMAL OPERATIONS THE FUEL ZONE WATER LEVEL MEASURING SYSTEM (ACCUREX) WAS TAKEN OUT OF SERVICE, ONE CHANNEL AT A TIME, TO MODIFY IT'S PROGRAM TO IMPROVE ITS ACCURACY. CONSEQUENCES WERE MINIMAL, AS THE DEVICES WERE EACH RETURNED TO SERVICE WITHIN ONE HOUR, WELL WITHIN THE SEVEN DAYS PERMITTED BY TECH SPECS. (NOTE: THIS SYSTEM USES THE PLANT COMPUTER AND PRINTS OUT REACTOR WATER LEVEL TO TECHNICAL SUPPORT CENTER DURING AN ACCIDENT.) THE ACCUREX WAS MODIFIED AS PER G.E. RECOMMENDATIONS AND WAS RETURNED TO SERVICE WITHIN ONE HOUR. INSPECTION N1-ISP-36-ICC WAS PERFORMED BY I&C FOLLOWING THE COMPLETION OF THE MODIFICATION, AFTER WHICH THE ACCUREX WAS THEN DECLARED OPERABLE.

[320] NINE MILE POINT 1 DOCKET 50-220 LER 83-043
FUEL ZONE WATER LEVEL MEASURING SYSTEM CHANNEL FOUND IDLE.
EVENT DATE: 112883 REPORT DATE: 120983 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188666) DURING NORMAL OPERATIONS, THE FUEL ZONE WATER LEVEL MEASURING SYSTEM (FZWLMS) (ACCUREX) WAS FOUND IN A "SYSTEM IDLE" CONDITION FOR CHANNEL 11(A) AT THE TIME THAT THE SURVEILLANCE PROCEDURE N1-ISP-36-ICC WAS TO BE PERFORMED. CONSEQUENCES WERE MINIMAL SINCE CORRECTIVE ACTION WAS TAKEN IMMEDIATELY, THE REDUNDNAT FZWLMS (ACCUREX) CHANNEL 12(A) WAS OPERABLE, AND THE SYSTEM ONLY ACTIVATES DURING A SEVERE ACCIDENT. LER 83-36 REPORTED A SIMILAR OCCURRENCE. IMMEDIATE CORRECTIVE ACTIONS TAKEN WERE PUSHING THE "START" BUTTON ON THE ACCUREX AND RUNNING THE N1-ISP-36-ICC SURVEILLANCE PROCEDURE. THE ACCUREX WAS THEN DECLARED OPERABLE. THE CAUSE OF THIS EVENT IS STILL UNKNOWN. FUTURE ACTIONS BEING TAKEN INCLUDE FURTHER INVESTIGATION INTO THE REASONS FOR THE IDLE CONDITION OF THE ACCUREX ON CHANNEL 11(A) AND POSSIBLE ACTIONS TO ALLEVIATE THIS TYPE OF OCCURRENCE IN THE FUTURE.

[321] NINE MILE POINT 1 DOCKET 50-220 LER 83-039
STEAM RELIEF VALVE THERMOCOUPLE FAILS.
EVENT DATE: 120283 REPORT DATE: 010384 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: PALL TRINITY MICRO CORP.

(NSIC 188312) DURING NORMAL OPERATIONS WHILE PERFORMING SURVEILLANCE TEST N1-ISP-RVT ON THE MAIN STEAM ELECTROMATIC RELIEF VALVE TAILPIPE TEMPERATURE SENSORS, THE INPUTS INDICATED LOOSE CONNECTIONS IN THE THERMOCOUPLE AND/OR FAILURE OF THE THERMOCOUPLE. THE THERMOCOUPLES ACT AS BACKUP SENSORS TO THE PRIMARY ACOUSTIC SENSORS WHICH ARE CURRENTLY OPERABLE. LER 83-15 REPORTED A SIMILAR OCCURRENCE. THE SURVEILLANCE TEST ON THE SONIC DETECTOR (THE PRIMARY SENSOR) WAS RUN ON VALVE 01-07 PER N1-ISP-01-VMS AND WAS FOUND TO BE OPERATING NORMALLY. FUTURE CORRECTIVE ACTION TO DETERMINE THE CAUSE OF THIS EVENT WILL BE TO INVESTIGATE THE THERMOCOUPLE AND CONNECTIONS UPON THE NEXT SCHEDULED DRYWELL ENTRY.

[322] NINE MILE POINT 1 DOCKET 50-220 LER 83-046
TEMPORARY CHANGES NOT REVIEWED ON TIME.
EVENT DATE: 123083 REPORT DATE: 013084 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188535) DURING NORMAL OPERATION, IT WAS DISCOVERED BY A QA REVIEW ON 12/30/83 THAT THE SITE OPERATIONS REVIEW COMMITTEE FAILED TO REVIEW 12 TEMPORARY CHANGE SUBMITTALS ON THE "JUMPER/BLOCK-ANNUNCIATOR RELAY LOG" WITHIN THE SEVEN DAY TECH SPEC LIMITATION. THE DATES ON THESE JUMPER/BLOCK-ANNUNCIATOR RELAY SUBMITTALS FOR SORC REVIEW RANGED FROM 5/27/83 TO 11/16/83. NO SAFETY RELATED EQUIPMENT WAS INVOLVED IN 10 OF THE 12 SUBMITTALS REVIEWED. SAFETY RELATED EQUIPMENT WAS INVOLVED IN THE OTHER TWO SUBMITTALS. HOWEVER, THE ABILITY OF THIS EQUIPMENT WAS NOT AFFECTED BY THE TEMPORARY CHANGES. LERS 83-45 AND 81-45 REPORTED SIMILAR OCCURRENCES. THE TEMPORARY CHANGES LISTED IN THE "JUMPER/BLOCK-ANNUNCIATOR RELAY LOG" WERE NOT REVIEWED WITHIN THE LIMIT DUE TO A BREAKDOWN IN PAPER FLOW. THESE CHANGES WERE REVIEWED AND APPROVED BY SORC ON 1/9/84. FUTURE ACTIONS TO BE TAKEN INCLUDE: (1) THE WRITING OF AN OFFICE INSTRUCTION TO PROVIDE FOR BETTER PAPER FLOW; (2) REVISION TO APN-5 AND APN-7A, WHICH WILL PROVIDE A FEEDBACK MECHANISM TO THE ORIGINATOR OF THE TEMPORARY CHANGE AS WELL AS A REVISION OF THE FORM USED TO MAKE TEMPORARY CHANGES AT NINE MILE POINT 1.

[323] NORTH ANNA 1 DOCKET 50-338 LER 83-010
FIRE DOOR WILL NOT CLOSE.
EVENT DATE: 030483 REPORT DATE: 032883 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
VENDOR: CECO STEEL PROD CORP.

(NSIC 188620) ON MARCH 4, 1983, WITH UNIT 1 IN MODE 3, FIRE DOOR S71-17 BETWEEN THE 1J EMERGENCY DIESEL GENERATOR ROOM AND THE TURBINE BUILDING WAS DECLARED INOPERABLE BECAUSE IT WOULD NOT CLOSE AND LATCH WITHOUT ASSISTANCE. A FIRE WATCH WAS IMMEDIATELY POSTED. THIS EVENT IS CONTRARY TO TECH SPEC 3.7.15 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE DOOR WOULD NOT CLOSE COMPLETELY BECAUSE IT WAS SLIGHTLY WARPED. THIS TYPE OF DAMAGE IS SUSTAINED WHILE CLOSING THE DOOR DURING DIESEL OPERATION WITH PRESSURE IN THE ROOM LESS THAN ATMOSPHERIC. THE CLOSURE DEVICE WAS READJUSTED AND THE DOOR VERIFIED TO OPERATE PROPERLY.

[324] NORTH ANNA 1 DOCKET 50-338 LER 83-021
FIRE DOOR MALFUNCTIONS.
EVENT DATE: 041183 REPORT DATE: 051083 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

VENDOR: CECO STEEL PROD CORP.

(NSIC 188621) ON APR. 11, 1983, WITH UNIT 1 IN MODE 1, FIRE DOOR S-71-7 BETWEEN THE SERVICE BUILDING HEALTH PHYSICS AREA AND THE AUXILIARY BUILDING WOULD NOT SELF CLOSE. INITIALLY, NO FIRE WATCH WAS POSTED BECAUSE REPAIRS TO THE DOOR HAD COMMENCED WITHOUT NOTIFYING THE SHIFT SUPERVISOR. MANY PEOPLE CONSTANTLY TRAVEL THIS AREA AND THERE WAS NO CHALLENGE TO THE FIRE BARRIER. THIS EVENT IS CONTRARY TO TECH SPEC 3.7.15 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE DOOR WOULD NOT SELF CLOSE BECAUSE THE RECLOSURE DEVICE HAD BEEN REMOVED FOR MAINTENANCE ON THE CLOSURE COUPLING (PULL BACK FROM FRAME TO DOOR). THE COUPLING WAS LOOSE, MISALIGNED AND CAUSED DIFFICULTIES FOR THOSE USING THE DOOR. THE RECLOSURE DEVICE WAS REPAIRED, REINSTALLED AND PROPER DOOR OPERATION VERIFIED.

[325] NORTH ANNA 1 DOCKET 50-338 LER 83-036
ROD POSITION INDICATOR DEVIATIONS.
EVENT DATE: 052883 REPORT DATE: 062183 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188622) ON MAY 28, 29, 31 AND JUNE 7, 1983, DURING UNIT 1 STARTUP FROM MODE 3 TO 100 PERCENT POWER, 22 INDIVIDUAL ROD POSITION INDICATORS (IRPI) DEVIATED FROM THE GROUP DEMAND POSITION AT VARIOUS TIMES, BY GREATER THAN 12 STEPS. THE APPROPRIATE ACTION STATEMENTS WERE SATISFIED. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 3.1.3.2, 3.1.3.3 AND 6.9.1.9.B. THE CAUSE OF THE INDICATOR DISAGREEMENT WAS INSTRUMENT DRIFT CAUSED BY TEMPERATURE VARIATIONS DURING STARTUP. THIS IS A RECURRING PROBLEM AND IS GENERIC TO WESTINGHOUSE ANALOG POSITION INDICATION SYSTEMS. THE IRPI CHANNELS WERE EITHER PROPERLY RECALIBRATED AND RETURNED TO SERVICE OR THE REACTOR TRIP BREAKERS WERE OPENED. NO FURTHER CORRECTIVE ACTION IS REQUIRED.

[326] NORTH ANNA 1 DOCKET 50-338 LER 83-049
I-131 ACTIVITY IN REACTOR PRIMARY COOLANT.
EVENT DATE: 071083 REPORT DATE: 080383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: COMPONENT CODE NOT APPLICABLE
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188868) ON JULY 10, 1983, FOLLOWING A REACTOR TRIP FROM 100% POWER, THE I-131 DOSE EQUIVALENT SPECIFIC ACTIVITY EXCEEDED 1.0 MICROCURIES/GRAM. SAMPLES WERE TAKEN WITH A 4 HR SURVEILLANCE FREQUENCY IN ACCORDANCE WITH ITEM 4A OF TECH SPEC TABLE 4.4-4. THE LEVEL RETURNED TO LESS THAN THE LIMIT WITHIN 14 HRS. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B AND TECH SPEC 6.9.2. THIS EVENT WAS CAUSED BY MINOR FUEL ELEMENT DEFECTS, THOUGH NOT SPECIFICALLY IDENTIFIED, IN THE REACTOR CORE. POST TRIP CONDITIONS IN THE CORE CAUSED A RELEASE OF IODINE FROM FUEL ELEMENT DEFECTS TO THE REACTOR COOLANT SYSTEM. THE ACCELERATED SAMPLING FREQUENCY OF TECH SPEC 3.4.8 WAS IMPLEMENTED UNTIL RCS SPECIFIC ACTIVITY RETURNED TO LESS THAN THE LIMIT OF TECH SPEC 3.4.8.A.

[327] NORTH ANNA 1 DOCKET 50-338 LER 83-061 REV 1
UPDATE ON TWO HPSI PUMPS OUT OF SERVICE.
EVENT DATE: 092183 REPORT DATE: 022984 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PUMPS
VENDOR: PACIFIC PUMPS

(NSIC 188915) ON SEPTEMBER 21, 1983, WITH UNIT 1 AT 100 PERCENT POWER AND ONE HIGH HEAD SAFETY INJECTION (HHSI) PUMP OUT OF SERVICE, A SECOND HHSI PUMP WAS REMOVED FROM SERVICE AT 2350 DUE TO HIGH BEARING VIBRATIONS. THIS IS CONTRARY TO THE LCO OF TECH SPEC 3.5.2 WHICH REQUIRES TWO OPERABLE HHSI PUMPS IN MODE 1. THE REMAINING HHSI PUMP WAS OPERABLE AND A SECOND HHSI PUMP WAS RESTORED TO OPERABLE

WITHIN THE TIME LIMITS OF THE ACTION STATEMENT. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE "1C" HHSI PUMP WAS TAGGED OUT FOR MAINTENANCE AT THE TIME OF THE EVENT. THE "1A" HHSI PUMP WAS REMOVED FROM SERVICE DUE TO HIGH THRUST BEARING VIBRATIONS. THE "1C" HHSI PUMP WAS TESTED SATISFACTORILY AND RETURNED TO SERVICE AT 1931 ON SEPTEMBER 22, 1983.

[328] NORTH ANNA 1 DOCKET 50-338 LER 83-085
PRESSURE CHANNEL OBSERVED TO BE DRIFTING AND CAUSING INTERMITTENT ALARMS.
EVENT DATE: 122083 REPORT DATE: 011184 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 188437) ON DECEMBER 20, 1983, WITH UNIT 1 AT 100 PERCENT RATED THERMAL POWER CONTAINMENT PRESSURE CHANNEL IV WAS OBSERVED TO BE DRIFTING AND CAUSING INTERMITTENT ALARMS. THE CHANNEL WAS PLACED IN THE TRIPPED CONDITION WITHIN ONE HOUR AS REQUIRED BY THE ACTION STATEMENT OF TECH SPEC 3.3.2.1. THE REDUNDANT CHANNELS REMAINED AVAILABLE TO INITIATE A HIGH, INTERMEDIATE HIGH-HIGH AND HIGH-HIGH CONTAINMENT PRESSURE SIGNALS IF REQUIRED. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CAUSE OF THE CHANNEL BEHAVIOR COULD NOT BE DETERMINED, HOWEVER, IT IS SUSPECTED THAT DIRT IN THE FEEDBACK COIL OF THE PRESSURE TRANSMITTER RESULTED IN THE FAILURE. THE TRANSMITTER WAS INSPECTED, CLEANED AND THE CHANNEL WAS RETURNED TO SERVICE FOLLOWING A SATISFACTORY CALIBRATION.

[329] NORTH ANNA 2 DOCKET 50-339 LER 83-020
CONTAINMENT SPRAY VALVE FAILS.
EVENT DATE: 030283 REPORT DATE: 033083 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: LIMITORQUE CORP.

(NSIC 188869) ON MAR. 2, 1983, WITH UNIT 2 IN MODE 1, MOV-RS-255A, 2-RS-P-2A SUCTION ISOLATION VALVE, COULD NOT BE REOPENED AFTER HAVING BEEN CLOSED FOR A PERIODIC TEST RENDERING RECIRCULATION SPRAY PUMP, 2-RS-P-2A, INOPERABLE. THE THREE REMAINING RECIRCULATION SPRAY PUMPS WERE STILL AVAILABLE TO PROVIDE CONTAINMENT SPRAY IF REQUIRED AND ONLY TWO PUMPS ARE REQUIRED FOR ADEQUATE POST LOCA COOLING. THIS EVENT IS CONTRARY TO TECH SPEC 3.6.2.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. MOV-RS-255A COULD NOT BE REOPENED BECAUSE OF A STRIPPED BEVEL GEAR. THE GEAR WAS REPLACED AND THE VALVE STROKED SATISFACTORILY.

[330] NORTH ANNA 2 DOCKET 50-339 LER 83-026
FIRE DOORS FAIL TO LATCH.
EVENT DATE: 040283 REPORT DATE: 042083 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
VENDOR: CECO STEEL PROD CORP.

(NSIC 188623) ON APRIL 2, 1983, WITH UNIT 2 IN MODE 4, FIRE DOORS S71-18 AND S71-16, BETWEEN THE "2H" AND "2J" EMERGENCY DIESEL GENERATOR ROOMS (RESPECITVELY) AND THE TURBINE BUILDING, WOULD NOT LATCH. A FIRE WATCH WAS IMMEDIATELY POSTED FOR EACH EVENT. THIS EVENT IS CONTRARY TO TECH SPEC 3.7.15 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE DEGRADATION OF FIRE DOORS BETWEEN THE DIESEL ROOMS AND TURBINE BUILDING DUE TO THE DIFFERENTIAL PRESSURE DURING DIESEL OPERATION IS A RECURRING EVENT. FIRE DOOR S71-18 WOULD NOT LATCH BECAUSE THE DOOR STRIKE WAS JAMMED OPEN. THE LATCH WAS DISASSEMBLED, CLEANED, REASSEMBLED AND TESTED SATISFACTORILY. FIRE DOOR S71-16 WOULD NOT LATCH BECAUSE THE DOOR STRIKE WAS STICKING AND BENT. THE LATCH WAS DISASSEMBLED, CLEANED, STRAIGHTENED, REASSEMBLED AND TESTED SATISFACTORILY. DESIGN MODIFICATIONS TO THE ABOVE MENTIONED FIRE DOORS ARE BEING PURSUED.

[331] NORTH ANNA 2 DOCKET 50-339 LER 83-034
FIRE DOOR FAILS TO LATCH.
EVENT DATE: 041983 REPORT DATE: 051183 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
VENDOR: CECO STEEL PROD CORP.

(NSIC 188624) ON APRIL 19, 1983, WITH UNIT 2 IN THE REFUELING MODE, FIRE DOOR S71-18, BETWEEN THE 2H EMERGENCY DIESEL ROOM AND THE TURBINE BUILDING, WOULD NOT LATCH. THE DEGRADATION OF FIRE DOORS BETWEEN THE EMERGENCY DIESEL ROOMS AND TURBINE BUILDING DUE TO DIFFERENTIAL PRESSURE BETWEEN THE AREAS DURING DIESEL OPERATION IS A RECURRING EVENT. THIS EVENT IS CONTRARY TO TECH SPEC 3.7.15 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. FIRE DOOR S71-18 WOULD NOT LATCH BECAUSE THE LATCH WAS STICKING. THE LATCH WAS LUBRICATED AND OPERATION OF THE FIRE DOOR TESTED SATISFACTORILY. DESIGN MODIFICATION TO THE FIRE DOORS BETWEEN THE DIESEL ROOMS AND THE TURBINE BUILDING ARE BEING PURSUED.

[332] NORTH ANNA 2 DOCKET 50-339 LER 83-072
LHSI PUMP CONTAINMENT SUMP SUCTION VALVE FAILS TO FULLY OPEN.
EVENT DATE: 120583 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: ALOYCO, INC.

(NSIC 188438) ON DECEMBER 5, 1983, WITH UNIT 2 AT 100 PERCENT RATED THERMAL POWER, THE LOW HEAD SAFETY INJECTION PUMP (1-SI-P-1A) CONTAINMENT SUMP SUCTION VALVE MOV-2860A FAILED TO FULLY OPEN DURING SURVEILLANCE TESTING. THE REDUNDANT ECCS SUBSYSTEM REMAINED OPERABLE AND THE VALVE WAS RETURNED TO OPERABLE STATUS WITHIN THE TIME LIMIT OF THE ACTION STATEMENT OF TECH SPEC 3.5.2.C. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. A SIMILAR EVENT WAS REPORTED IN UNIT 2 LER 82-061. AN IMMEDIATE INVESTIGATION REVEALED THAT AN ELECTRIC CORD HAD BEEN HUNG ON AN UNUSED SUPPORT ATTACHED TO THE VALVE STEM EXTENSION. THIS PREVENTED ROTATION OF THE VALVE STEM EXTENSION AND WOULD NOT ALLOW THE VALVE TO FULLY OPEN. THE ELECTRICAL CORD WAS REMOVED AND THE VALVE WAS TESTED SATISFACTORILY.

[333] NORTH ANNA 2 DOCKET 50-339 LER 83-080
ROD POSITION INDICATION DRIFTS.
EVENT DATE: 122183 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188440) ON DECEMBER 21, 1983, DURING UNIT 2 STARTUP, INDIVIDUAL ROD POSITION INDICATOR, (IRPI) FOR ROD C-09, DEVIATED FROM THE GROUP DEMAND POSITION BY GREATER THAN 12 STEPS. THE APPROPRIATE ACTION STATEMENT WAS SATISFIED. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 3.1.3.3 AND 6.9.1.9.B. THE CAUSE OF THE INDICATOR DISAGREEMENT WAS INSTRUMENT DRIFT CAUSED BY DETECTOR TEMPERATURE VARIATIONS. THIS IS A RECURRING PROBLEM AND IS GENERIC TO WESTINGHOUSE ANALOG POSITION INDICATION SYSTEMS. THE IRPI CHANNEL WAS PROPERLY RECALIBRATED AND RETURNED TO SERVICE. NO FURTHER CORRECTIVE ACTION IS REQUIRED.

[334] NORTH ANNA 2 DOCKET 50-339 LER 83-074
OUTER PERSONNEL HATCH DOOR LEAKS.
EVENT DATE: 122983 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 188439) ON DECEMBER 29, 1983, WITH UNIT 2 AT 100 PERCENT RATED THERMAL POWER, THE OUTER PERSONNEL HATCH DOOR WAS DETERMINED TO HAVE AN UNACCEPTABLE LEAK RATE. THE INNER SEAL REMAINED FUNCTIONAL AND THE OUTER SEAL WAS REPAIRED WITHIN

TWO HOURS. THIS EVENT IS CONTRARY TO TECH SPEC 3.6.1.3 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE OUTER HATCH SEAL WAS TESTED FOLLOWING MULTIPLE CONTAINMENT ENTRIES. THE TEST FAILED DUE TO DIRT BUILDUP ON THE SEAL. THE SEAL WAS CLEANED, RELUBRICATED AND SUBSEQUENTLY TESTED SATISFACTORILY. NO FURTHER CORRECTIVE ACTION IS REQUIRED. SIMILAR SEAL PROBLEMS HAVE BEEN REPORTED PREVIOUSLY AT NORTH ANNA.

[335] OCONEE 1 DOCKET 50-269 LER 83-020
REACTOR TRIP BREAKERS FAIL.
EVENT DATE: 120983 REPORT DATE: 123083 NSSS: BW TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188316) AT 1601 HOURS ON 12/19/83 DURING ROUTINE SURVEILLANCE TESTING, UNIT 1'S CONTROL ROD DRIVE (CRD) AC BREAKER NO. 10 EXPERIENCED A DELAYED TRIP AND SUBSEQUENT TESTING OF ALL AC & DC CRD BREAKERS ON ALL THREE UNITS RESULTED IN CRD DC BREAKER NO. 2 ON UNIT 1 ALSO EXPERIENCING A DELAYED TRIP. IF A REACTOR TRIP HAD OCCURRED, AND IF BOTH MALFUNCTIONED BREAKERS HAD DELAYED IN TRIPPING, CONTROL ROD GROUPS 1, 2, 5, 6, & 7 WOULD HAVE DROPPED IMMEDIATELY, SHUTTING THE REACTOR DOWN. GROUPS 3 & 4 WOULD HAVE DROPPED WHEN EITHER OF THE MALFUNCTIONING BREAKERS OPENED. THE APPARENT CAUSE OF THIS EVENT WAS COMPONENT FAILURE. THE BREAKER TRIP SHAFT BEARING ASSEMBLY WAS STICKING, CAUSING THE BREAKER TO DELAY IN OPENING. THE STICKING WAS A RESULT OF HARDENING OF THE BEARING LUBRICANT. THE TRIP BREAKERS WERE REPLACED WITH SPARES. ALL CRD BREAKER TRIP SHAFT BEARING ASSEMBLIES ON ALL UNITS WILL BE REPLACED AND AN AUTOMATIC SHUNT TRIP ATTACHMENT WILL BE INSTALLED.

[336] OCONEE 1 DOCKET 50-269 LER 83-021
BWST LEVEL INSTRUMENT FAILS.
EVENT DATE: 122583 REPORT DATE: 012484 NSSS: BW TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: HEATERS,ELECTRIC

(NSIC 188487) ON 12/25/83, THE BWST LEVEL CHANNEL 1 FAILED LOW WHEN MOISTURE IN THE INSTRUMENT AIR LINES FROZE, THUS GIVING INCORRECT LEVEL INDICATIONS. REDUNDANT LEVEL CHANNEL 2 WAS OPERABLE AND CAPABLE OF PROVIDING THE NECESSARY INFORMATION ON BWST LEVEL. CHANNEL 1 WAS DECLARED OPERABLE IN LESS THAN 2 1/2 HOURS, WELL WITHIN THE 24 HOURS ALLOWED BY TECH SPEC 3.3.4.A. THE STRIP HEATERS, WHICH HEAT THE TRANSMITTER BOX HOUSING THE AFFECTED INSTRUMENT AIR LINE, DEENERGIZED DUE TO A TRIPPED PANELBOARD BREAKER. THE CAUSE OF THIS TRIP, THUS THE OCCURRENCE, IS UNKNOWN. THE BREAKER WAS RESET AND MONITORED AND WILL BE CHECKED FURTHER. THE HEATER FAILURE ALARMS WILL BE CHECKED. RELOCATION OF THE AFFECTED TRANSMITTERS WILL BE CONSIDERED.

[337] OCONEE 2 DOCKET 50-270 LER 83-002
SUBCOOLING MONITORS INOPERABLE.
EVENT DATE: 020783 REPORT DATE: 030983 NSSS: BW TYPE: PWR
SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: YARWAY CORP.

(NSIC 188675) ON 2/7/83 UNIT 2'S COMPUTER BECAME INOPERATIVE CAUSING THE LOSS OF BOTH REACTOR COOLANT SYSTEM (RCS) SUBCOOLING MONITORS. THE CONTROL ROOM HAD INDICATION OF RCS TEMPERATURE AND PRESSURE WHICH COULD BE PLOTTED ON A SATURATION CURVE TO ENSURE THAT THE RCS DID NOT GO BELOW SATURATION TEMPERATURE OR PRESSURE. THE CAUSE OF THIS INCIDENT WAS DEFICIENCY IN PROCEDURES. THE PROCEDURES MADE NO REFERENCE TO REWIRE YARWAY LEVEL INDICATOR PRIOR TO INSTALLATION. THE IMMEDIATE CORRECTIVE ACTION WAS TO REPAIR AND RESTART THE COMPUTER. ALL APPROPRIATE PERSONNEL WILL BE MADE AWARE OF THIS INCIDENT AND PROCEDURES WILL BE CHANGED TO ENSURE THAT THE INDICATOR IS PROPERLY WIRED PRIOR TO INSTALLATION.

[338] OCONEE 3 DOCKET 50-287 LER 83-013 REV 1
UPDATE OF QUENCH TANK DRAIN LINE CONTAINMENT ISOLATION VALVE LEAKS.
EVENT DATE: 112483 REPORT DATE: 122283 NSSS: BW TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: GRINNELL CORP.

(NSIC 188850) AT 0230 HOURS ON 11/24/83 AN ENGINEERED SAFEGUARD (ES) VALVE 3CS-5, A CONTAINMENT ISOLATION VALVE, WAS DISCOVERED TO BE LEAKING PAST THE SEAT AND WAS DECLARED INOPERABLE. THE REDUNDANT ES VALVE (3CS-6) IN THE QUENCH TANK DRAIN LINE WAS DEACTIVATED AND ADMINISTRATIVELY LOCKED CLOSED WITHIN 4 HRS PER TECH SPEC. ON 12/2/83 3CS-5 WAS DECLARED OPERABLE, HOWEVER, ON 12-3-83 3CS-5 WAS DISCOVERED LEAKING AGAIN AND WAS DECLARED INOPERABLE. 3CS-6 WAS ALWAYS FULLY OPERABLE. FURTHERMORE, APPROPRIATE ACTIONS WERE TAKEN TO ASSURE ADEQUATE CONTAINMENT INTEGRITY WAS MAINTAINED. INITIALLY, IT WAS HYPOTHESIZED THAT FOREIGN MATERIAL WAS LODGED IN THE VALVE SEAT AND WAS SUBSEQUENTLY FLUSHED AWAY WHEN THE VALVE WAS BEING CYCLED. HOWEVER, THE CAUSE OF THE 12-3-83 FAILURE CANNOT BE DETERMINED AT THIS TIME. DURING THE NEXT AVAILABLE OUTAGE THE VALVE WILL BE INSPECTED TO DETERMINE CAUSE OF FAILURE AND CORRECTIVE ACTION TO BE TAKEN. A SUPPLEMENTAL REPORT WILL BE SUBMITTED WHEN THE INFORMATION IS AVAILABLE.

[339] OCONEE 3 DOCKET 50-287 LER 83-014
RC TEMPERATURE INDICATION CHANNEL INOPERABLE.
EVENT DATE: 122683 REPORT DATE: 012584 NSSS: BW TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188851) ON 12/26/83, THE UNIT 3 CHANNEL "B" RPS "A" HOT LEG TEMPERATURE (TH) INSTRUMENT WAS DISCOVERED INDICATING AN UNACCEPTABLE AMOUNT LOWER THAN THE OTHER THREE CHANNELS. A FAILURE ANALYSIS PERFORMED DEMONSTRATED THAT NO SINGLE FAILURE INVOLVING A REACTOR TRIP MODULE WILL PREVENT ITS ASSOCIATED BREAKERS AND CONTACTORS FROM OPENING. RPS CHANNELS "A", "C", AND "D" WERE OPERATIONAL FOR THE DURATION OF THIS INCIDENT. THE CAUSE OF THIS OCCURRENCE WAS PROCEDURE DEFICIENCY. THE PROCEDURE ALLOWED THE RTD BRIDGE TO GO OUT OF CALIBRATION WHICH AFFECTED THE READINGS OF THE INSTRUMENTATION INVOLVED. THE RTD BRIDGE WAS CALIBRATED AND THE RPS "A" (TH) RETURNED TO SERVICE. ASSOCIATED PROCEDURES WILL BE REVISED. THE RTD BRIDGES ON ALL RPS CHANNELS WILL BE CHECKED DURING THE NEXT RC TEMPERATURE INSTRUMENT CALIBRATION.

[340] OYSTER CREEK DOCKET 50-219 LER 83-025
EXCESS FLOW CHECK VALVES NOT TESTED.
EVENT DATE: 120183 REPORT DATE: 010384 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188310) ON THURSDAY, DEC. 1, 1983, SEVERAL MAINTENANCE AND SURVEILLANCE PROCEDURES WERE IDENTIFIED AS NOT ADEQUATELY VERIFYING EXCESS FLOW CHECK VALVES OPEN FOLLOWING VALVING OPERATIONS. THIS IS A VIOLATION OF TECH SPEC 4.5 ITEM 0. A DEVIATION REPORT WAS SUBMITTED FOR REVIEW. THIS EVENT IS CONSIDERED TO BE A REPORTABLE OCCURRENCE AS DEFINED IN THE TECH SPECS, PARAGRAPH 6.9.2.B.3. THE CAUSE OF THIS OCCURRENCE WAS INADEQUATE PLANT MAINTENANCE PROCEDURES AND SURVEILLANCE PROCEDURES. THE DEFICIENT PROCEDURES WILL BE REVISED TO MEET TECH SPEC REQUIREMENTS.

[341] OYSTER CREEK DOCKET 50-219 LER 83-024
VALVE OPERATOR TORQUE SWITCHES MALADJUSTED.
EVENT DATE: 122083 REPORT DATE: 010584 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: VALVES
VENDOR: LIMITORQUE CORP.

(NSIC 188534) AFTER A REVIEW OF HISTORICAL DATA ON TORQUE SWITCH SETPOINTS OF THE

LIMITORQUE MOTOR OPERATED VALVES, IT WAS DISCOVERED THAT THE TORQUE SWITCHES WERE SET BELOW THE MANUFACTURERS RECOMMENDED SETPOINT. ALTHOUGH THIS IS STILL UNDER EVALUATION, THIS OCCURRENCE MAY HAVE PREVENTED THE VALVES FROM OPERATING DURING ACCIDENT CONDITIONS. THIS EVENT IS CONSIDERED TO BE A REPORTABLE OCCURRENCE AS DEFINED IN THE TECH SPECS, PARAGRAPH 6.9.2.A.9. THE APPARENT CAUSE OF OCCURRENCE IS ATTRIBUTED TO LACK OF SUFFICIENT KNOWLEDGE CONCERNING SETPOINT DESIGN BASIS. IMMEDIATE CORRECTIVE ACTION WAS TO INITIATE AN INVESTIGATION ON THE DESIGN BASIS OF EACH VALVE OPERATOR. BEYOND THIS, CORRECTIONS WILL BE MADE TO TORQUE SWITCH SETPOINTS, AND ADMINISTRATIVE CONTROLS WILL BE ISSUED TO PRECLUDE RECURRENCE OF INCIDENT.

[342] OYSTER CREEK DOCKET 50-219 LER 83-026
SPENT FUEL HEAT EXCHANGER FOUNDATIONS POTENTIALLY OVERSTRESSED.
EVENT DATE: 122383 REPORT DATE: 020784 NSSS: GE TYPE: BWR
SYSTEM: SPENT FUEL POOL COOL & CLEANUP COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188665) THE ADDITION OF LEAD FOR RADIATION SHIELDING ON TWO OF THREE SPENT FUEL POOL HEAT EXCHANGERS WOULD OVERSTRESS THE HEAT EXCHANGER'S FOUNDATION BOLTS DURING A SEISMIC EVENT. BASED UPON THE POTENTIAL CONSEQUENCES OF A FAILURE OF THIS TYPE AND THE LIKELIHOOD OF OCCURRENCE, THE SAFETY SIGNIFICANCE IS CONSIDERED MINIMAL. THE DISCOVERY OF THIS CONDITION IS CONSIDERED A REPORTABLE OCCURRENCE PER TECH SPECS PARAGRAPH 6.9.2.A.9. CAUSE WAS ATTRIBUTED TO LACK OF PROCEDURAL CONTROLS IN THE PAST WHEN APPLYING LEAD SHIELDING TO PIPING SYSTEMS. A DECONTAMINATION EFFORT WILL ATTEMPT TO REDUCE THE RADIATION LEVELS IN THE VICINITY OF THE HEAT EXCHANGERS. PLANT WALKDOWN WILL IDENTIFY SIMILAR SITUATIONS AFFECTING SAFETY-RELATED SYSTEMS. SAFETY EVALUATION PRIOR TO LEAD REAPPLICATION.

[343] PALISADES DOCKET 50-255 LER 83-068
TWO FIRE INSPECTION TOURS NOT COMPLETED ON TIME.
EVENT DATE: 100383 REPORT DATE: 110383 NSSS: CE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186791) ON TWO OCCASIONS, FIRE INSPECTION TOURS OF THE ENGINEERED SAFEGUARDS ROOM WERE NOT COMPLETED WITHIN THE REQUIRED HOURLY PERIOD. IN A SEPARATE OCCURRENCE, A FIRE INSPECTION TOUR OF CABLE PENETRATION ROOM WAS NOT COMPLETED WITHIN THE REQUIRED HOURLY PERIOD. THE FIRE TOURS WERE BEING CONDUCTED AS COMPENSATORY MEASURES FOR THE LOSS OF FIRE BARRIER GENERATION INTEGRITY PER TECH SPEC 3.22.5.1. REPORTABLE PER TECH SPEC 6.9.2.B(2). THE PLANT IS SHUTDOWN FOR REFUELING. THE FIRST OCCURRENCE WAS CAUSED BY THE FAILURE TO ADEQUATELY COMMUNICATE THE SIGNIFICANCE OF TIMELY COMPLETION OF FIRE TOURS. THE SECOND OCCURRENCE WAS CAUSED BY PERSONNEL ERROR. PROCEDURES HAVE BEEN REVISED TO EMPHASIZE TIMELY FIRE TOUR COMPLETION. ADDITIONALLY, START AND COMPLETION TIMES OF TOURS WILL BE COMMUNICATED VIA RADIO FOR IMPROVED MONITORING.

[344] PALISADES DOCKET 50-255 LER 83-069 REV 1
UPDATE ON INOPERABLE FIRE BARRIERS.
EVENT DATE: 110183 REPORT DATE: 022384 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188840) THE INSPECTION OF PENETRATION FIRE BARRIERS, PER TECH SPECS SURVEILLANCE PROCEDURE RT-53, HAS RESULTED IN THE DISCOVERY OF A NUMBER OF INOPERABLE FIRE BARRIER PENETRATIONS IN SAFETY RELATED AREAS. UPON DISCOVERY, HOURLY FIRE INSPECTION TOURS WERE INITIATED AND CONTINUE TO BE PERFORMED IN THE AFFECTED AREAS PER TECH SPEC 3.22.5.1. CONDITION REPORTABLE PER TECH SPEC 3.22.5.1 AND 6.9.2.A(2). CAUSES ATTRIBUTED TO NORMAL DETERIORATION OVER TIME AND LACK OF APPROPRIATE CONTROLS DURING CONSTRUCTION ACTIVITIES. A CAUSE FOR A NUMBER OF ADDITIONAL INOPERABLE PENETRATIONS COULD NOT BE DETERMINED, HOWEVER, IT

IS LIKELY THEY HAD NEVER BEEN SEALED. DEFECTIVE PENETRATION FIRE BARRIERS WILL BE RESTORED. ADDITIONAL CONTROLS FOR OPENING FIRE BARRIERS WILL BE ESTABLISHED.

[345] PALISADES DOCKET 50-255 LER 83-079
LOW FLOW TRIP SETTINGS FOUND BELOW LIMIT.
EVENT DATE: 123083 REPORT DATE: 012584 NSSS: CE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188896) THE "AS FOUND" TRIP SETTINGS FOR LOW PCS FLOW FOR OPERATION WITH TWO PRIMARY COOLANT PUMPS WERE FOUND BELOW THE LIMIT SPECIFIED IN TECH SPEC TABLE 2.3.1 (ITEM 2). THE REQUIREMENT TO TEST THE LOW FLOW TRIP SETTINGS FOR TWO-PUMP OPERATION HAD BEEN INADVERTENTLY DELETED FROM THE SURVEILLANCE PROCEDURE IN 1975. THE SETPOINT ERROR WAS DISCOVERED DURING TESTING ON DECEMBER 30, 1983. TWO-PUMP OPERATION IS PROHIBITED BY OPERATING PROCEDURES. REPORTABLE PER TECH SPEC 6.9.2.B(1). CAUSE ATTRIBUTED TO AN INADEQUATE SURVEILLANCE PROCEDURE WHICH DID NOT INCLUDE LOW FLOW TRIP TESTING FOR TWO-PUMP OPERATION. THE TECH SPEC SURVEILLANCE PROCEDURE WILL BE REVISED TO INCLUDE THE MISSED TRIP TESTS. TWO-PUMP TESTING WILL BE PERFORMED PRIOR TO PLANT OPERATION. ADMINISTRATIVE PROCEDURES REGARDING TECH SPEC SURVEILLANCE PROCEDURE REVIEW WILL ALSO BE REVISED.

[346] PEACH BOTTOM 2 DOCKET 50-277 LER 83-017
OFFSITE ELECTRICAL SOURCE WAS TAKEN OUT OF SERVICE.
EVENT DATE: 062083 REPORT DATE: 072083 NSSS: GE TYPE: BWR
SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: TRANSFORMERS

(NSIC 184104) DURING NORMAL OPERATION, AN OFFSITE ELECTRICAL SOURCE WAS TAKEN OUT OF SERVICE BECAUSE THE TRANSFORMER FOR THAT SOURCE HAD A DEFECTIVE RELIEF DEVICE. THE ELECTRICAL SYSTEM WAS SET-UP FOR OPERATION WITH ONE OFF-SITE SOURCE OUT OF SERVICE. ALL FOUR DIESELS AND ASSOCIATED EMERGENCY BUSES WERE DEMONSTRATED TO BE OPERABLE. THE TRANSFORMER REMAINED OUT OF SERVICE APPROXIMATELY 10 HOURS. THE RELIEF DEVICE WAS REPLACED AND THE ELECTRICAL SYSTEM WAS RETURNED TO NORMAL CONFIGURATION.

[347] PEACH BOTTOM 2 DOCKET 50-277 LER 83-023 REV 1
UPDATE ON CONTAINMENT ISOLATION VALVES LEAK.
EVENT DATE: 110883 REPORT DATE: 122283 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: WALWORTH COMPANY

(NSIC 188607) WITH UNIT 2 SHUTDOWN, SURVEILLANCE TESTING INDICATED THAT THE COMBINED LEAKAGE FOR TYPE B & C TESTS EXCEEDED THE 10CFR50, APPENDIX J LIMIT OF .6LA. CONTAINMENT ISOLATION VALVES MO-2-74 AND MO-23-57 FAILED TO PASS LOCAL LEAK RATE TESTS. REDUNDANT VALVES MO-2-77 AND MO-23-58, RESPECTIVELY, WERE TESTED WITH ACCEPTABLE LEAK RATES. VALVE MO-2-77 HAD BEEN REMOVED FROM SERVICE FOR MAINTENANCE AT THE TIME OF THE EVENT AND WAS TESTED FOLLOWING MAINTENANCE. CAUSE OF THE EVENT WAS DUE TO NORMAL WEAR OF THE VALVE INTERNALS. THE VALVE INTERNALS OF VALVE MO-2-74 WERE REPLACED, THE SEATS WERE MACHINED, AND THE VALVE WAS RETESTED WITH AN ACCEPTABLE LEAK RATE. THE SEATS OF VALVE MO-23-57 WERE MACHINED AND THE VALVE WAS RETESTED WITH AN ACCEPTABLE LEAK RATE.

[348] PEACH BOTTOM 2 DOCKET 50-277 LER 83-026
DRYWELL MOISTURE MONITORING SYSTEM FAILS.
EVENT DATE: 120583 REPORT DATE: 123083 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: RELAYS
VENDOR: POTTER & BRUMFIELD

(NSIC 188541) DURING THE UNIT 2 STARTUP, THE MOISTURE MONITORING SYSTEM FAILED

WHILE UNDERGOING SURVEILLANCE TESTING. SHIFT SUPERVISION IMMEDIATELY INITIATED AN HOURLY MONITORING OF THE DRYWELL SUMP PUMP OUT RATES. INVESTIGATION DISCOVERED THE CAUSE OF THE EVENT AS AN IMPROPERLY POSITIONED (LOOSE) POTTER AND BRUMFIELD RELAY, MODEL #R10-EL-W2-V700. THE RELAY WAS IMMEDIATELY READJUSTED IN THE CIRCUIT BOARD FOR PROPER CONTACT. THE MOISTURE MONITORING SYSTEM SURVEILLANCE TEST WAS THEN PERFORMED SATISFACTORILY AND THE SYSTEM RETURNED TO SERVICE ON DEC. 5, 1983.

[349] PEACH BOTTOM 2 DOCKET 50-277 LER 83-027
MAIN STEAM TEMPERATURE ELEMENT READS LOW.
EVENT DATE: 121583 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BURNS ENGINEERING

(NSIC 188542) DURING A DAILY INSTRUMENT CHECK WHILE AT POWER, ONE OF THE FOUR MAIN STEAM LINE TEMPERATURE ELEMENTS, TE-4913D, WAS FOUND TO READ LOW. THE ISOLATION 'B' LOGIC WAS PLACED IN THE TRIPPED CONDITION WHEN IT WAS DISCOVERED THAT THE TEMPERATURE ELEMENT HAD FALLEN OUT OF THE VENTILATION DUCT THAT IT MONITORS. THE REDUNDANT TEMPERATURE ELEMENTS WERE STILL OPERABLE. APPLICABLE TECH SPEC IS TABLE 3.2.A. FOR A PREVIOUS SIMILAR EVENT, REFERENCE LER 2-77-49/3L. INVESTIGATION REVEALED THAT TEMPERATURE ELEMENT, TE-4913D, WAS OUT OF ITS MAIN STEAM LINE DUCT WITH ITS RETAINING BRACKET BENT AND 1 OF ITS 2 MOUNTING SCREWS BROKEN. THE TEMPERATURE ELEMENT WAS REINSTALLED WITH THE EXISTING BRACKET. THE MOUNTING BRACKET WILL BE REPAIRED AND IMPROVED IF NECESSARY DURING THE NEXT REFUEL OUTAGE.

[350] PEACH BOTTOM 2 DOCKET 50-277 LER 83-028
TWO HIGH PRESSURE SERVICE WATER PUMPS OUT OF SERVICE.
EVENT DATE: 122383 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES
VENDOR: ATWOOD & MORRILL CO., INC.

(NSIC 188543) ON 7/20/83, THE 2A HIGH PRESSURE SERVICE WATER PUMP (HPSWP) MOTOR WAS REMOVED FROM SERVICE FOR OVERHAUL. ON 12/23/83, WITH UNIT 2 AT 1080 MW, WHILE PERFORMING SURVEILLANCE TESTING, THE 2B HPSW PUMP WAS DECLARED INOPERABLE DUE TO LOW FLOW CAUSED BY A STUCK OPEN DISCHARGE CHECK VALVE ON THE 2D HPSW PUMP. APPLICABLE TECH SPEC IS 3.5.B.2. REMAINING COMPONENTS OF THE CONTAINMENT COOLING SYSTEM WERE DEMONSTRATED TO BE OPERABLE. ON 12/29/83, THE 2D HPSW PUMP DISCHARGE CHECK VALVE WAS INSPECTED AND THE CAUSE OF THE PROBLEM WAS DETERMINED TO BE INTERNAL WEAR TO THE VALVE DISC PIN AND ARM. THESE PARTS WERE REPLACED AND THE VALVE WAS RETURNED TO SERVICE ON 12/30/83. THE 2A HPSW PUMP MOTOR IS EXPECTED TO BE RETURNED TO SERVICE IN 2/84.

[351] PEACH BOTTOM 3 DOCKET 50-278 LER 83-020
RCIC STEAM SUPPLY LOW PRESSURE ISOLATION SWITCH SETPOINT DRIFTS.
EVENT DATE: 112383 REPORT DATE: 122383 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARKSDALE COMPANY

(NSIC 188544) WHILE AT POWER DURING SURVEILLANCE TESTING, THE REACTOR CORE ISOLATION COOLING (RCIC) TURBINE STEAM SUPPLY LOW PRESSURE ISOLATION SWITCH, PS-3-13-87D, WAS FOUND OUT OF CALIBRATION. ALL REDUNDANT INSTRUMENT CHANNELS WERE OPERABLE. APPLICABLE TECH SPEC IS TABLE 3.2.B. CAUSE OF THE EVENT WAS SETPOINT DRIFT OF THE RCIC LOW PRESSURE ISOLATION SWITCH (BARKSDALE, MODEL: PIH-M340SS-V). THE INSTRUMENT WAS RECALIBRATED, TESTED FOR OPERABILITY, AND RETURNED TO SERVICE.

[352] PEACH BOTTOM 3 DOCKET 50-278 LER 83-022
4 KV EMERGENCY BUS UNDERFREQUENCY RELAY FAILS.
EVENT DATE: 120783 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: RELAYS

(NSIC 188545) WHILE AT POWER DURING SURVEILLANCE TESTING, THE 4 KV EMERGENCY BUS UNDERVOLTAGE RELAY, IAV-127 (GE MODEL #12-IAV-53N1A), FAILED TO OPERATE. AUTO TRANSFER TO AN ALTERNATE SOURCE OF THE 4 KV EMERGENCY BUS ON LOW VOLTAGE WOULD OCCUR WITHIN A MAXIMUM OF 10-15 SECONDS AS A RESULT OF THE ADDITIONAL DEGRADED GRID VOLTAGE RELAYS INSTALLED DURING A RECENT MODIFICATION. APPLICABLE TECH SPEC IS TABLE 3.2.B. CAUSE WAS BINDING OF THE RELAY'S ROTATING DISK DUE TO DUST BUILDUP AS A RESULT OF FIRE PROTECTION MODIFICATION WORK IN THE 4 KV ROOM. ALL 4 KV PROTECTIVE RELAYS WERE CLEANED, TESTED FOR OPERABILITY, AND RETURNED TO SERVICE. PATHWAYS FOR DUST ENTRANCE INTO THE GE IAV RELAYS WILL BE INVESTIGATED BY ENGINEERING.

[353] PEACH BOTTOM 3 DOCKET 50-278 LER 83-023
TORUS LEVEL INDICATOR FAILS.
EVENT DATE: 121383 REPORT DATE: 011284 NSSS: GE TYPE: BWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188678) DURING NORMAL OPERATION, THE TORUS NARROW RANGE LEVEL INDICATOR (LI-9027B) WAS FOUND OUT OF CALIBRATION WHILE PERFORMING A ROUTINE SURVEILLANCE TEST. THE REDUNDANT LEVEL INDICATION AND ALL OTHER TORUS LEVEL INDICATORS WERE OPERABLE DURING THE EVENT. THE APPLICABLE TECH SPEC IS 3.2.F. THE TORUS NARROW RANGE LEVEL INDICATOR, MODEL G.E.-180, COULD NOT BE CALIBRATED TO WITHIN THE REQUIRED ACCURACY. THE LEVEL INDICATOR WAS REPLACED WITH ANOTHER MODEL G.E.-180 INDICATOR, CALIBRATED, AND RETURNED TO SERVICE ON 12/16/83.

[354] PEACH BOTTOM 3 DOCKET 50-278 LER 83-024
MOISTURE SENSOR IN MOSITURE MONITORING SYSTEM FAILS.
EVENT DATE: 121983 REPORT DATE: 011884 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188900) WHILE AT POWER, DURING SURVEILLANCE TESTING, A MOISTURE SENSOR IN THE MOISTURE MONITORING SYSTEM FAILED. SHIFT SUPERVISION IMMEDIATELY INITIATED AN HOURLY MONITORING OF THE DRYWELL SUMP PUMP OUT RATES. INVESTIGATION DETERMINED THE FAILED SENSOR TO BE LOCATED AT WELD 2-BD-14/BPB ON THE 4 INCH 'B' RECIRCULATION PIPING LOOP. PREVIOUS SIMILAR OCCURRENCES 3-83-16/3L. CAUSE OF THE FAILURE WAS A DEFECTIVE TECHMARK LIMITED SENSOR. HOURLY MONITORING OF DRYWELL SUMP WILL CONTINUE WHILE THE SENSOR IS INOPERABLE. THE INOPERABLE SENSOR WILL BE REPLACED DURING THE NEXT SCHEDULED OR FORCED OUTAGE OF SUFFICIENT DURATION WITH THE DRYWELL DEINERTED. SPARE SENSORS ARE AVAILABLE ON SITE.

[355] PILGRIM 1 DOCKET 50-293 LER 82-033 REV 1
UPDATE ON LONG RESPONSE TIME OF NITROGEN PURGE ISOLATION VALVE.
EVENT DATE: 081982 REPORT DATE: 013084 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: ASCO VALVES

(NSIC 188608) ON 8/19/82, THE NITROGEN PURGE ISOLATION VALVE (AO5033B) DID NOT MEET THE TECH SPEC REQUIRED CLOSING TIME OF 10 SECONDS. THIS EVENT OCCURRED AFTER THE INERTING OF THE DRYWELL. THE TECH SPEC REQUIRED REDUNDANT VALVE ISOLATIONS WERE ESTABLISHED AND A CAUSE DETERMINATION STARTED. THIS VALVE WAS THE SUBJECT OF LER #80-065/03L-0, 9/29/80. SIMILAR EVENTS HAVE SUBSEQUENTLY BEEN REPORTED IN LERS 83-21 AND 83-34. THE 3/8" SOLENOID AIR SUPPLY VALVE (SV 5033B) TO AO 5033B WAS DETERMINED TO BE THE CAUSE OF THE EXTENDED CLOSING TIME. THIS

VALVE HAS BEEN REPLACED WITH A 1/2" SOLENOID VALVE WHICH INCREASED THE AIR EXHAUST VOLUME FROM THE VALVE OPERATOR THUS REDUCING THE CLOSING TIME. (PDCR 82-24). THE VALVE WAS TESTED SATISFACTORILY AND RETURNED TO SERVICE. (REF. LER: 83-34/03L-0).

[356] PILGRIM 1 DOCKET 50-293 LER 83-007
LOSS OF OFFSITE POWER OCCURS.
EVENT DATE: 021383 REPORT DATE: 031583 NSSS: GE TYPE: BWR
SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188679) ON 2/13/83 DURING A SHUTDOWN CONDITION, OFFSITE POWER WAS LOST. THE EMERGENCY DIESEL GENERATORS IMMEDIATELY STARTED AS DESIGNED. THE STATION SAFETY-RELATED EQUIPMENT FUNCTIONED AS INTENDED DURING AND AFTER THE SWITCH OVER TO THE DIESELS. LER 82-051 REPORTED A SIMILAR EVENT. THE NRC WAS NOTIFIED VIA ENS. WHILE THE INSULATORS ON THE ISOLATED PORTION OF THE SWITCHYARD WERE BEING WASHED DOWN, OFFSITE POWER TO THE STARTUP TRANSFORMER WAS LOST WHEN THE INSERVICE BREAKERS OPENED AS A RESULT OF A SENSED GROUND FAULT DUE TO SALT ACCUMULATION. POWER WAS RESTORED AFTER THE INSULATORS WERE WASHED DOWN.

[357] PILGRIM 1 DOCKET 50-293 LER 83-012
ATWS CHANNEL ERRONEOUSLY SHOWS HALF TRIP.
EVENT DATE: 031083 REPORT DATE: 040883 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188501) ON 3/10/83, DURING AN ATWS CHANNEL SURVEILLANCE TEST, THE ATWS PANEL INDICATOR LIGHTS SHOWED A HALF TRIP WHEN NO TRIP SIGNAL WAS BEING APPLIED. A VOLUNTARY 14 DAY LCO WAS ENTERED TO INVESTIGATE THIS APPARENT FAULT. DURING THIS TIME, THE REDUNDANT ATWS CHANNEL AND OTHER TECH SPEC REQUIRED SYSTEMS WERE OPERABLE. THE NEON INDICATOR LIGHTS USED IN THE TRIP CIRCUITS HAVE BEEN FOUND TO BE SENSITIVE TO SPURIOUS VOLTAGES THEREBY GIVING AN ERRONEOUS TRIP INDICATION. A CHANGE TO THE ATWS FUNCTIONAL TEST (8.M.1-29) HAS BEEN MADE TO ALLOW A VOLTMETER TO BE USED DURING THE TEST TO REMOVE THE RELIANCE ON THE NEON LIGHTS. A REQUEST FOR ENGINEERING SUPPORT FOR A DESIGN CHANGE TO PROVIDE A MORE POSITIVE CIRCUIT STATUS HAS BEEN INITIATED.

[358] PILGRIM 1 DOCKET 50-293 LER 83-020 REV 1
UPDATE ON IMPROPER POWER/FLOW.
EVENT DATE: 042983 REPORT DATE: 020884 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188901) ON 4/29/83, IT WAS DISCOVERED THAT TECH SPEC 3.11.D AND 4.11.D WERE NOT INCORPORATED INTO PNPS TECH SPECS. IT WAS FOUND THAT THESE TECH SPEC SECTIONS WERE ISSUED WITH AMENDMENT 39 AND INADVERTENTLY DELETED BY AMENDMENT 42. THE UNIT HAD BEEN OFF-LINE CONTINUOUSLY FOR A REFUEL OUTAGE PRIOR TO THE ISSUANCE OF AMENDMENT 39 (1/8/80) AND UNTIL AFTER ISSUANCE OF AMENDMENT 42 (5/12/80). THE NRR OFFICE OF THE NRC WAS NOTIFIED OF THIS EVENT ON 5/2/83. THE MOST PROBABLE CAUSE APPEARS TO BE PERSONNEL ERROR RESULTING FROM THE ADMINISTRATIVE PROCESSING OF TWO SEPARATE REQUESTS FOR TECH SPEC AMENDMENTS ON RELATED TECHNICAL ISSUES. A CHANGE TO PROCEDURE 8.A.23 WAS MADE TO INCORPORATE THE SURVEILLANCE (4.11.D) FOR THE LCO (3.11.D). NRR STATED THAT THE DELETED 3.11.D AND 4.11D WOULD BE FORWARDED WITH A FUTURE TECH SPEC CHANGE.

[359] PILGRIM 1 DOCKET 50-293 LER 83-043
OFFGAS RADIATION MONITOR FAILS DUE TO INSTRUMENT DRIFT.
EVENT DATE: 072283 REPORT DATE: 081783 NSSS: GE TYPE: BWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

VENDOR: GENERAL ELECTRIC CO.

(NSIC 188902) ON JULY 22, 1983, DURING A ROUTINE SURVEILLANCE TEST, OFFGAS RADIATION MONITOR 1705-3A WAS FOUND TO BE OUT OF CALIBRATION IN THE NON-CONSERVATIVE DIRECTION. THE CHANNEL WAS FAILED DOWNSCALE IN ACCORDANCE WITH TECH SPEC 3.2.D.1.B AND A MAINTENANCE REQUEST ISSUED. THE CAUSE OF THE EVENT WAS INSTRUMENT DRIFT. OFFGAS RADIATION MONITOR 1705-3A WAS RECALIBRATED, TESTED SATISFACTORILY AND RETURNED TO SERVICE ON JULY 27, 1983.

[360] PILGRIM 1 DOCKET 50-293 LER 83-062
THREE SECONDARY CONTAINMENT DAMPERS FOUND INOPERABLE.
EVENT DATE: 120583 REPORT DATE: 010484 NSSS: GE TYPE: BWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVE OPERATORS
VENDOR: PACIFIC AIR PRODUCTS

(NSIC 188547) ON 12/5/83, WHILE CONDUCTING THE INSPECTION OF SECONDARY CONTAINMENT DAMPERS, TWO IN SERIES DAMPERS, AO/N-94 AND 95 WERE FOUND TO BE INOPERABLE AFTER THE NYLON DRIVE GEARS BECAME MISALIGNED. A PLANT SHUTDOWN WAS INITIATED PER TECH SPEC 3.7.C.1. THE DAMPERS WERE REPAIRED, SUCCESSFULLY TESTED, DECLARED OPERABLE, AND THE SHUTDOWN WAS TERMINATED. ON 12/6/83, AO/N-90 WAS FOUND INOPERABLE AND THE REDUNDANT DAMPER WAS CLOSED TO SATISFY TECH SPEC 3.7.C.1. DAMPERS AO/N-94 AND 95 WERE REPAIRED BY READJUSTING THE DRIVE GEARS. DAMPER AO/N-90 WAS REPAIRED BY REPLACING THE DRIVE GEAR. LER 81-041 AND 82-041 IDENTIFY SIMILAR OCCURRENCES. ENGINEERING HAS BEEN REQUESTED TO REVIEW THE DESIGN ADEQUACY AND INITIATE AN APPROPRIATE CORRECTIVE ACTION PLAN TO PRECLUDE RECURRENCE. THE SUBJECT DAMPERS ARE MANUFACTURED BY PACIFIC AIR PRODUCTS.

[361] PILGRIM 1 DOCKET 50-293 LER 83-065
HPCI CHECK VALVE FOUND TO HAVE EXCESSIVE LEAKAGE.
EVENT DATE: 121383 REPORT DATE: 010984 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: ANCHOR VALVE CO.

(NSIC 188548) ON 12/13/83, DURING 10CFR50 APPENDIX J LEAK RATE TESTING, THE HPCI EXHAUST CHECK VALVE 2301-45 WAS FOUND TO HAVE LEAKAGE IN EXCESS OF THE ACCEPTANCE CRITERIA LISTED IN TECH SPEC 4.7.A.2.F. PRIMARY CONTAINMENT WAS NOT VIOLATED AS A RESULT OF THIS FAILURE SINCE THE REDUNDANT IN SERIES VALVE MET LLRT ACCEPTANCE CRITERIA. A MAINTENANCE REQUEST HAS BEEN ISSUED TO REPAIR THE VALVE. THE CAUSE OF THE FAILURE AND DETAILS OF THE REPAIR WORK FOR THIS AND ANY OTHER VALVES IDENTIFIED AS A RESULT OF 10CFR50 APPENDIX J TESTING WILL BE PROVIDED IN AN UPDATE TO THIS REPORT.

[362] PILGRIM 1 DOCKET 50-293 LER 83-064
POOL SHIELD PLUGS NOT REMOVED.
EVENT DATE: 121983 REPORT DATE: 123083 NSSS: GE TYPE: BWR
SYSTEM: REACTOR VES. & APPURTENANCES COMPONENT: OTHER COMPONENTS

(NSIC 188502) ON 12/19/83, DURING REFUELING OPERATIONS, THE SHIELD PLUGS SEPARATING THE DRYER/SEPARATOR POOL FROM THE REFUEL CAVITY WERE NOT REMOVED IN ACCORDANCE WITH THE INTENT OF TECH SPEC 3.5.F.5. FUEL MOVEMENT WAS IMMEDIATELY STOPPED AND THE SHIELD PLUGS WERE REMOVED. CAUSE OF THIS EVENT WAS A PROCEDURAL INADEQUACY. PROCEDURE 4.3, "FUEL HANDLING," IS BEING REVISED TO PREVENT RECURRENCE OF THIS EVENT. A SEARCH OF RECORDS INDICATED NO PREVIOUS OCCURRENCE OF A SIMILAR NATURE.

[363] PILGRIM 1 DOCKET 50-293 LER 83-066
FIRE PUMP FAILS TO START.
EVENT DATE: 123083 REPORT DATE: 012684 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188680) WHILE SHUTDOWN FOR REFUELING ON 12/30/83, AND WHILE PERFORMING THE WEEKLY FIRE PUMP TEST, THE ELECTRIC FIRE PUMP WOULD NOT START WITH AUTO INITIATION LOGIC AS REQUIRED BY TECH SPEC 3.12.B.4. THE REDUNDANT DIESEL FIRE PUMP REMAINED OPERABLE. THE CAUSE OF THIS EVENT WAS FROZEN SENSING LINES RESULTING FROM SUBFREEZING TEMPERATURES AND DRAFTS IN THE AREA OF THE LINES. DRAFTS RESULTED FROM THE ROOF PLUGS BEING OUT AND DOORS BEING OPEN TO SUPPORT MAJOR MAINTENANCE IN THE AREA. THE LINES WERE THAWED WITH PORTABLE HEATERS AND PERSONNEL WERE COUNSELED TO KEEP DOORS CLOSED AS MUCH AS POSSIBLE. SEE LER 82-002 FOR A SIMILAR OCCURRENCE.

[364] POINT BEACH 1 DOCKET 50-266 LER 83-002
DIESEL FAILS TO START DURING TESTS.
EVENT DATE: 030983 REPORT DATE: 032283 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: ELECTRO - MOTIVE DIV. OF GM

(NSIC 188486) EDG 3D FAILED TO START WHILE ATTEMPTING TO PERFORM SURVEILLANCE TESTING REQUIRED BY TECH SPEC 15.4.6.A.1. UPON INVESTIGATION, THE FUEL RACK WAS FOUND TO BE IN THE LOW FUEL POSITION. THE FUEL INJECTOR LEVER WAS EXERCISED BY HAND AND A START AND TEST RUN WAS CONDUCTED SATISFACTORILY. REDUNDANT EDG 4D WAS OPERABLE DURING THE EVENT. START FAILURE WAS ATTRIBUTED TO THE ENGINE GOVERNOR NOT RETURNING TO ITS NORMAL START POSITION AFTER THE COMPLETION OF THE SHUTDOWN SIGNAL TIMING SEQUENCE FROM THE PREVIOUS TEST RUN OF 3/2/83. THIS WOODWARD TYPE UG8 GOVERNOR WAS MANUALLY RETURNED TO ITS NORMAL START POSITION. THIS UNIT WILL BE REPLACED. IN THE INTERIM, A SPECIAL MAINTENANCE PROCEDURE IS IN EFFECT TO ENSURE THE GOVERNOR RETURNS TO ITS NORMAL START POSITION AFTER THE DIESEL IS SHUT DOWN.

[365] POINT BEACH 1 DOCKET 50-266 LER 83-005
NO POWER TO PORV.
EVENT DATE: 062883 REPORT DATE: 072283 NSSS: WE TYPE: PWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: HEINEMANN ELECTRIC CO.

(NSIC 188841) WHILE AT NORMAL POWER AT 1430 HOURS ON 6/28/83, UNIT 1 CONTROL OPERATOR DISCOVERED 1PORV-430 HAD NO POSITION INDICATION ON THE MAIN CONTROL BOARD. INVESTIGATIONS REVEALED THAT A MOLDED CIRCUIT BREAKER WAS OPEN. LOSS OF POWER THROUGH THIS BREAKER ALSO CAUSES LOSS OF POWER TO THE SOLENOID FOR THE VALVE OPERATOR, LEAVING THE REDUNDANT PORV AND 2 CODE SAFETIES TO SERVE RCS RELIEF FUNCTIONS THROUGH THE PRESSURIZER. TECH SPEC TABLE 15.3.5-5, ITEM 1, REQUIRES INDICATION FOR THIS VALVE. THE CAUSE OF THE BREAKER BEING OPEN IS UNKNOWN. UPON DISCOVERY, THE BREAKER WAS RECLOSED AND INDICATION TO 1PORV-430 WAS RESTORED AT 1427 HOURS. A REVIEW OF SHIFT TURNOVER LOGS REVEALED THE VALVE DID HAVE POWER AND POSITION INDICATION ON THE PREVIOUS SHIFT AND SURVEILLANCE SINCE THE EVENT HAS SHOWN NO FURTHER ANOMALIES.

[366] POINT BEACH 1 DOCKET 50-266 LER 83-009
THREE CONTAINMENT ISOLATION VALVES LEAK.
EVENT DATE: 100183 REPORT DATE: 101083 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES

(NSIC 188729) DURING AN INITIAL REVIEW OF REFUELING LEAKAGE TESTS OF CONTAINMENT ISOLATION VALVES ON 10/07/83, THREE VALVES WERE DISCOVERED TO HAVE LEAKAGE SUCH

THAT THE LIMIT IN TECH SPEC WOULD HAVE BEEN EXCEEDED. THE 3 VALVES INCLUDE THE CONTAINMENT PURGE EXHAUST VALVE (3212), THE CONTAINMENT PURGE SUPPLY VALVE (3245) AND THE CHARGING LINE CHECK VALVE (370). THE PURGE SUPPLY AND EXHAUST VALVES ARE 36", 9200 SERIES, "T" RING MILLER BUTTERFLY VALVES. THE PURGE EXHAUST VALVE WAS TESTED ON 10/01/83 AND FOUND TO LEAK AT 470 SCCM WHEN PRESSURIZED TO 84.25 PSIA. HOWEVER, IT APPEARS THAT AN INFLATABLE VALVE SEAL WAS LEAKING. THUS, THE VALIDITY OF THE TEST IS QUESTIONABLE. THE PURGE SUPPLY VALVE WAS ALSO LEAK TESTED ON 10/01/83. PRESSURIZATION TO THE REQUIRED TEST PRESSURE COULD NOT BE OBTAINED (I.E., 60 PSIG). THE VALVE WAS FOUND TO LEAK AT 105 SLPM AT A MAXIMUM OBTAINABLE PRESSURE OF 63.6 PSIA. APPARENTLY, THE VALVE WAS NOT PROPERLY SEATED. THE THIRD VALVE, THE CHARGING LINE CHECK VALVE, WAS TESTED ON 10/07/83. PRESSURIZATION TO THE REQUIRED TEST PRESSURE COULD NOT BE ACHIEVED.

[367] POINT BEACH 2 DOCKET 50-301 LER 83-011
RHR PUMP HAS HIGH BEARING VIBRATION.
EVENT DATE: 081783 REPORT DATE: 091683 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: PUMPS
VENDOR: PACIFIC PUMPS

(NSIC 186848) DURING NORMAL OPERATION, INSERVICE TEST IT-04 WAS CONDUCTED TO DETERMINE THE OPERABILITY OF THE RHR PUMPS. AS A RESULT OF THIS TEST, RHR PUMP 2P10B WAS DECLARED OUT OF SERVICE DUE TO HIGH BEARING VIBRATION LEVELS. THIS PLACED THE UNIT INTO A DEGRADED MODE OF OPERATION PERMITTED BY THE LIMITING CONDITION DEFINED IN TECH SPEC 15.3.3.A.3.A. THE CAUSE OF THE HIGH VIBRATIONS IS UNCERTAIN AT THIS TIME. SOME BEARING ROUGHNESS WAS NOTED UPON DISASSEMBLY OF THE PUMP. CORRECTIVE ACTION CONSISTED OF REPLACEMENT OF THE FAILED PUMP.

[368] PRAIRIE ISLAND 1 DOCKET 50-282 LER 83-001
REANALYSIS INDICATES POSSIBLE HIGH CLADDING TEMPERATURE FOLLOWING A LOCA.
EVENT DATE: 020483 REPORT DATE: 021883 NSSS: WE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188497) AN ERROR WAS DISCOVERED IN THE EXXON LOCA-ECCS ANALYSIS WHICH RESULTS IN AN INCREASE IN PEAK CLAD TEMPERATURE OF 13 F. EXXON INFORMED NSP THAT AN ERROR IN THE INPUT TO ONE OF THE CODES USED IN THE ECCS ANALYSIS SUPPORTING CURRENT OPERATION IN BOTH PRAIRIE ISLAND UNITS WAS DISCOVERED. THIS ERROR RESULTED IN AN INCREASE IN PEAK CLAD TEMPERATURE (PCT) OF 13 F. CURRENT ANALYSIS INDICATES PCT VALUES GREATER THAN 2190 F, WHICH MEANS LESS THAN 13 F MARGIN WAS AVAILABLE TO THE 2200 F LIMIT. WITH THE 13 F ERROR IN PCT INCLUDED, EXXON ANALYSIS SHOWS THAT OVER A MAJOR PORTION OF FUEL EXPOSURES SUFFICIENT PCT MARGIN EXISTS TO ACCOMMODATE THE PRESENT F LIMIT OF 2.21. THE EXCEPTIONS TO THIS STATEMENT ARE EXXON STANDARD FUEL AT GREATER THAN 47,000 MWD/MTU PEAK PELLET BURNUP AND EXXON TOPROD FUEL AT BEGINNING OF LIFE. EXXON ALSO STATES THAT A 1% REDUCTION IN THE F LIMIT WILL ASSURE THAT THE 2200 F WILL NOT BE EXCEEDED BY ANY FUELS IN THE CORE. (CALCULATIONS INDICATE A 1% REDUCTION WILL REDUCE PCT BY 18 F.) EXXON CONCLUDES THAT OPERATION OF THE CURRENT CYCLES WITH THE 1% REDUCTION OF F(SUB Q) IS WITHIN ACCEPTABLE ECCS EVALUATION CRITERIA.

[369] PRAIRIE ISLAND 1 DOCKET 50-282 LER 83-012
LOW ACCUMULATOR LEVEL.
EVENT DATE: 051583 REPORT DATE: 061483 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188498) DURING A DRAINING OPERATION TO REACH A DESIRED LEVEL IN NO. 12 ACCUMULATOR, THE LEVEL WAS ALLOWED TO DECREASE TO 1245 CUBIC FEET, BELOW THE TECH SPEC LIMIT OF 1250 CUBIC FEET. TECH SPEC 3.3.A.1.B APPLIES. REDUNDANT EQUIPMENT WAS OPERABLE. NOT REPETITIVE. PERSONNEL OVERSIGHT WAS THE CAUSE. OPERATOR PERFORMING THE DRAINING OPERATION WAS BRIEFLY DISTRACTED BY ANOTHER CONTROL ROOM

ANNUNCIATOR. WHEN DISCOVERED, THE LEVEL WAS IMMEDIATELY RETURNED TO WITHIN LIMITS. INVOLVED PERSONNEL WILL REVIEW THIS EVENT.

[370] PRAIRIE ISLAND 2 DOCKET 50-306 LER 83-006
AFW PUMP FAILS TO START.
EVENT DATE: 040883 REPORT DATE: 050683 NSSS: WE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: RELAYS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188504) DURING SURVEILLANCE TEST, ONE RELAY WHICH STARTS NO. 21 MOTOR-DRIVEN AUXILIARY FEEDWATER PUMP ON A LOW-LOW LEVEL IN NO. 21 STEAM GENERATOR WAS FOUND FAILED. THE RELAY HAD APPARENTLY FILED AS A RESULT OF TESTING IN MARCH. TECH SPEC TABLE 3.5-3 ITEM 3 APPLIES. RECENT SIMILAR EVENT WAS RO 81-20. RELAY COIL FAILURE IN A WESTINGHOUSE NBFD RELAY STYLE #1271C50G01. COIL WAS IMMEDIATELY REPLACED. LATER, ALL NBFD RELAYS IN UNIT 2 AUXILIARY FEEDWATER PUMP CIRCUITS WERE REPLACED WITH BFD RELAYS.

[371] PRAIRIE ISLAND 2 DOCKET 50-306 LER 83-008
TURBINE STOP VALVE FAILS TO OPEN.
EVENT DATE: 041083 REPORT DATE: 051083 NSSS: WE TYPE: PWR
SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: VALVES
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188505) DURING SURVEILLANCE TEST IN WHICH THE TURBINE RIGHT HAND STOP VALVE WAS STROKED CLOSED, THE VALVE FAILED TO REOPEN. NOT REPETITIVE. THE UNIT WAS LIMITED TO 70% POWER UNTIL APR. 15TH WHEN THE UNIT WAS SHUTDOWN TO REPAIR THE VALVE. VALVE DISC HAD SEPARATED FROM THE CLAPPER ARM; DISC STEM WAS FRACTURED. VALVE WAS REPAIRED AND RETURNED TO SERVICE AND WILL BE REPLACED AT THE NEXT REFUELING THIS SUMMER. LEFT-HAND STOP VALVE WAS ALSO INSPECTED.

[372] PRAIRIE ISLAND 2 DOCKET 50-306 LER 83-013
COOLANT SYSTEM IODINE ACTIVITY FOLLOWING SCRAM.
EVENT DATE: 052083 REPORT DATE: 061783 NSSS: WE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188507) FOLLOWING A REACTOR TRIP, A SPIKE OCCURRED IN RCS ACTIVITY UP TO 1.88 MICRO CURIE/GM DOSE EQUIVALENT I-131. RECENT SIMILAR EVENT WAS RO 83-9. UNIT 2 PRIMARY COOLANT SPECIFIC ACTIVITY PRIOR TO MAY 20, 1983 WAS AT AN EQUILIBRIUM VALUE OF APPROXIMATELY 1.3X10(-2) MICRO CURIE/GM DOSE EQUIVALENT IODINE-131. AT ABOUT 1430 HOURS ON MAY 20, 1983 THE REACTOR TRIPPED. WHILE THE REACTOR WAS AT HOT STANDBY A SAMPLE OF THE RCS PRIMARY COOLANT ACTIVITY INDICATED THAT AN ACTIVITY INCREASE TO 1.88 MICRO CURIE/GM DOSE EQUIVALENT IODINE-131 HAD OCCURRED. WASHOUT OF FISSION PRODUCTS FROM EXISTING FUEL PIN DEFECTS FOLLOWING REACTOR TRIP. UNIT 2 HAD BEEN OPERATING SINCE MID-MARCH, 1983 WITH KNOWN FUEL DEFECTS (ESTIMATED TO BE ONLY 1 LEAKING FUEL PIN). THE ACTIVITY INCREASE IS BELIEVED TO BE CAUSED BY WASHOUT OF FISSION PRODUCTS FROM THE EXISTING DEFECTS FOLLOWING THE TRIP. THERE IS NO EVIDENCE OF NEW DEFECTS BEING FORMED AS A RESULT OF THIS TRANSIENT.

[373] PRAIRIE ISLAND 2 DOCKET 50-306 LER 83-015
RCS IODINE SPIKE AFTER SHUTDOWN.
EVENT DATE: 060983 REPORT DATE: 070883 NSSS: WE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188506) FOLLOWING A REACTOR SHUTDOWN, A SPIKE OCCURRED IN RCS ACTIVITY UP TO 3.18 MICRO CURIE/GM DOSE EQUIVALENT I-131. RECENT SIMILAR EVENT WAS RO 83-13. UNIT 2 PRIMARY COOLANT SPECIFIC ACTIVITY PRIOR TO JUNE 9, 1983 WAS AT AN

EQUILIBRIUM VALUE OF APPROXIMATELY 1.4 X 10(-2) MICRO CURIE/GM DOSE EQUIVALENT IODINE-131. AT ABOUT 0001 HOURS ON JUNE 9, 1983 THE REACTOR WAS SHUT DOWN TO REPAIR LEAKING S/G MANWAYS. WHILE THE REACTOR WAS AT HOT SHUTDOWN A SAMPLE OF THE RCS PRIMARY COOLANT ACTIVITY INDICATED THAT AN ACTIVITY INCREASE TO 3.18 MICRO CURIE/GM DOSE EQUIVALENT IODINE-131 HAD OCCURRED. UNIT 2 HAD BEEN OPERATING SINCE MID-MARCH, 1983 WITH KNOWN FUEL DEFECTS (ESTIMATED TO BE ONLY 1 LEAKING FUEL PIN). THE ACTIVITY INCREASE IS BELIEVED TO BE CAUSED BY WASHOUT OF FISSION PRODUCTS FROM THE EXISTING DEFECTS FOLLOWING THE SHUTDOWN. THERE IS NO EVIDENCE OF NEW DEFECTS BEING FORMED AS A RESULT OF THIS TRANSIENT.

[374] PRAIRIE ISLAND 2 DOCKET 50-306 LER 83-017
CONTAINMENT ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 071283 REPORT DATE: 081183 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: VALVES
VENDOR: CONTROMATICS CORP.

(NSIC 188856) DURING SURVEILLANCE TEST, CV-31642, CONTAINMENT AIR SAMPLE INLET ISOLATION VALVE, FAILED TO FULLY CLOSE ON DEMAND. TECH SPEC 3.6.A.6 APPLIES. SIMILAR EVENT WAS RO 82-12. APPARENT INACCURACY IN MACHINING OF THE HARD VALVE SEATS IN A 1" CONTROMATICS P. P. SW VALVE. VALVE SEATS WERE REPLACED WITH THOSE OF A MORE RESILIENT MATERIAL AND THE VALVE TESTED SATISFACTORILY. REPLACEMENT OF VALVE SEATS IN SIMILAR VALVES IS CONTEMPLATED.

[375] QUAD CITIES 1 DOCKET 50-254 LER 83-009
RCIC FLOW SWITCH SETPOINT DRIFTS.
EVENT DATE: 022283 REPORT DATE: 031783 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188470) WHILE PERFORMING QIS-18 (STEAM LINE HIGH FLOW RCIC ISOLATION SURVEILLANCE) ON FEB. 22, 1983, AT 1400 HOURS, IT WAS DISCOVERED THAT DPIS 1-1360-1A WOULD NOT TRIP IN THE NEGATIVE DIRECTION AS REQUIRED BY TECH SPEC TABLE 3.2.1. A TRIP IN THE NEGATIVE DIRECTION WILL CAUSE AN RCIC ISOLATION DUE TO A BREAK OF THE CELL'S HIGH PRESSURE REFERENCE LEG. A TRIP IN THE POSITIVE DIRECTION PROVIDES AN RCIC ISOLATION DUE TO A DOWNSTREAM RCIC STEAM LINE BREAK. THE TRIP IN THE POSITIVE DIRECTION WAS CALIBRATED AND FOUND TO BE WITHIN LIMITS. HAD EITHER EVENT OCCURRED, THE REDUNDANT DPIS 1-1360-1B AND PS 1-1360-9A THROUGH 0 WOULD HAVE PERFORMED THE ISOLATION FUNCTION OF THE RCIC SYSTEM AS DESIGNED. THUS SAFE OPERATION OF THE PLANT WAS MAINTAINED. UPON INSPECTION OF DPIS 1-1360-1A, IT WAS FOUND THAT THE INSTRUMENT SETPOINT HAD DRIFTED ABOVE THE PHYSICAL "STOPS". THE SWITCH WAS RECALIBRATED AND TESTED SATISFACTORILY. ALL OF THE REMAINING SWITCHES WERE TESTED SATISFACTORILY. NO FURTHER CORRECTIVE ACTION WAS DEEMED NECESSARY.

[376] QUAD CITIES 1 DOCKET 50-254 LER 83-010
REFUEL FLOOR RADIATION MONITOR GIVES ERRONEOUS SIGNAL.
EVENT DATE: 022483 REPORT DATE: 032283 NSSS: GE TYPE: BWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: RELAYS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188471) AT 0155 HOURS, ON FEB. 24, 1983, THE REACTOR BUILDING AND CONTROL ROOM VENTILATION SYSTEMS ISOLATED AND STANDBY GAS TREATMENT AUTO-STARTED DUE TO AN APPARENT SPIKE IN THE REFUEL FLOOR RADIATION MONITORS. THE MONITORS WERE FOUND TO BE INDICATING NORMAL. THE TRIP OCCURRED AGAIN AND COULD NOT BE RESET. THE MONITORS WERE INDICATING NORMAL. THE VENTILATION SYSTEMS TRIPPED AND STANDBY GAS TREATMENT SYSTEM AUTO-STARTED; THUS, THE SYSTEM OPERATED AS DESIGNED. THERE WAS NO POTENTIAL FOR AN UNCONTROLLED RELEASE OF RADIOACTIVE MATERIAL TO THE ENVIRONMENT. THE CAUSE OF THIS OCCURRENCE WAS A FAILURE OF RELAY COIL 1705-108

AND THE SUBSEQUENT FAILURE OF RELAY COIL 1705-107. THE FAILED COILS CAUSED THE RELAYS TO TRIP IN A FAIL-SAFE CONDITION. THE COILS WERE REPLACED WITH UPGRADED VOLTAGE RATED COILS. THERE HAVE BEEN PAST INSTANCES OF COIL FAILURES IN THIS TYPE OF RELAY, HOWEVER THIS CORRECTIVE ACTION HAS BEEN DEEMED ADEQUATE AT THIS TIME TO PREVENT RECURRENCE.

[377] QUAD CITIES 1 DOCKET 50-254 LER 83-048
STACK RADIATION MONITOR INOPERABLE.
EVENT DATE: 122983 REPORT DATE: 012584 NSSS: GE TYPE: BWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188672) ON DECEMBER 29, 1983, RESULTS OF THE CHIMNEY EFFLUENT RADIONUCLIDE ANALYSIS WERE FOUND TO BE SUBSTANTIALLY LESS THAN NORMAL. AN INSPECTION REVEALED THAT THE CHIMNEY SAMPLE LINE WAS PLUGGED, RENDERING THE CHIMNEY GAS SAMPLE SYSTEM INOPERABLE. A GSEP UNUSUAL EVENT WAS DECLARED, AND LOAD WAS HELD STEADY AS REQUIRED BY TECH SPEC 3.8.G.2. THE TURBINE BUILDING AND OFF-GAS SAMPLES WERE USED TO DETERMINE RELEASE RATES. THE OFF-GAS RADIATION MONITORS WERE OPERABLE AND CAPABLE OF ISOLATING THE OFF-GAS SYSTEM. EXTREME SUB-ZERO TEMPERATURES APPARENTLY CAUSED THE POWER CABLE TO THE SAMPLE LINE HEAT TRACING TO BREAK. MOISTURE IN THE SAMPLE LINE EVENTUALLY CAUSED ICE BLOCKAGES IN THE TWO SECTIONS OF SAMPLE LINE EXPOSED TO THE OUTSIDE ENVIRONMENT. THE POWER CABLE WAS REPLACED, AND ADDITIONAL HEAT TRACING AND INSULATION WAS INSTALLED. THE SAMPLE SYSTEM WAS DECLARED OPERABLE AT 6:03 P.M. ON DECEMBER 30, 1983. THIS ACTION IS DEEMED ADEQUATE TO PREVENT FURTHER OCCURRENCES.

[378] QUAD CITIES 2 DOCKET 50-265 LER 83-018 REV 1
UPDATE ON CRACK IN REACTOR WATER CLEANUP PIPES.
EVENT DATE: 101183 REPORT DATE: 020284 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: PIPES,FITTINGS
VENDOR: BABCOCK & WILCOX COMPANY

(NSIC 188605) ON OCTOBER 11, 1983, ULTRASONIC EXAMINATIONS OF THE REACTOR CLEANUP SYSTEM PIPING WELDS WERE BEING PERFORMED AS REQUIRED BY THE INSERVICE INSPECTION PROGRAM, AND THE NRC CONFIRMATORY ORDER. A 1 1/4-INCH LONG, 20% THRU-WALL LINEAR INDICATION WAS DISCOVERED IN WELD 12S-S27, WHICH IS LOCATED OUTSIDE THE PRIMARY CONTAINMENT BETWEEN THE PENETRATION AND THE OUTBOARD CONTAINMENT ISOLATION VALVE. THE LINEAR INDICATION WAS LOCATED BETWEEN THE CONTAINMENT ISOLATION VALVES, AND COULD HAVE BEEN ISOLATED FROM THE REACTOR AND THE CLEANUP SYSTEM IF NECESSARY. THE CAUSE OF THIS OCCURRENCE IS POSTULATED AS BEING INTERGRANULAR STRESS CORROSION CRACKING. THE EXISTING WELDS AND ELBOW WERE CUT OUT. NEW PIPING AND ELBOW WITH A LOW CARBON CONTENT, AS WELL AS HEAT-SINK WELDING TECHNIQUES, WERE USED TO REPLACE THE AFFECTED PIPING. ALL NONDESTRUCTIVE TESTING RESULTS WERE SATISFACTORY. NO FURTHER CORRECTIVE ACTION IS DEEMED NECESSARY.

[379] QUAD CITIES 2 DOCKET 50-265 LER 83-021 REV 4
UPDATE ON RECIRCULATION SYSTEM PIPES EXPERIENCE INTEGRANULAR STRESS CORROSION CRACKING.
EVENT DATE: 102783 REPORT DATE: 121383 NSSS: GE TYPE: BWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PIPES,FITTINGS
VENDOR: DRAVO, INC.

(NSIC 188674) ON DECEMBER 12, 1983, WHILE REVIEWING ULTRASONIC TEST DATA TAKEN TO COMPLY WITH THE INSPECTION ORDER FOR ALL LARGE BORE STAINLESS STEEL PIPES, THREE LINEAR INDICATIONS WERE IDENTIFIED. WELD 02AS-F14 AND WELD 02AS-S12, BOTH 28 INCH PIPE-TO-ELBOW WELDS ON THE 'A' RECIRCULATION PUMP SUCTION PIPING, AND WELD 02A-S10, A 22 INCH PIPE-TO-CAP WELD ON THE RECIRCULATION RING HEADER, WERE FOUND TO HAVE CIRCUMFERENTIAL LINEAR INDICATIONS IN THE HEAT-AFFECTED ZONE OF THE WELDS. THE SLOW GROWTH RATE OF THESE INDICATIONS COMBINED WITH THE REDUCED

ALLOWABLE CONTAINMENT LEAKAGE RATE WOULD HAVE BEEN SUFFICIENT TO READILY IDENTIFY ANY POSSIBLE LEAKAGE AND PRECLUDE A GROSS FAILURE. THE CAUSE OF THIS OCCURRENCE IS POSTULATED AS BEING INTEGRANULAR STRESS CORROSION CRACKING. FURTHER ANALYSES ARE BEING PERFORMED TO DETERMINE THE CORRECTIVE ACTION TO BE TAKEN. A SUPPLEMENTAL REPORT WILL BE SUBMITTED FOLLOWING REPAIRS.

[380] QUAD CITIES 2 DOCKET 50-265 LER 83-024 REV 1
UPDATE ON 7 OF 24 SNUBBERS FAIL FUNCTIONAL TEST.
EVENT DATE: 120183 REPORT DATE: 011184 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: PACIFIC SCIENTIFIC COMPANY

(NSIC 188606) WHILE PREPARING THE OPERATING CYCLE FUNCTIONAL TEST OF SAFETY-RELATED MECHANICAL SNUBBERS, AN ADDITIONAL SEVEN SNUBBERS FAILED THE FUNCTIONAL TEST. THESE SNUBBERS WERE PART OF THE 100 PERCENT OF MECHANICAL SNUBBERS TESTED. SINCE ALL MECHANICAL SNUBBERS WERE TESTED, TECH SPEC 4.6.1.3 WAS SATISFIED. AT NO TIME WERE THESE SNUBBERS CONSIDERED INOPERABLE. ALTHOUGH THESE SNUBBERS FAILED THE FUNCTIONAL TEST, THEY WOULD HAVE PERFORMED THEIR DESIGN FUNCTION OF DAMPENING ANY EXCESSIVE PIPE MOVEMENT. THE CAUSE OF THESE SNUBBERS FAILING TO MEET THE ACCEPTANCE CRITERIA OF THE FUNCTIONAL TEST WILL NOT BE KNOWN UNTIL THESE SNUBBERS HAVE BEEN DISASSEMBLED AND INSPECTED. A SUPPLEMENT WILL BE SUBMITTED AT THAT TIME. THESE SNUBBERS WILL BE REPAIRED OR REPLACED WITH NEW, LIKE-FOR-LIKE, MECHANICAL SNUBBERS. THESE NEW SNUBBERS WILL BE FUNCTIONALLY TESTED PRIOR TO INSTALLATION.

[381] QUAD CITIES 2 DOCKET 50-265 LER 83-025
TWO CHECK VALVES LEAK.
EVENT DATE: 122983 REPORT DATE: 012584 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES
VENDOR: VOGT, HENRY MACHINE COMPANY

(NSIC 188743) ON DECEMBER 29, 1983, WHILE PERFORMING THE RHR SERVICE WATER VAULT SUMP DISCHARGE CHECK VALVE TEST, QTS 170-4, OUTBOARD CHECK VALVE CV 2-3999-516C ON THE SOUTH VAULT SUMP AND INBOARD CHECK VALVE CV 2-3999-515A ON THE NORTH VAULT SUMP WERE FOUND TO LEAK EXCESSIVELY. THE TEST WAS PERFORMED TO COMPLY WITH THE REQUIREMENTS OF TECH SPEC 4.5.H. THE REDUNDANT CHECK VALVE IN EACH LINE WAS TESTED SATISFACTORILY AND MANUAL VALVES ARE AVAILABLE FOR ISOLATION PURPOSES. THE CAUSE OF THIS OCCURRENCE WAS A BUILDUP OF DIRT AND OTHER FOREIGN MATTER IN THE CHECK VALVE INTERNALS. THE CHECK VALVES WERE CLEANED AND REASSEMBLED. THE RHR SERVICE WATER VAULT SUMP DISCHARGE CHECK VALVE TEST, QTS 170-4, WAS SUCCESSFULLY PERFORMED AFTER THE CHECK VALVES WERE REPAIRED. THERE HAS BEEN ONE PREVIOUS FAILURE OF THESE CHECK VALVES ON UNIT ONE IN NOVEMBER 1982.

[382] RANCHO SECO DOCKET 50-312 LER 83-003
REACTOR TRIP AND SFAS TRIP RELAYS NOT TESTED.
EVENT DATE: 011183 REPORT DATE: 020983 NSSS: BW TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188685) PROCEDURE TO TEST THE RPS MASTER REACTOR TRIP RELAY KA (AS SHOWN IN FIGURE 7.1-1 OF THE FSAR) AND THE SFAS ANALOG CHANNEL LOGIC BUFFER TRIP RELAY WERE DETERMINED NOT TO MEET THE TECH SPEC REQUIREMENTS FOR FREQUENCY. INVESTIGATION BY THE PLANT REVIEW COMMITTEE DETERMINED THAT THE SYSTEMS WERE FUNCTIONAL. THE TECH SPEC WILL BE REWRITTEN TO PERMIT THE KA RELAY TO BE TESTED ON A REFUELING INTERVAL RATHER THAN A MONTHLY INTERVAL AND PROCEDURE I-200 WILL BE REWRITTEN TO PROPERLY TEST THE SFAS ANALOG CHANNEL LOGIC BUFFER TRIP RELAY.

[383] RANCHO SECO DOCKET 50-312 LER 83-037 REV 1
UPDATE ON DECAY HEAT EMERGENCY SUMP VALVE FAILING TO OPEN.
EVENT DATE: 100883 REPORT DATE: 010584 NSSS: BW TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
VENDOR: DARLING VALVE & MFG CO.

(NSIC 188330) ON OCTOBER 8, 1983 WHILE PERFORMING SURVEILLANCE TEST SP 203.06A, VALVE HV-26105 MOTOR OPERATOR TORQUED OUT AND WOULD NOT OPEN THE VALVE. THIS VALVE IS THE A DECAY HEAT TRAIN EMERGENCY SUMP VALVE. THE B DECAY HEAT TRAIN VALVE REMAINED OPERABLE. THE DISTRICT HAS INVESTIGATED THIS EVENT AND HAS CONCLUDED THAT NO PROBLEMS EXIST WITH THE VALVE ITSELF. THE MOST LIKELY CAUSE IS A COMBINATION OF A LOW TORQUE SWITCH SETTING, BYPASS SWITCH SETTING, AND A POSSIBLE SEAL FORMED BETWEEN THE DISC AND ITS SEAT DUE TO CONTACT WITH BORATED WATER ON ONE SIDE OF THE VALVE. THE SWITCHES WERE READJUSTED AND THE VALVE WILL BE STROKED MONTHLY UNTIL ITS NEXT REGULARLY SCHEDULED QUARTERLY SURVEILLANCE.

[384] RANCHO SECO DOCKET 50-312 LER 83-039
PRESSURIZER LEVEL INSTRUMENTS DISAGREE.
EVENT DATE: 121483 REPORT DATE: 122783 NSSS: BW TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ROSEMOUNT, INC.

(NSIC 188331) ON DECEMBER 14, DURING A REVIEW OF SURVEILLANCE PROCEDURES, AN AUDITOR NOTED THAT SHIFT DATA OBTAINED FOR PRESSURIZER LEVEL DID NOT SATISFY THE SURVEILLANCE ACCEPTANCE CRITERIA. THE REQUIREMENT WAS THAT CHANNELS AGREE WITHIN 6 INCHES. THEY WERE, HOWEVER, WITHIN 13 INCHES. THIS CONDITION EXISTED FOR A PERIOD OF SEVERAL DAYS. FOUR AREAS WERE IDENTIFIED THAT REQUIRE CORRECTIVE MEASURES. 1) TRAINING IN TECH SPEC REQUIREMENTS FOR ENGINEERS RESPONSIBLE FOR REVIEW OF SURVEILLANCES. 2) REVISION OF SURVEILLANCES TO HIGHLIGHT TECH SPEC ITEMS. 3) REVISE WORK REQUEST PROCEDURE TO EXPEDITE LCO ITEMS. 4) REVIEW LCO WORK REQUEST AT MORNING MEETINGS.

[385] RANCHO SECO DOCKET 50-312 LER 83-041
LACK OF COOLING TO AFW PUMP TURBINE BEARINGS.
EVENT DATE: 122083 REPORT DATE: 012084 NSSS: BW TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: TURBINES
VENDOR: INTERNATIONAL SWITCHBOARD CORP.

(NSIC 188508) ON DEC. 20, 1983, DURING A PLANT TOUR, A VALVE ON A 1/4" LINE SUPPLYING COOLING WATER TO THE AUXILIARY FEEDWATER PUMP TURBINE BEARINGS AND GOVERNOR WAS FOUND CLOSED. UPON INVESTIGATION, IT WAS DETERMINED THAT THIS VALVE DID NOT APPEAR ON ANY VALVE LINEUPS IN THE AFW OPERATING PROCEDURE NOR IN ANY SURVEILLANCES. THE SYSTEM WAS NOT CHALLENGED AND THE DISTRICT CONSIDERS THE PUMP OPERABLE. THIS VALVE IS A SMALL VALVE INCLUDED BY THE MANUFACTURER IN THE PACKAGE AND WAS APPARENTLY OVERLOOKED DURING THE DEVELOPMENT OF VALVE LISTS AND LINEUPS. THE VALVE WAS TAGGED AND THE PROCEDURES REVISED TO POSITION THE VALVE OPEN. ALSO, THE STA'S WILL LOOK FOR SUCH VALVES DURING THEIR PLANT TOURS. A TEST WILL BE RUN ON THE TURBINE TO VERIFY OPERABILITY WITH NO COOLING FLOW.

[386] ROBINSON 2 DOCKET 50-261 LER 83-032
PRESSURIZER PORV FAILS TO MEET REQUIRED CYCLE TIME.
EVENT DATE: 110483 REPORT DATE: 010584 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: VALVES
VENDOR: COPES-VULCAN, INC.

(NSIC 188315) ON NOVEMBER 4, 1983, AT 0130 HOURS, WITH THE UNIT AT 0% POWER, DURING TESTING OF THE PRESSURIZER POWER OPERATED RELIEF VALVES (PORVS), VALVE PORV-456 FAILED TO MEET THE REQUIRED CYCLE TIME. THE LOW TEMPERATURE

OVERPRESSURE PROTECTION SYSTEM (LTOP) WAS PLACED IN SERVICE AT 0200 HOURS ON NOVEMBER 4, 1983. THIS RESULTED IN A DEGRADED MODE PERMITTED BY TECH SPEC 3.1.2.1.D AND IS REPORTED PURSUANT TO TECH SPEC 6.9.2.B.2. THE REDUNDANT PORV WAS OPERABLE. THE REPORTABILITY OF THIS ITEM WAS NOT RECOGNIZED UNTIL DECEMBER 6, 1983. WHILE THE UNIT WAS IN COLD SHUTDOWN, THE LIMIT SWITCH ON PORV-456 WAS ADJUSTED, AND A SMALL AIR LEAK WAS REPAIRED ON THE OPERATING DIAPHRAGM. PORV-456 WAS THEN SUCCESSFULLY TESTED. THE PROBABLE CAUSE OF NOT MEETING THE REQUIRED CYCLE TIME WAS THE LIMIT SWITCH NEEDING ADJUSTMENT.

[387] ROBINSON 2 DOCKET 50-261 LER 83-029
LEVEL TRANSMITTER FOR A SAFETY INJECTION ACCUMULATOR FOUND TO BE OUT OF CALIBRATION.
EVENT DATE: 112283 REPORT DATE: 122183 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MASONEILAN INTERNATIONAL, INC.

(NSIC 188314) ON NOVEMBER 22, 1983, WITH THE UNIT SHUT DOWN FOR A STEAM GENERATOR INSPECTION OUTAGE, A LEVEL TRANSMITTER (LT-928) FOR A SAFETY INJECTION ACCUMULATOR WAS FOUND TO BE OUT OF CALIBRATION DURING THE ANNUAL INSTRUMENT CALIBRATION. THE CAUSE OF FAILURE IS ATTRIBUTED TO INSTRUMENT DRIFT. THIS EVENT COULD HAVE POTENTIALLY RESULTED IN TECH SPEC 3.3.1.1.C BEING EXCEEDED AND IS REPORTED PURSUANT TO 6.9.2.B.1. ALTHOUGH THE POTENTIAL EXISTED FOR THE VOLUME OF WATER TO BE SLIGHTLY LESS THAN THE REQUIRED AMOUNT, ALL OTHER FEATURES OF THE ACCUMULATOR WERE CAPABLE OF PERFORMING THEIR INTENDED FUNCTIONS. THE ACCUMULATOR LEVEL TRANSMITTER WAS RECALIBRATED TO THE PROPER VALUE AND RETURNED TO SERVICE ON NOVEMBER 22, 1983. A MODIFICATION TO REPLACE THESE TRANSMITTERS WITH MORE RELIABLE INSTRUMENTS HAS BEEN DEVELOPED AND WILL BE PERFORMED DURING THE STEAM GENERATOR REPLACEMENT OUTAGE PRESENTLY SCHEDULED FOR THE SUMMER OF 1984.

[388] ROBINSON 2 DOCKET 50-261 LER 83-033
FROZEN INSTRUMENT LINES.
EVENT DATE: 122483 REPORT DATE: 012384 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ROSEMOUNT, INC.

(NSIC 188742) ON DECEMBER 24, 1983, WITH THE UNIT AT 50% POWER AND INCREASING TO FULL LOAD, INSTRUMENT LINES TO THE TURBINE FIRST STAGE PRESSURE TRANSMITTERS, THE STEAM PRESSURE TRANSMITTER, AND THE STEAM DRIVEN AFW PUMP DISCHARGE PRESSURE SWITCH FROZE. THE HIGH STEAM LINE FLOW BISTABLES AND STEAM LINE BISTABLES WERE PLACED IN THE TRIP MODE DUE TO THE INOPERABILITY OF THE FIRST STAGE PRESSURE AND STEAM PRESSURE TRANSMITTERS, RESPECTIVELY. THIS IS REPORTED PER TECH SPEC 6.9.2.B.2. REDUNDANT CHANNELS AND EQUIPMENT WERE OPERABLE. EXTREMELY COLD WEATHER, IN CONJUNCTION WITH HIGH WINDS, CAUSED THE HEAT TRACED INSTRUMENT LINES TO FREEZE. 480V PORTABLE HEATERS, WIND SCREENS AND ADDITIONAL INSULATION WERE USED TO THAW THESE LINES AND TO PREVENT OTHERS FROM FREEZING FOR THE NEXT SEVERAL DAYS. THE ABOVE TRANSMITTERS WERE RETURNED TO SERVICE BY 0055 HOURS ON DECEMBER 25, 1983.

[389] SALEM 1 DOCKET 50-272 LER 81-007 REV 1
UPDATE ON 4 SAFETY INJECTION VALVES MALPOSITIONED.
EVENT DATE: 011981 REPORT DATE: 032081 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: ROCKWELL MANUFACTURING COMPANY

(NSIC 188824) WHILE IN THE HOT STANDBY CONDITION ON 1/19/81 AT 1500 HOURS, THE NRC RESIDENT INSPECTOR REQUESTED THAT THE THROTTLE VALVES WHICH BALANCE FLOW THRU THE SAFETY INJECTION LOOPS BE INSPECTED TO VERIFY THAT THEY WERE ALL IN THEIR REQUIRED POSITIONS. VALVE 14SJ16, 11SJ138, 12SJ138 & 13SJ138 WERE NOT IN THEIR

CORRECT POSITIONS. THE INCORRECTLY POSITIONED VALVES MAY HAVE PREVENTED THE FULFILLMENT OR THE FUNCTIONAL REQUIREMENTS OF THE SYSTEM TO COPE WITH ACCIDENTS ANALYZED IN THE SAR. THIS EVENT WAS THE RESULT OF PROCEDURE INADEQUACY. TO INSURE THAT ALL THE THROTTLING VALVES IN THIS SYSTEM ARE RETURNED TO THEIR EXACT REQUIRED POSITIONS FOLLOWING ANY EVOLUTION REQUIRING A VALVE LINE-UP, ON-THE-SPOT CHANGES HAVE BEEN MADE TO THE APPROPRIATE PROCEDURES. AN ENGINEERING REVIEW HAS CONCLUDED THAT THE PLANT WAS NOT IN AN UNSAFE CONDITION DURING THIS EVENT.

[390] SALEM 1 DOCKET 50-272 LER 83-018
BORIC ACID TANK CONCENTRATION LOW.
EVENT DATE: 022383 REPORT DATE: 032483 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: ACCUMULATORS

(NSIC 188488) ON FEB. 23, 1983, DURING ROUTINE OPERATION, SAMPLE RESULTS FOR THE BORIC ACID TANKS (BATS) INDICATED THE BORIC ACID CONCENTRATIONS WERE BELOW THE TECH SPEC LIMIT OF 20,100 PPM. THE ASSOCIATED BORIC ACID STORAGE SYSTEMS WERE DECLARED INOPERABLE AND ACTION STATEMENT 3.1.2.8A WAS ENTERED. A REDUNDANT BORATED WATER SOURCE WAS OPERABLE THROUGHOUT THE OCCURRENCES. THE OCCURRENCE CONSTITUTED OPERATION IN A DEGRADED MODE PER TECH SPEC 6.9.A.9B. INVESTIGATION OF THE INCIDENT REVEALED THAT THE BATS HAD APPARENTLY BEEN DILUTED DURING RECOVERY FROM A SAFETY INJECTION. THE EVENT INVOLVED INSUFFICIENT PROCEDURAL GUIDANCE. THE BATS WERE RETURNED TO SPECIFICATION, AND THE ACTION STATEMENT WAS TERMINATED. THE APPLICABLE PROCEDURE HAS BEEN REVISED TO INCLUDE DETAILED INSTRUCTIONS.

[391] SALEM 1 DOCKET 50-272 LER 83-023 REV 1
UPLATE ON POTENTIAL UNREVIEWED SAFETY QUESTION INVOLVING HOT CHANNEL FACTOR.
EVENT DATE: 060283 REPORT DATE: 121383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS

(NSIC 188539) IN JUNE, NOTIFICATION WAS RECEIVED FROM WESTINGHOUSE RESEARCH DIVISION OF A POTENTIAL USQ. ACCORDING TO THE NOTICE, OPERATION AT FULL POWER FOLLOWING EXTENDED REDUCED POWER OPERATION COULD RESULT IN INCREASED POWER PEAKING IN THE BOTTOM OF THE CORE AND POSSIBLY EXCEEDING LIMITS FOR THE HEATER FLUX HOT CHANNEL FACTOR. NEITHER UNIT HAD OPERATED IN THE MANNER IDENTIFIED; AND STEPS WERE IMMEDIATELY TAKEN TO PRECLUDE SUCH OPERATION. PROMPT NOTIFICATION WAS MADE TO THE USNRC IN ACCORDANCE WITH 6.9.1.8H. PROCEDURES WERE IMPLEMENTED THAT AUGMENT THE TECH SPECS. THE MEASURED TARGET VALUE IS ADMINISTRATIVELY CONTROLLED TO ENSURE THE PLANT IS WITHIN THE RELOAD SAFETY ANALYSIS DESIGN TOLERANCE UNDER ALL OPERATING CONDITIONS. WE NO LONGER HAVE A SAFETY QUESTION. WESTINGHOUSE CONCURRED WITH THE ACTION.

[392] SALEM 1 DOCKET 50-272 LER 83-038
HYDROGEN ANALYZER INOPERABLE.
EVENT DATE: 082783 REPORT DATE: 092683 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ITHACO, INC.

(NSIC 188843) ON AUG. 27, 1983, FOLLOWING A LINE VOLTAGE TRANSIENT ON SALEM UNIT 2 NO. 2B VITAL BUS, NO. 12 AND 22 HYDROGEN ANALYZER CHANNELS FAILED TO RESTART. NO. 12 CHANNEL WAS REQUIRED TO BE OPERABLE DUE TO SALEM UNIT 1 BEING IN MODE 1. THE CHANNEL WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.6.4.1 WAS ENTERED. THE REDUNDANT UNIT 1 HYDROGEN ANALYZER CHANNEL WAS OPERABLE AND INDICATED NORMAL HYDROGEN LEVEL IN CONTAINMENT. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. THE CHANNELS FAILED TO RESTART DUE TO THE VOLTAGE TRANSIENT. THE SUSCEPTIBILITY OF THE CHANNEL INTEGRATED CIRCUITS TO SUCH MALFUNCTIONS COULD BE EXPECTED. THE CHANNEL PROM INTEGRATED CIRCUITS WERE

REPLACED, THE CHANNELS RESTARTED, AND THE ACTION STATEMENT WAS TERMINATED. INVESTIGATION INTO PROVIDING AN UNINTERRUPTABLE POWER SUPPLY IS UNDERWAY.

[393] SALEM 1 DOCKET 50-272 LER 83-062 REV 1
UPDATE ON ACCELOGRAPH FAILURE.
EVENT DATE: 112283 REPORT DATE: 022484 NSSS: WE TYPE: PWR
SYSTEM: OTHER AUX SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: KINEMETRICS, INC.

(NSIC 188844) ON NOV. 22, 1983, WHILE PERFORMING ROUTINE SURVEILLANCE TESTING ON SEISMIC INSTRUMENTATION, THE TRIAXIAL TIME-HISTORY ACCELOGRAPH LOCATED BEHIND THE BIOSHIELD ON THE 81' ELEVATION OF THE CONTAINMENT BUILDING, DID NOT RESPOND AS REQUIRED. THE INSTRUMENT WAS DECLARED INOPERABLE, AND A SPECIAL REPORT WAS SUBMITTED ON DEC. 30, 1983. ON JAN. 4, 1984, DURING A MAINTENANCE SHUTDOWN, THE ACCELEROMETER WAS REPLACED. THE REDUNDANT ACCELOGRAPHS WERE OPERABLE THROUGHOUT THE OCCURRENCE, AND THE EVENT INVOLVED NO UNDUE RISK. THE DETECTOR (KINEMETRICS MODEL FBA-3 ACCELEROMETER) WAS CONTAMINATED, WHICH PRECLUDED THE POSSIBILITY OF TROUBLESHOOTING AND DETERMINING THE EXACT FAILURE MECHANISM. SINCE THIS WAS THE FIRST DETECTOR FAILURE EXPERIENCED, THE OCCURRENCE WAS OF AN ISOLATED NATURE.

[394] SALEM 1 DOCKET 50-272 LER 83-060
VITAL HEAT TRACE CHANNEL FAILS.
EVENT DATE: 120383 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188317) ON DECEMBER 3, 1983, WHILE PERFORMING ROUTINE SURVEILLANCE, VITAL HEAT TRACE CHANNEL 602B (ON BORON INJECTION TANK) FAILED TO DRAW GREATER THAN 0.5 AMPS AS REQUIRED. THE CHANNEL WAS DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.5.4.2 WAS ENTERED. THE REDUNDANT CHANNEL REMAINED OPERABLE THROUGHOUT THE OCCURRENCE. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION AND IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. CHANNEL 602B TERMINAL CONNECTIONS WERE EXHIBITING A HIGH RESISTANCE. THE TERMINALS WERE CLEANED AND TIGHTENED. THE SURVEILLANCE WAS PERFORMED WITH SATISFACTORY RESULTS. THE CHANNEL WAS DECLARED OPERABLE AND ACTION STATEMENT 3.5.4.2 WAS TERMINATED AT 1533 HOURS, DECEMBER 3, 1983.

[395] SALEM 1 DOCKET 50-272 LER 83-061
REACTOR TRIP SYSTEM AND ESFAS INSTRUMENTATION SURVEILLANCE TEST NOT COMPLETED ON TIME.
EVENT DATE: 120983 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188318) ON DECEMBER 9, 1983, REACTOR TRIP SYSTEM AND ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE TESTING WAS COMPLETED WITHIN THE ONE HOUR LIMIT REQUIRED BY THE TECH SPECS. IN ACCORDANCE WITH THE ACTION REQUIREMENTS, A UNIT LOAD REDUCTION WAS COMMENCED. SURVEILLANCE TESTING WAS COMPLETED IN 1 HOUR AND 45 MINUTES, AND THE UNIT WAS RETURNED TO FULL POWER OPERATION. THIS OCCURRENCE IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. A TYPOGRAPHICAL ERROR IN THE PROCEDURE REQUIRED AN ON-THE-SPOT CHANGE TO CONTINUE. THE DELAY RESULTED IN EXCEEDING THE TIME LIMIT. A LICENSE CHANGE REQUEST IS BEING SUBMITTED TO INCREASE THE ALLOWED TESTING TIME TO 2 HOURS (AS ALLOWED BY UNIT 2 TECH SPECS).

[396] SALEM 1 DOCKET 50-272 LER 83-063
AXIAL FLUX DIFFERENCE NOT MONITORED AND LOGGED DURING TEST.
EVENT DATE: 121483 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188744) ON DECEMBER 14, 1983, THE AXIAL FLUX DIFFERENCE (AFD) RECORDER AND MONITOR ALARM WERE REMOVED FROM SERVICE TO PERFORM A ROUTINE CHANGE OF THE TARGET FLUX DIFFERENCE VALUE. THE INDICATED AFD WAS NOT MONITORED AND LOGGED FOR THE FIRST TWO HOURS, AS REQUIRED BY THE SURVEILLANCE REQUIREMENT. THERE IS NO REASON TO BELIEVE THAT AFD DEVIATED FROM THE BAND WITHIN THE TWO HOUR PERIOD. THE OCCURRENCE IS REPORTABLE IN ACCORDANCE WITH 6.9.1.9.C. THE SURVEILLANCE WAS MISSED DUE TO OVERSIGHT ON THE PART OF THE SHIFT SUPERVISOR AND THE REACTOR OPERATOR. BOTH INDIVIDUALS INVOLVED WERE COUNSELED.

[397] SALEM 1 DOCKET 50-272 LER 83-064
FUEL OIL LEAK FOUND ON FIRE SUPPRESSION PUMP DIESEL ENGINE.
EVENT DATE: 121483 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
VENDOR: WAUKESHA ELECTRIC MACHINERY MFG. CO.

(NSIC 188392) ON DECEMBER 14, 1983, DURING ROUTINE SURVEILLANCE TESTING, A FUEL OIL LEAK WAS ENCOUNTERED ON NO. 1 FIRE SUPPRESSION PUMP DIESEL ENGINE. THE ENGINE WAS SHUT DOWN, THE PUMP WAS DECLARED INOPERABLE, AND TECH SPEC ACTION STATEMENT 3.7.10.1.A WAS ENTERED. THE REDUNDANT FIRE SUPPRESSION PUMP REMAINED OPERABLE THROUGHOUT THE OCCURRENCE. DUE TO THE LOSS OF REDUNDANCY, THE EVENT IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. THE FUEL OIL PRESSURE GAUGE HOSE HAD RUPTURED DUE TO WEAR CAUSED BY NORMAL ENGINE VIBRATION. THE HOSE WAS REPLACED, THE PUMP WAS TESTED WITH SATISFACTORY RESULTS. NO. 1 FIRE SUPPRESSION PUMP WAS RETURNED TO AN OPERABLE STATUS AND THE ACTION STATEMENT WAS TERMINATED.

[398] SALEM 1 DOCKET 50-272 LER 83-067
DIESEL FIRE SUPPRESSION TANK LEAKS.
EVENT DATE: 122083 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188745) ON DECEMBER 20, 1983, DURING ROUTINE SURVEILLANCE TESTING OF NO. 1 DIESEL FIRE SUPPRESSION PUMP, A MINOR LEAK DEVELOPED ON THE DIESEL COOLING WATER EXPANSION TANK. THE PUMP WAS DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.7.10.1.A WAS ENTERED. THE REDUNDANT FIRE SUPPRESSION PUMP REMAINED IN AN OPERABLE STATUS. DUE TO THE LOSS OF REDUNDANCY, THE OCCURRENCE IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. INVESTIGATION REVEALED THAT THE LEAK WAS COMING FROM THE SEALS WHERE THE CONTROL ROD SHAFT (FOR THE COOLING WATER VALVE) PENETRATES THE EXPANSION TANK. BUSHING WEAR ALLOWED RADIAL SHAFT MOVEMENT, WHICH CAUSED THE SEALS TO LEAK. THE LEAK WAS REPAIRED, THE PUMP WAS TESTED AND DECLARED OPERABLE.

[399] SALEM 1 DOCKET 50-272 LER 83-070
CONTAINMENT PENETRATION DOOR LEAKS.
EVENT DATE: 122183 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 188676) ON DEC. 21, 1983, THE EXTERIOR DOOR OF THE 100' ELEVATION AIRLOCK EXHIBITED EXCESSIVE LEAKAGE DURING SURVEILLANCE TESTING. THE AIRLOCK WAS DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.6.1.3 WAS ENTERED. THE INTERIOR DOOR REMAINED OPERABLE AND CLOSED THROUGHOUT THE OCCURRENCE. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION AND IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. THE OUTER SEAL ON THE EXTERIOR DOOR WAS CUT. IT WAS NOT SEATED PROPERLY IN ITS GROOVE WHEN THE DOOR WAS LAST SHUT RESULTING IN A PINCHED SEAL. THE SEAL WAS REPLACED, AND THE AIRLOCK WAS RETESTED WITH SATISFACTORY RESULTS. THE AIRLOCK WAS DECLARED OPERABLE AND THE ACTION STATEMENT WAS TERMINATED.

[400] SALEM 1 DOCKET 50-272 LER 83-071
CONTAINMENT FAN COIL UNIT REMOVED FROM SERVICE.
EVENT DATE: 122283 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: HEAT EXCHANGERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188747) ON DECEMBER 22, 1983, NO. 14 CONTAINMENT FAN COIL UNIT (CFCU) WAS REMOVED FROM SERVICE TO REPAIR THE FLEXIBLE CONNECTOR. THIS CONNECTOR IS LOCATED BETWEEN THE CFCU FILTRATION/COOLING UNIT AND THE FAN SUCTION. IT IS A RUBBER, ACCORDIAN TYPE OF JOINT THAT HAS EXPERIENCED DEGRADATION BECAUSE OF ITS DESIGN. THE REMAINING FAN COIL UNITS WERE OPERABLE. THE EVENT CONSTITUTED A LOSS OF REDUNDANCY AND IS REPORTABLE IN ACCORDANCE WITH 6.9.1.9.B. THE FLEXIBLE CONNECTOR WAS TEMPORARILY REPAIRED. NO. 14 CFCU WAS RETURNED TO AN OPERABLE STATUS. THE REDUNDANT UNITS WERE INSPECTED. THEY ARE SATISFACTORY AT THE PRESENT TIME; ALTHOUGH, THEY ALSO SHOW SIGNS OF DETERIORATION. ALL CONNECTORS WILL BE REPLACED WITH ONES OF A DIFFERENT DESIGN.

[401] SALEM 1 DOCKET 50-272 LER 83-073
DIESEL GENERATOR DECLARED INOPERABLE.
EVENT DATE: 122383 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: PIPES,FITTINGS
VENDOR: ALCO ENGINE DIVISION, WHITE IND.

(NSIC 188748) ON DECEMBER 23, 1983, WHILE PERFORMING ROUTINE SURVEILLANCE TESTING ON 1B EMERGENCY DIESEL GENERATOR, THE OPERATOR OBSERVED A JACKET WATER COOLING LEAK FROM AN INSTRUMENT LINE. THE DIESEL WAS DECLARED INOPERABLE. 1A AND 1C DIESEL GENERATORS WERE VERIFIED OPERATIONAL. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION, AND IS THEREFORE REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. AN ELBOW ON DIESEL JACKET WATER INSTRUMENT LINE EXPERIENCED CRACKING DUE TO NORMAL ENGINE VIBRATION, AND THE LACK OF PROPER TUBING SUPPORTS. A DESIGN CHANGE WILL REROUTE THE INSTRUMENT TUBING AND PROVIDE THE PROPER SUPPORTS.

[402] SALEM 1 DOCKET 50-272 LER 83-068
FIRE SUPPRESSION PUMP DECLARED INOPERABLE.
EVENT DATE: 122483 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188746) ON DECEMBER 24, 1983, AN OPERATOR OBSERVED STEAM ISSUING FROM NO. 1 DIESEL FIRE SUPPRESSION PUMP COOLING WATER EXPANSION TANK. DIESEL JACKET WATER TEMPERATURE WAS NOTED AS GREATER THAN 200 DEGREES. THE PUMP WAS DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.7.10.1.A WAS ENTERED. THE REDUNDANT PUMP REMAINED IN AN OPERABLE STATUS. DUE TO THE LOSS OF REDUNDANCY, THE OCCURRENCE IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. THE CAUSE WAS FROZEN DIESEL WATER COOLING LINES, DUE TO THE SUB-ZERO TEMPERATURES. A VENTILATION DAMPER IN THE PUMP HOUSE WAS OPEN. THE DAMPER WAS SHUT, EXERCISED, AND THE LINES THAWED. THE PUMP WAS TESTED, RESTORED TO AN OPERABLE STATUS, AND THE ACTION STATEMENT WAS TERMINATED.

[403] SALEM 1 DOCKET 50-272 LER 83-066
FIRE SUPPRESSION WATER SYSTEMS RENDERED INOPERABLE TWICE.
EVENT DATE: 122583 REPORT DATE: 010684 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PIPES,FITTINGS

(NSIC 188393) ON TWO OCCASIONS, DECEMBER 25, AND 26, 1983, THE FIRE SUPPRESSION WATER STORAGE TANK CAPACITY DROPPED BELOW THE MINIMUM ALLOWED BY THE TECH SPECS. THIS TECHNICALLY RENDERED BOTH FIRE SUPPRESSION WATER SYSTEMS INOPERABLE. IN BOTH OCCURRENCES, THE SYSTEMS WERE RESTORED TO AN OPERABLE STATUS IN A TIMELY

FASHION. THIS SPECIAL REPORT IS SUBMITTED IN ACCORDANCE WITH TECH SPEC 6.9.2.F. THE FIRST OCCURRENCE WAS DUE TO A RUPTURED ELBOW ON A SPRINKLER RISER. THIS WAS CAUSED BY WATER INSIDE THE ELBOW FREEZING. THE ELBOW IS BEING REPLACED. VARIOUS SYSTEM LEAKS DUE TO FREEZING WEATHER CONDITIONS CAUSED THE SECOND EVENT. THE COMBINED CAPACITY OF THE LEAKS EXCEEDED THE WELL PUMP CAPACITY. THE NUMBER OF OPERATING PUMPS WAS INCREASED.

[404] SALEM 1 DOCKET 50-272 LER 83-065
CONTAINMENT SUMP LEVEL MONITORING SYSTEM DECLARED INOPERABLE.
EVENT DATE: 122683 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: HEAT EXCHANGERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188845) THE CONTAINMENT SUMP LEVEL MONITORING SYSTEM WAS DECLARED INOPERABLE WHEN RCS WATER INVENTORY BALANCES AND MANY CONTAINMENT INSPECTIONS (OVER AN ELEVEN DAY PERIOD) DID NOT SUBSTANTIATE THE INDICATED LEAKAGE. THE RCS WATER INVENTORY BALANCES AND THE REDUNDANT RCS LEAKAGE DETECTION SYSTEMS CONTINUED TO PROVE THAT THERE WAS NOT A REACTOR COOLANT LEAK. DUE TO THE LOSS OF REDUNDANCY, THE EVENT IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. A SOURCE OF LEAKAGE WAS SUBSEQUENTLY IDENTIFIED AS NO. 14 STEAM GENERATOR SECONDARY HANDHOLE COVER. THE UNIT WAS SHUT DOWN, AND THE HANDHOLE COVER WAS REPAIRED. SATISFACTORY OPERATION OF THE CONTAINMENT SUMP LEVEL MONITORING SYSTEM WAS CONFIRMED.

[405] SALEM 1 DOCKET 50-272 LER 83-069
FIRE PUMP FAILS TO START.
EVENT DATE: 122683 REPORT DATE: 012584 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MERCOID CORP.

(NSIC 188846) ON DECEMBER 26, 1983, THE FIRE PROTECTION HEADER PRESSURE DROPPED SUDDENLY DUE TO A RUPTURED 4" ALARM VALVE. NO. 1 FIRE SUPPRESSION PUMP STARTED IN RESPONSE TO THE LOW HEADER PRESSURE; BUT NO. 2 FIRE SUPPRESSION PUMP FAILED TO START. THE LEAK WAS ISOLATED, THE HEADER PRESSURE RESTORED AND NO. 2 FIRE SUPPRESSION PUMP WAS DECLARED INOPERABLE. DUE TO THE LOSS OF REDUNDANCY, THE OCCURRENCE IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. THE VALVE RUPTURE WAS DUE TO WATER WITHIN THE VALVE FREEZING. A NEW VALVE WAS ORDERED, AND WILL BE INSTALLED UPON RECEIPT. THE FAILURE OF NO. 2 FIRE SUPPRESSION PUMP TO START WAS DUE TO A FAILED PRESSURE DETECTOR. THE DETECTOR WAS REPLACED AND CALIBRATED. NO. 2 PUMP WAS TESTED AND DECLARED OPERABLE.

[406] SALEM 1 DOCKET 50-272 LER 83-075
MICROPROCESSOR MEMORY LOST FOR HYDROGEN ANALYZER CHANNELS.
EVENT DATE: 122783 REPORT DATE: 012584 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188750) ON DECEMBER 27, 1983, IT WAS DISCOVERED THAT THE MICROPROCESSOR MEMORY WAS LOST FOR HYDROGEN ANALYZER CHANNELS NO. 12 AND 22. BOTH CHANNELS WERE DECLARED INOPERABLE. THE REDUNDANT CHANNELS (NO. 11 AND 21) WERE OPERABLE THROUGHOUT THE OCCURRENCE AND INDICATED THAT THE HYDROGEN LEVELS IN BOTH CONTAINMENT BUILDINGS WERE NORMAL AT ALL TIMES. DUE TO THE LOSS OF REDUNDANCY, THE OCCURRENCE IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. A VOLTAGE TRANSIENT ON THE 2B VITAL INSTRUMENT BUS CAUSED THE MICROPROCESSOR TO LOSE ITS CONSTANTS. THE CONSTANTS WERE REINSTALLED AND THE CHANNELS RETURNED TO SERVICE. WE ARE PRESENTLY INVESTIGATING THE POSSIBILITY OF MODIFYING THE POWER SUPPLY DESIGN TO ELIMINATE FAILURES OF THIS SORT, DUE TO VOLTAGE TRANSIENTS.

[407] SALEM 1 DOCKET 50-272 LER 83-072
CAPACITY CURVES FOR FIRE SUPPRESSION WATER STORAGE TANK INCORRECT.
EVENT DATE: 122983 REPORT DATE: 011284 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188489) THIS REPORT DOCUMENTS AN OCCURRENCE INVOLVING THE FIRE SUPPRESSION WATER STORAGE TANKS INDICATING A LEVEL BELOW THE MINIMUM CAPACITY ALLOWED BY TECH SPECS. PROMPT NOTIFICATION OF THE EVENT WAS MADE THE DAY OF THE OCCURRENCE, DEC. 29, 1983. WRITTEN FOLLOW-UP WAS TRANSMITTED ON DEC. 30, 1983 (ERRONEOUSLY USING LER #83-076/01P INSTEAD OF THE CORRECT LER #83-072/01P). SUBSEQUENT INVESTIGATION HAS REVEALED THAT THE TANK CAPACITY NEVER DECREASED BELOW THE MINIMUM ALLOWED CAPACITY. THE OCCURRENCE WAS THEREFORE NOT REPORTABLE. INVESTIGATION REVEALED THAT THE FIRE SUPPRESSION STORAGE TANK CAPACITY CURVES WERE INCORRECT. THE TANK LEVEL INDICATION, WHICH WAS BELIEVED TO CORRESPOND TO THE TECH SPEC LIMIT WAS 2.8% HIGH. THIS RESULTED IN CONSERVATIVELY TAKING ACTION BEFORE REQUIRED TO DO SO.

[408] SALEM 1 DOCKET 50-272 LER 83-074
TWO CONTROL ROD POSITION INDICATORS DRIFT OUT OF CALIBRATION.
EVENT DATE: 123083 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BAILEY INSTRUMENT CO., INC.

(NSIC 188749) ON DECEMBER 30, 1983, DURING A RAPID LOAD REDUCTION, DUE TO ICING CONDITIONS AT THE CIRCULATORS, 2A3 AND 1C1 CONTROL ROD POSITION INDICATORS EXCEEDED 12 STEPS FROM THE GROUP DEMAND POSITION FOR THEIR GROUP. NO OTHER ABNORMALITIES WERE NOTED. ALL REMAINING CHANNELS IN THE GROUPS WERE OPERABLE. THE TWO AFFECTED CHANNELS WERE DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.1.3.2.A WAS ENTERED. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION AND IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. THE HEAT GENERATED IN THE STACK COILS, DUE TO CONTROL ROD MOTION DURING THE RAPID DOWN-POWER MANUEVER, CAUSED THE SENSOR OUTPUT CALIBRATION TO DRIFT. THE CHANNELS WERE RECALIBRATED, RETURNED TO SERVICE, AND THE ACTION STATEMENT WAS TERMINATED.

[409] SALEM 2 DOCKET 50-311 LER 82-078 REV 1
UPDATE ON CONTAINMENT FAN COOLER LEAKAGE.
EVENT DATE: 081982 REPORT DATE: 062983 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: HEAT EXCHANGERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188091) AT 2145 HOURS, AUG. 19, 1982, WHILE CHECKING ACCUMULATOR SIGHTGLASS LEVEL INDICATION, THE EQUIPMENT OPERATOR DISCOVERED A SERVICE WATER LEAK WITHIN THE CONTAINMENT. AN INVESTIGATION REVEALED THAT THE LEAKAGE WAS FROM NO. 25 CONTAINMENT FAN COIL UNIT (CFCU) MOTOR COOLER. THE CFCU WAS DECLARED INOPERABLE, ISOLATED, AND ACTION STATEMENT 3.6.2.3.A WAS ENTERED. AT 2240 HOURS, THE NRC WAS NOTIFIED BY TELEPHONE WITH WRITTEN CONFIRMATION ON AUG. 20, 1982. BOTH CONTAINMENT SPRAY SYSTEMS WERE OPERABLE THROUGHOUT THE OCCURRENCE. THE CAUSE WAS EROSION OF THE CFCU MOTOR COOLER BY SILT IN THE SERVICE WATER. THE COOLER WAS REPLACED, NO. 25 CFCU WAS SATISFACTORILY TESTED, AND THE ACTION STATEMENT WAS TERMINATED. DESIGN CHANGE REQUEST 2EC-0507 WAS ISSUED AND THE COOLER WAS REPLACED WITH ONES OF A MORE EROSION RESISTANT MATERIAL.

[410] SALEM 2 DOCKET 50-311 LER 82-141 REV 1
UPDATE ON P-250 COMPUTER INOPERABLE TWICE.
EVENT DATE: 112182 REPORT DATE: 121683 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188529) ON TWO SEPARATE OCCASIONS, ON NOV. 21 AND DEC. 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 PER 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 TERMINATED. THE POWER SUPPLY BREAKER WAS REPLACED AND THE AIR CONDITIONING UNITS WERE REPAIRED. DCRS ARE BEING FORMULATED TO INSTALL SAFETY PARAMETER DISPLAY SYSTEMS.

[411] SALEM 2 DOCKET 50-311 LER 83-036 REV 1
UPDATE ON ECCS ACCUMULATOR WITH HIGH LEVEL.
EVENT DATE: 072683 REPORT DATE: 121383 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: ACCUMULATORS
VENDOR: DELTA SOUTHERN CO.

(NSIC 188551) ON JULY 26, 1983, DURING ROUTINE STARTUP OPERATIONS, IT WAS DISCOVERED THAT NO. 23 ECCS ACCUMULATOR LEVEL WAS SLIGHTLY HIGHER THAN REQUIRED BY THE TECH SPECS. REVIEW OF THE OPERATING LOGS REVEALED THAT THE CONDITION HAD EXISTED FOR GREATER THAN THE INTERVAL REQUIRED BY THE APPROPRIATE ACTION REQUIREMENT. THE LEVEL WAS IMMEDIATELY DRAINED TO WITHIN SPECIFICATION. PROMPT NOTIFICATION TO THE USNRC WAS MADE PER TECH SPEC 6.9.1.8B. THE SLIGHTLY OUT OF SPECIFICATION LEVEL WAS ASSOCIATED WITH STARTUP OPERATION AND PLANT HEATUP; THIS WAS OVERLOOKED BY THE OPERATOR. A SUBSEQUENT SAFETY EVALUATION OF THE INCIDENT CONCLUDED THAT THE HIGH LEVEL CONDITION DID NOT RENDER THE ACCUMULATOR INOPERABLE, AND IT WAS FULLY CAPABLE OF PERFORMING ITS DESIGN FUNCTION.

[412] SALEM 2 DOCKET 50-311 LER 83-062
VOLTAGE TRANSIENT CAUSES VALVE TO CLOSE RESULTING IN LOSS OF RHR FLOW.
EVENT DATE: 112883 REPORT DATE: 122383 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
VENDOR: COPES-VULCAN, INC.

(NSIC 188407) ON NOVEMBER 28, 1983, DURING A MAINTENANCE SHUTDOWN, 2A VITAL INSTRUMENT BUS WAS TRANSFERRED TO ITS ALTERNATE POWER SUPPLY TO PERFORM ROUTINE METER CALIBRATIONS ON 2A INVERTER. A VOLTAGE TRANSIENT CAUSED 2RH2 TO SHUT RESULTING IN A LOSS OF RHR FLOW. THE VALVE WAS IMMEDIATELY REOPENED, AND RHR FLOW WAS RE-ESTABLISHED. BECAUSE THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION, THE OCCURRENCE IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. BECAUSE THIS EVOLUTION CAUSES A VOLTAGE TRANSIENT WHICH EFFECTS CERTAIN EQUIPMENT, THIS EQUIPMENT WILL BE IDENTIFIED AND PROCEDURES WILL BE REVISED TO REFLECT EQUIPMENT TO BE MONITORED AND APPROPRIATE ACTIONS TO BE TAKEN.

[413] SALEM 2 DOCKET 50-311 LER 83-064
FIRE SUPPRESSION SYSTEM PILOT VALVE FAILS TO SEAT PROPERLY.
EVENT DATE: 120283 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES

(NSIC 188408) ON DECEMBER 2, 1983, WHILE PERFORMING SURVEILLANCE TESTING ON THE LOW PRESSURE CO(2) FIRE SUPPRESSION SYSTEM, THE PILOT VALVE FOR 2FP377 DID NOT COMPLETELY SEAT FOLLOWING A SATISFACTORY "PUFF-TEST" OF THE VITAL SWITCHGEAR ROOMS. THE AREA WAS RETESTED, AND THE PILOT VALVE SEATED PROPERLY FOLLOWING THE TEST. FAILURE OF THE PILOT VALVE TO RESEAT FOLLOWING SYSTEM OPERATION DID NOT RENDER THE SYSTEM INOPERABLE. IMPROPER SEATING WAS APPARENTLY DUE TO FROST ON THE

PILOT VALVE SEAT DUE TO THE RAPIDLY EXPANDING CO(2). FOLLOWING A SYSTEM RETEST, THE VALVE SEATED PROPERLY. SATISFACTORY OPERATION OF THE SYSTEM WAS UNAFFECTED BY THE OCCURRENCE.

[414] SALEM 2 DOCKET 50-311 LER 83-061
VITAL BUS IS DE-ENERGIZED.
EVENT DATE: 120783 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188406) ON DECEMBER 7, 1983, DURING A MAINTENANCE SHUTDOWN, CHANNEL 2A SAFEGUARDS EQUIPMENT CONTROL (SEC) WAS INADVERTENTLY ACTUATED WHILE TESTING, CAUSING 2A VITAL BUS TO BE DE-ENERGIZED. TECH SPEC ACTION STATEMENT 3.8.2.2 WAS ENTERED. THE BUS WAS RE-ENERGIZED AND LOADS WERE RESTORED. ACTION STATEMENT 3.8.2.2 WAS TERMINATED WITHIN 47 MINUTES. 2B AND 2C VITAL BUSES REMAINED ENERGIZED THROUGHOUT THE OCCURRENCE. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION AND IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. TESTING PERSONNEL REVERSED THE POLARITY OF THE LEADS WHILE CONNECTING A DUEL-TRACE OSCILLOSCOPE TO RELAY XK49 IN 2A SEC. THIS ACTUATED VARIOUS RELAYS RESULTING IN THE DE-ENERGIZATION OF THE BUS. PERSONNEL INVOLVED WERE COUNSELED.

[415] SALEM 2 DOCKET 50-311 LER 83-065
DG VOLTAGE REGULATOR FAILS.
EVENT DATE: 120783 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: TRANSFORMERS
VENDOR: BASLER ELECTRIC COMPANY

(NSIC 188321) ON DECEMBER 7, 1983, DURING A MAINTENANCE SHUTDOWN, 2B DIESEL GENERATOR (DG) VOLTAGE REGULATOR FAILED DURING SURVEILLANCE TESTING OF THE DIESEL, CAUSING THE GENERATOR BREAKER TO TRIP ON OVERCURRENT. 2B DIESEL WAS DECLARED INOPERABLE. AS REQUIRED BY THE TECH SPECS, TWO DIESELS WERE MAINTAINED IN AN OPERABLE STATUS. THIS REPORT IS SUBMITTED FOR INFORMATIONAL PURPOSES IN ACCORDANCE WITH SURVEILLANCE REQUIREMENT 4.8.1.1.4. 2B DIESEL GENERATOR VOLTAGE REGULATOR CONTROL POWER TRANSFORMER WAS GROUNDED. THIS IS THE FIRST FAILURE OF THIS SORT EXPERIENCED AT SALEM. A REPLACEMENT TRANSFORMER WAS OBTAINED FROM THE VENDOR AND IS BEING REPLACED AT THIS TIME.

[416] SALEM 2 DOCKET 50-311 LER 83-066
LOSS OF RHR FLOW.
EVENT DATE: 122083 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
VENDOR: COPES-VULCAN, INC.

(NSIC 188754) ON DECEMBER 20, 1983, DURING A MAINTENANCE SHUTDOWN, 2RH1 CLOSED, RESULTING IN A LOSS OF RHR FLOW. THE EVENT TOOK PLACE DURING THE TRANSFER OF 2B4KV VITAL BUS FROM ONE STATION POWER TRANSFORMER TO THE OTHER. THE BACKUP POWER SUPPLY FOR 2B INSTRUMENT INVERTER WAS DE-ENERGIZED FOR MAINTENANCE. THE TRANSFER RESULTED IN A MOMENTARY LOSS OF THE INSTRUMENT BUS; 2RH1 CLOSED ON INTERLOCK. DUE TO OPERATION IN A DEGRADED MODE, PERMITTED BY A LIMITING CONDITION FOR OPERATION, THE EVENT IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9.B. WHEN 2RH1 CLOSED, THE OPERATOR SECURED 22 RHR PUMP. THE CAUSE WAS DETERMINED, AND 2RH1 WAS REOPENED. 22 RHR PUMP WAS STARTED, AND RHR FLOW WAS REESTABLISHED WITHIN 22 MINUTES OF THE OCCURRENCE. THE INCIDENT WAS ADDRESSED IN AN OPERATIONS DEPARTMENT NEWS LETTER.

[417] SALEM 2 DOCKET 50-311 LER 83-067
DG HAS FUEL OIL LEAK ON CYLINDER INJECTOR.
EVENT DATE: 123183 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: WHITE ENGINE INC.

(NSIC 188756) ON DECEMBER 31, 1983, DURING SURVEILLANCE TESTING, 2B DIESEL GENERATOR EXPERIENCED A FUEL OIL LEAK ON #8R CYLINDER INJECTOR. THE SURVEILLANCE TEST WAS STOPPED AND THE DIESEL WAS DECLARED INOPERABLE. 2A AND 2C DIESEL GENERATORS REMAINED OPERABLE. THIS REPORT IS BEING SUBMITTED FOR INFORMATIONAL PURPOSES IN ACCORDANCE WITH TECH SPEC SURVEILLANCE REQUIREMENT 4.8.1.1.4. THE FUEL OIL MANIFOLD-TO-INJECTOR GASKET ON #8R CYLINDER WAS LEAKING. THE FITTINGS WERE INSPECTED; NO DAMAGE WAS OBSERVED. THE GASKET WAS REPLACED AND THE DIESEL SURVEILLANCE WAS AGAIN PERFORMED, THIS TIME WITH SATISFACTORY RESULTS.

[418] SAN ONOFRE 1 DOCKET 50-206 LER 83-006
PRESSURIZER LEVEL TOO HIGH FOR THREE DAYS.
EVENT DATE: 112783 REPORT DATE: 121283 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188533) ON 11/18/83, WITH UNIT 1 IN MODE 5, THE RCS WAS DRAINED TO 50%. DURING THE FOLLOWING 3 DAYS, PRESSURIZER LEVEL INCREASED 2 TO 3% PER DAY. THE RCS WAS DRAINED 3 TIMES TO KEEP ITS LEVEL BELOW 50%, WHILE OPERATORS ATTEMPTED TO LOCATE SUSPECTED IN-LEAKAGE. ON 11/27/83, THE REACTOR VESSEL HEAD WAS VENTED AND THE PRESSURIZER LEVEL DROPPED FROM 45 TO 16%. THE PRESSURIZER LEVEL WAS RESTORED BY CHARGING 3684 GALLONS INTO RCS. PRESSURIZER IS PRESENTLY LEVEL AT APPROXIMATELY 40%. THE CAUSE OF THIS EVENT WAS USING INCREASED NITROGEN PRESSURE TO THE VOLUME CONTROL TANK TO FORCE CHARGING FLOW TO THE RCS. NITROGEN CAME OUT OF SOLUTION IN THE RCS AND COLLECTED IN THE VESSEL HEAD. AS CORRECTIVE ACTION, THE OVERPRESSURE WAS REDUCED, ALL OPERATING SHIFTS WILL BE MADE AWARE OF THIS OCCURRENCE AND THE MANNER IN WHICH IT DEVELOPED AND APPROPRIATE PROCEDURAL REVISION WILL BE MADE.

[419] SAN ONOFRE 2 DOCKET 50-361 LER 82-006 REV 2
UPDATE ON LOW BORON CONCENTRATION IN REFUELING WATER STORAGE TANK.
EVENT DATE: 031682 REPORT DATE: 120283 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: ACCUMULATORS

(NSIC 188662) WITH THE PLANT IN MODE 6, REFUELING WATER STORAGE TANK, T006, WAS FOUND TO HAVE A STRATIFIED BORON CONCENTRATION WHICH RESULTED IN ACTUAL AVERAGE TANK CONCENTRATION BEING LOWER THAN TANK SAMPLES INDICATED. THE RWST WAS NOT PROVIDED WITH A MEANS TO CIRCULATE ITS CONTENTS FROM TOP TO BOTTOM ALLOWING BORON STRATIFICATION TO DEVELOP AS IT WAS FILLED. A TEMPORARY LINE WAS INSTALLED TO ALLOW RECIRCULATION.

[420] SAN ONOFRE 2 DOCKET 50-361 LER 83-094
FIRE DETECTOR CIRCUITS FOUND DISCONNECTED.
EVENT DATE: 022283 REPORT DATE: 121283 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: AUTOMATIC SPRINKLER CORPORATION

(NSIC 188518) ON 2/17/83, WITH UNIT 2 IN MODE 5, ZONE 1 FIRE DETECTOR ELECTRICAL PANEL 2L-204 FAILED THE 6-MONTH SUPERVISORY CIRCUIT SURVEILLANCE TEST S023-I-2.62. ON 2/22/83, WITH UNIT 3 IN MODE 5, THE UNIT 3 PANEL, 3L-204, FAILED THE SAME SURVEILLANCE. PER LCO 3.3.3.7, ACTION STATEMENT 'A', EACH CONTAINMENT'S AMBIENT AIR TEMPERATURE WAS MONITORED OR FIRE WATCHES WERE POSTED WHEN THE CONTAINMENT WS ACCESSIBLE. THE PANELS WERE RENDERED INOPERABLE WHEN THEIR SUPERVISORY CIRCUITS WERE DISCONNECTED AS A RESULT OF MODIFICATIONS TO THE

SYSTEM. DETECTORS AND DELUGE SYSTEMS REMAINED OPERABLE. SINCE SOME COMPONENTS ARE INSIDE CONTAINMENT, THE CIRCUITS WILL BE REPAIRED DURING THE NEXT OUTAGE AT EACH UNIT. COMPENSATORY MEASURES WILL REMAIN IN EFFECT UNTIL THE SYSTEMS ARE RETURNED TO SERVICE. SEE LER 83-067, UNIT 2.

[421] SAN ONOFRE 2 DOCKET 50-361 LER 83-024
EMERGENCY CHILLER FANS FAILED TO START.
EVENT DATE: 030283 REPORT DATE: 040183 NSSS: CE TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVES

(NSIC 188872) WITH UNITS 2 AND 3 IN MODES 4 AND 5, RESPECTIVELY, EMERGENCY CHILLER ROOM SUPPLY AND EXHAUST FANS AO53 AND AO56 ASSOCIATED WITH EMERGENCY CHILLER E-336 (TRAIN A) FAILED TO START FOLLOWING AN INVALID TOXIC GAS ISOLATION SIGNAL (TGIS). ACCORDINGLY, E-336 WAS DECLARED INOPERABLE. INOPERABILITY OF E-336 RENDERS EQUIPMENT INOPERABLE IN EFFECTED ROOMS IN BOTH UNITS WHERE CHILLED WATER IS PROVIDED TO COOL AMBIENT AIR IN THE EVENT OF TGIS, SIAS, OR LOSS OF OFFSITE POWER. SEVERAL LCO'S GOVERN UNITS 2 AND 3 OPERATIONS IN THIS SITUATION. SUBSEQUENT INVESTIGATION REVEALED THAT FAN FAILURES WERE ATTRIBUTED TO INADVERTENT VALVING OUT OF CHILLED WATER FLOW CONTROL SWITCH FCL-9870-1. THE FCL-9870-1 INSTRUMENT VALVES WERE RETURNED TO THE NORMAL OPEN POSITION AND THE FANS STARTED AT 1840 ON MARCH 4, 1983, TRAIN A TGIS OPERABILITY WAS VERIFIED IN ACCORDANCE WITH SO23-3-3.20. THE TIME AND CAUSE OF THE INADVERTENT VALVING OUT HAS NOT BEEN DETERMINED. THIS EVENT IS CONSIDERED TO HAVE BEEN AN ISOLATED OCCURRENCE.

[422] SAN ONOFRE 2 DOCKET 50-361 LER 83-028
RCS PRESSURE ISOLATION VALVES NOT TESTED.
EVENT DATE: 030483 REPORT DATE: 040183 NSSS: CE TYPE: PWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188699) WITH THE PLANT IN MODE 4 AND PREVIOUSLY OPERATING ON SHUTDOWN COOLING, THE REACTOR COOLANT SYSTEM (RCS) PRESSURE ISOLATION VALVES LISTED IN TECH SPEC TABLE 3.4-1, SECTION B, WERE NOT LEAK TESTED WITHIN 24 HOURS AS REQUIRED BY SURVEILLANCE REQUIREMENT 4.4.5.2.2.D. THE PLANT HAD ENTERED MODE 4 AT 1440 ON MARCH 3, 1983. THE VALVES WERE DECLARED INOPERABLE AND LCO 3.4.5.2, ACTION STATEMENT 'C' WAS INVOKED. SINCE THE PLANT WAS TAKEN TO MODE 5 AT 0315 ON MARCH 5, 1983, DUE TO RCP PROBLEMS, THE REQUIREMENTS OF THE ACTION STATEMENT WERE SATISFIED. RCS PRESSURE ISOLATION LEAK TESTING WAS NOT PERFORMED DUE TO PLANT CONDITIONS NOT BEING SUFFICIENTLY STABLE. THE INSTABILITY WAS CAUSED BY SEAL LEAKAGE FROM REACTOR COOLANT PUMP P-001. AS CORRECTIVE ACTION TO PREVENT RECURRENCE, A PROPOSED TECH SPEC CHANGE WAS SUBMITTED TO NRR ON SEPT. 3, 1982 ALLOWING MORE TIME FOR COMPLETING THE REQUIRED TESTING.

[423] SAN ONOFRE 2 DOCKET 50-361 LER 83-025
FAILURE OF REACTOR TRIP BREAKERS.
EVENT DATE: 030883 REPORT DATE: 033183 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188629) ON 03/01/83, A TELEPHONE REPORT WAS MADE REGARDING FAILURE OF REACTOR TRIP CIRCUIT BREAKERS (TCB'S) TO TRIP ON UNDERVOLTAGE. THE SHUNT TRIP FUNCTIONED PROPERLY AND WOULD HAVE PERFORMED THE TRIP FUNCTION IF CALLED UPON TO DO SO. SEE ALSO LER 82-175 AND LER 82-176, UNIT 2, AND LER 83-023, UNIT 3. THE INVESTIGATION OF THE TCB FAILURES IDENTIFIED INADEQUACIES IN CERTAIN MAINTENANCE ACTIVITIES. A RETURN TO POWER REPORT SCHEDULED TO BE SUBMITTED TO THE OFFICE OF NRR IN APRIL 1983 WILL ADDRESS OUR EVALUATIONS OF THIS EVENT.

[424] SAN ONOFRE 2 DOCKET 50-361 LER 83-031
POTENTIAL OF CORE PROTECTION CALCULATOR FAILURE.
EVENT DATE: 032383 REPORT DATE: 040483 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 187(56) DURING POST-CORE HOT FUNCTIONAL TESTING ON SAN ONOFRE UNIT 3 (DOCKET 50-362) AND SUBSEQUENT FOLLOWUP TROUBLESHOOTING, A POTENTIAL SAFETY CONCERN INVOLVING CALIBRATION SHIFT OF 2AO-V31 MODULES ASSOCIATED WITH THE CORE PROTECTION CALCULATORS (CPC'S) WAS IDENTIFIED. IF LEFT UNCORRECTED, THIS SHIFT COULD RESULT IN ERRONEOUS PRIMARY LOOP TEMPERATURE (T HOT AND T COLD) BEING TRANSMITTED TO THE CPC'S AND, THEREFORE, A NONCONSERVATIVE CALCULATION IN THE CPC'S POSSIBLY DELAYING OR PREVENTING A REACTOR TRIP SIGNAL BEING GENERATED AS DESCRIBED IN OUR FSAR. SEE ALSO LER 82-028, DOCKET 50-362. THE POTENTIAL CALIBRATION SHIFT IS ATTRIBUTED TO PROBLEMS WITH THE AMPLIFIER ASSOCIATED WITH THE 2AO-V31 MODULES. ALTHOUGH THIS CALIBRATION SHIFT HAS NOT BEEN OBSERVED ON THIS UNIT, A DESIGN CHANGE TO REPLACE THESE MODULES WITH 2AO-V21 MODULES NOT SUSCEPTIBLE TO THIS CALIBRATION SHIFT IS CURRENTLY IN THE REVIEW PROCESS. THIS CHANGE WILL BE IMPLEMENTED PRIOR TO ENTRY INTO MODE 2.

[425] SAN ONOFRE 2 DOCKET 50-361 LER 83-083
STEAM GENERATOR LEVEL INDICATOR INOPERABLE.
EVENT DATE: 080283 REPORT DATE: 082683 NSSS: CE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: SIGMA INSTRUMENTS, INC.

(NSIC 188630) WITH UNIT 2 IN MODE 2, AT 0800 STEAM GENERATOR WIDE RANGE LEVEL INDICATOR 2LI-1125-2 WAS DECLARED INOPERABLE WHEN IT WAS DISCOVERED TO BE READING INCORRECTLY. ACTION STATEMENT 20 OF LCO 3.3.3.6 WAS ENTERED AND SATISFIED AT 1800 ON 8/7/83 WHEN 2 LI-1125-2 WAS RETURNED TO SERVICE. 2 LR-1125-1, WHICH ALSO INDICATES STEAM GENERATOR WIDE RANGE WATER LEVEL, REMAINED OPERABLE. THIS INCIDENT WAS CAUSED BY GAS ENTRAPPED IN THE INSTRUMENT'S SENSING LINE WHEN IT WAS LAST CALIBRATED ON 6/26/83. UNIT 2 WAS IN MODE 5 FROM 6/18/83 TO 7/10/83, AND WHEN A CHANNEL CHECK WAS DONE ON 7/10/83 THE INSTRUMENT GAVE SATISFACTORY INDICATION.

[426] SAN ONOFRE 2 DOCKET 50-361 LER 83-121
DNBR MARGIN TWICE FOUND OUT OF ALLOWABLE LIMITS.
EVENT DATE: 092783 REPORT DATE: 102583 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 186818) ON 9/27/83, WITH UNIT 2 IN MODE 1 AND THE CORE OPERATING LIMIT SUPERVISORY SYSTEM (COLSS) OUT OF SERVICE, CALCULATIONS USING SURVEILLANCE TEST S023-3-3.6 INDICATED THAT THE DEPARTURE FROM NUCLEATE BOILING RATIO (DNBR) MARGIN WAS NOT WITHIN ALLOWABLE LIMITS. AT 0917 THE ACTION STATEMENT ASSOCIATED WITH LIMITING CONDITION FOR OPERATION (LCO) 3.2.4 WAS ENTERED. THIS ALSO OCCURRED 10/3/83 AT 0806. SEE ALSO LER 83-116, DOCKET NO. 50-361. IN EACH CASE, ACCEPTABLE DNBR MARGIN WAS VERIFIED WITHIN 15 MINUTES BY RESTORING THE COLSS TO SERVICE. CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE ARE UNDER REVIEW AND WILL BE REPORTED IN A REVISION TO THIS LER.

[427] SAN ONOFRE 2 DOCKET 50-361 LER 83-125 REV 1
UPDATE ON FAILURES OF REACTOR TRIP BREAKERS.
EVENT DATE: 100283 REPORT DATE: 103183 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188350) ON OCT. 2, 1983, WITH UNIT 2 IN MODE 1 AT 100% POWER, REACTOR TRIP

BREAKER (RTB) SURVEILLANCE TESTING IN ACCORDANCE WITH PROCEDURE S023-II-11.162 WAS IN PROGRESS. DURING THIS TESTING, RTB'S #4, #6 AND #7 DEMONSTRATED ANOMALOUS BEHAVIOR WHEN THEIR UNDERVOLTAGE (UV) DEVICES WERE TESTED. SHUNT TRIP FEATURE FUNCTIONED PROPERLY AND WOULD HAVE PERFORMED THE TRIP FUNCTION IF CALLED UPON TO DO SO. THE RTB'S WERE REMOVED FROM SERVICE. RTB'S #4 AND #7 WERE REPLACED WITH SPARES. RTB #6 WAS REPLACED WITH ONE TAKEN FROM UNIT 3. THE CAUSE OF THE ANOMALIES HAS NOT BEEN DETERMINED AND IS CURRENTLY BEING INVESTIGATED THROUGH AN ENHANCED MAINTENANCE PROGRAM.

[428] SAN ONOFRE 2 DOCKET 50-361 LER 83-129
DNB RATIO POTENTIALLY EXCEEDED.
EVENT DATE: 101683 REPORT DATE: 111483 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 188520) ON 10/16/83, WITH UNIT 2 IN MODE 1 AND THE CORE OPERATING LIMIT SUPERVISORY SYSTEM (COLSS) OUT OF SERVICE, CALCULATIONS USING SURVEILLANCE TEST S023-3-3.6 INDICATED THAT THE DNBR MARGIN WAS NOT WITHIN ALLOWABLE LIMITS. AT 2210 THE ACTION STATEMENT ASSOCIATED WITH LCO 3.2.4 WAS ENTERED. THIS ALSO OCCURRED 10/18/83 AT 1605, 10/20/83 AT 0103, AND 10/21/83 AT 2100. SEE ALSO LER'S 83-116 AND 83-121, DOCKET NO. 50-361. IN EACH CASE, ACCEPTABLE DNBR MARGIN WAS VERIFIED WITHIN ONE HOUR BY RESTORING THE COLSS TO SERVICE. CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE ARE UNDER REVIEW AND WILL BE REPORTED IN A REVISION TO THIS LER.

[429] SAN ONOFRE 2 DOCKET 50-361 LER 83-151
PRESSURIZER PRESSURE AND LEVEL DECREASE CAUSES TRIP.
EVENT DATE: 111483 REPORT DATE: 121583 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVES
VENDOR: TARGET ROCK CORP.

(NSIC 188521) ON 11/14/83, AT 1901, WITH UNIT 2 IN MODE 1, THE REACTOR WAS MANUALLY TRIPPED DUE TO AN UNEXPECTED PRESSURIZER PRESSURE AND LEVEL DECREASE. OUR ANALYSIS DETERMINED THAT T-COLD HAD DROPPED BELOW THE LIMITS OF LCO 3.2.6 FOR 1 1/2 MINUTES, BUT THIS LCO WAS NO LONGER APPLICABLE FOLLOWING THE TRIP. DURING PLANT STABILIZATION, CST 2T-121'S LEVEL DROPPED BELOW THE LIMIT OF LCO 3.7.1.3 TWICE. THE LCO WAS SATISFIED WHEN TANK LEVEL WAS RESTORED BY 2000. AN OPERATOR HAD ERRONEOUSLY OPENED EMERGENCY BORATION VALVE 2HV-9247 RESULTING IN THE ADDITION OF CONCENTRATED BORIC ACID SOLUTION TO THE RCS DURING AUTOMATIC MAKE UP. WE BELIEVE THIS WAS A RESULT OF THE SIMILARITY IN LOCATION AND APPEARANCE BETWEEN THIS SWITCH AND THE INTENDED SWITCH.

[430] SAN ONOFRE 2 DOCKET 50-361 LER 83-107
DIESEL GENERATOR BUILDING FLAME DETECTOR AND SPRINKLER SYSTEMS INOPERABLE.
EVENT DATE: 120583 REPORT DATE: 010684 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: AUTOMATIC SPRINKLER CORPORATION

(NSIC 188519) ON 12/05/83, AT 1255, WITH UNIT 2 IN MODE 5, ZONE 17 DIESEL GENERATOR BUILDING PRE-ACTION FLAME DETECTOR 2BSH8974 ALARMED AND COULD NOT BE RESET. A CONTINUOUS FIRE WATCH HAD ALREADY BEEN ESTABLISHED SATISFYING THE REQUIREMENTS OF LCO 3.3.3.7, ACTION 'A'. ON 12/19/83, AT 1012, REDUCTION OF FIRE WATCH COVERAGE TO AN HOURLY BASIS RENDERED THE ASSOCIATED SPRAY/SPRINKLER SYSTEM INOPERABLE. LCO 3.7.8.2, ACTION 'A' WAS ENTERED AND SATISFIED BY THE HOURLY FIRE WATCH. THE CONTINUOUS FIRE WATCH WAS RESET AT 1110 ON 12/20/83. THE CAUSE OF THE ALARM WAS DUE TO A FAULTY COMPONENT ON A CIRCUIT CARD. THE COMPENSATORY FIRE WATCH WILL REMAIN IN EFFECT UNTIL THE DETECTOR IS RETURNED TO SERVICE.

[431] SAN ONOFRE 2 DOCKET 50-361 LER 83-152
REMOTE SHUTDOWN BORONOMETER INOPERABLE.
EVENT DATE: 121383 REPORT DATE: 011284 NSSS: CE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: NEWPORT LABORATORIES

(NSIC 188788) ON 12/13/83, AT 0253, WITH UNIT 2 IN MODE 4, REMOTE SHUTDOWN BORONOMETER 2AI-0203B WAS FOUND TO BE INOPERABLE DURING SURVEILLANCE TESTING IN ACCORDANCE WITH PROCEDURE S023-3-3-28. THE BORONOMETER WAS NOT REQUIRED TO BE OPERABLE IN MODE 4, BUT UNIT 2 HAD OPERATED IN MODES 1, 2, AND 3 SINCE IT WAS LAST DETERMINED OPERABLE ON 10/30/83. ITS ASSOCIATED CONTROL ROOM DISPLAY FUNCTIONED PROPERLY THROUGHOUT THE EVENT. THE INOPERABILITY OF THE BORONOMETER WAS DUE TO A FAILED DISPLAY. AS CORRECTIVE ACTION, THE DISPLAY UNIT WAS REPLACED. THE BORONOMETER WAS TESTED IN ACCORDANCE WITH PROCEDURE S023-II-9.125, AND DECLARED OPERABLE ON 12/15/83 AT 2050. THIS IS CONSIDERED TO BE AN ISOLATED OCCURRENCE AND NO FURTHER CORRECTIVE ACTIONS ARE PLANNED.

[432] SAN ONOFRE 2 DOCKET 50-361 LER 83-154
PRESSURIZER LEVEL TRANSMITTER FOUND INOPERABLE.
EVENT DATE: 121583 REPORT DATE: 011684 NSSS: CE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 188582) ON 12/11/83, WITH UNIT 2 IN A MODE 5 OUTAGE, CHANNEL A PRESSURIZER LEVEL TRANSMITTER 2LT-0110-1 WAS FOUND INOPERABLE DURING PERFORMANCE OF AN 18-MONTH CALIBRATION. AN INVESTIGATION INTO THE CAUSE WAS COMMENCED. ON 12/15/83, AT 2007, UNIT 2 ENTERED MODE 3, AND ACTION STATEMENT 'A' OF LCO 3.3.3.5 AND TABLE 3.3-10, ACTION STATEMENT 20 OF LCO 3.3.3.6, BECAME APPLICABLE REQUIRING CHANNEL TO BE RESTORED TO OPERABLE STATUS WITHIN 7 DAYS. THE INOPERABILITY OF 2LT-0110-1 WAS DUE TO AN EMPTY REFERENCE LEG, WHICH IS BELIEVED TO HAVE OCCURRED WHEN A LEAK WAS REPAIRED ON THE TRANSMITTER DURING THE OUTAGE. THE REFERENCE LEG WAS FILLED, AND CHANNEL A WAS DECLARED OPERABLE ON 12/17/83, AT 1512, IN ACCORDANCE WITH PROCEDURES S023-3-3.28 AND S023-3-3.35. NO FURTHER CORRECTIVE ACTION IS PLANNED.

[433] SAN ONOFRE 2 DOCKET 50-361 LER 83-092
CONTAINMENT AIRBORNE RADIATION MONITOR RENDERED INOPERABLE.
EVENT DATE: 121883 REPORT DATE: 011384 NSSS: CE TYPE: PWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: NATIONAL ENVIRONMENTAL INSTRUMENTS, INC.

(NSIC 188581) ON 12/18/83, AT 1650, WITH UNIT 2 IN MODE 3, AND 12/26/83, AT 1545, WITH UNIT 2 IN MODE 1, CONTAINMENT AIRBORNE RADIATION MONITOR 2RT-7804 WAS RENDERED INOPERABLE WHEN THE ASSOCIATED SAMPLE PUMP MOTOR BREAKER TRIPPED. REDUNDANT MONITOR 2RT-7807 WAS OUT OF SERVICE FOR ROUTINE SURVEILLANCE. ON 12/28/83, AT 0815, WITH UNIT 2 IN MODE 1, 2RT-7807 WAS SIMILARLY RENDERED INOPERABLE WITH 2RT-7804 OUT OF SERVICE. ACTION WAS INITIATED IN ACCORDANCE WITH LCO 3.4.5.1 ON EACH OCCASION. THE CAUSE OF THE SAMPLE PUMP MOTOR BREAKERS TRIPPING WAS AN INSUFFICIENT MARGIN BETWEEN THE MOTOR OPERATING CURRENT AND THE THERMAL OVERLOAD SETPOINT. THE THERMAL OVERLOAD WAS RESET AND THE PUMPS SUCCESSFULLY STARTED. THE MONITORS WERE OPERABLE WITHIN THE TIME CONSTRAINTS OF LCO 3.4.5.1. TO PREVENT RECURRENCE, THE THERMAL OVERLOAD TRIP SETPOINTS WERE RAISED 15%.

[434] SAN ONOFRE 2 DOCKET 50-361 LER 83-145
PPS EXCORE SAFETY CHANNEL DECLARED INOPERABLE.
EVENT DATE: 122083 REPORT DATE: 011884 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 188916) ON 12/20/83, AT 2145, WITH UNIT 2 IN MODE 1, THE PLANT PROTECTION SYSTEM (PPS) CHANNEL C EXCORE SAFETY CHANNEL LINEAR POWER SIGNAL VARIED FROM THE CORE PROTECTION CALCULATOR (CPC) CHANNEL C CALIBRATED LINEAR POWER SIGNAL BY 10 PERCENT, AS INDICATED BY THE CHANNEL C LINEAR POWER DEVIATION ALARM. THE PPS CHANNEL C EXCORE SAFETY CHANNEL WAS DECLARED INOPERABLE, AND IN ACCORDANCE WITH LCO 3.3.1, TABLE 3.3-1, ACTION STATEMENT 2, THE CHANNEL WAS PLACED IN THE BYPASSED CONDITION WITHIN 1 HOUR. SUBSEQUENT INVESTIGATION INDICATED THAT THE CHANNEL C EXCORE SAFETY CHANNEL LINEAR POWER SIGNAL REQUIRED ADJUSTMENT. THE CHANNEL WAS CALIBRATED AND DECLARED OPERABLE ON 12/21/83, AT 2345, IN ACCORDANCE WITH PROCEDURE S023-II-5.7. THIS IS CONSIDERED AN ISOLATED OCCURRENCE AND NO FURTHER CORRECTIVE ACTION IS PLANNED.

[435] SAN ONOFRE 2 DOCKET 50-361 LER 83-155
CONTROL ELEMENT ASSEMBLY CALCULATOR GIVES SPURIOUS INDICATION.
EVENT DATE: 122183 REPORT DATE: 011984 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 188789) WITH UNIT 2 IN MODE 1, CONTROL ELEMENT ASSEMBLY CALCULATOR (CEAC) 1 WAS DECLARED INOPERABLE AT 1438 ON 12/21/83 DUE TO SPURIOUS POSITION INDICATION ON CEA 20. IN ACCORDANCE WITH LCO 3.3.1, TABLE 3.3-1, ACTION STATEMENT 6, AT LEAST ONCE PER 4 HOURS EACH CEA WAS VERIFIED TO BE WITHIN 7 INCHES OF ALL OTHER CEA'S IN ITS GROUP. SEE ALSO LER'S 83-069, 83-087, AND 83-124 (DOCKET NO. 50-361). AFTER INVESTIGATION, THE CAUSE OF THIS EVENT COULD NOT BE DETERMINED. A CHANNEL FUNCTIONAL TEST WAS PERFORMED IN ACCORDANCE WITH PROCEDURE S023-II-6.2.3, AND CEAC 1 WAS DECLARED OPERABLE AT 0400 ON DEC. 24, 1983. NO FURTHER CORRECTIVE ACTIONS ARE PLANNED.

[436] SAN ONOFRE 3 DOCKET 50-362 LER 82-010 REV 1
UPDATE ON FIRE DETECTION INSTRUMENTATION FOUND INOPERABLE.
EVENT DATE: 111582 REPORT DATE: 121283 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: AUTOMATIC SPRINKLER CORPORATION

(NSIC 188530) IN AUG. 1982, PRIOR TO OPERATING LICENSE ISSUANCE ON 11/15/82, UNIT 3 FIRE DETECTION PANELS IN ZONES 1, 9, AND 28 FAILED THE 6-MONTH SURVEILLANCE TEST S023-I-2.62. PER LCO 3.3.3.7, ACTION STATEMENT 'A', FIRE WATCHES WERE ESTABLISHED ON 11/11/82, PRIOR TO OPERATING LICENSE ISSUANCE. FIRE SPRAY/SPRINKLER SYSTEMS REMAINED OPERABLE. SEE LER 83-067 (DOCKET NO. 50-361). INITIAL TESTING REVEALED THE NEED TO REPLACE/REPAIR COMPONENTS IN VARIOUS FIRE PANELS. THE REPLACEMENT/REPAIRS HAVE BEEN COMPLETED AS OF 9/28/83.

[437] SAN ONOFRE 3 DOCKET 50-362 LER 83-038 REV 1
UPDATE ON CABLE TUNNEL SPRAY SYSTEM COMPONENTS CORRODE.
EVENT DATE: 022083 REPORT DATE: 121283 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188583) ON MAY 11, 1983, WHILE IN MODE 5, THE SPRAY SYSTEM THAT PROTECTS CABLE TUNNEL SECTION 3 (ZONE 30) WAS DECLARED INOPERABLE WHEN DELUGE PANEL 3TSH-8951 INTERNALS WERE FOUND CORRODED. PER LCO'S 3.3.3.7 AND 3.7.8.2, ACTION STATEMENTS 'A', A CONTINUOUS FIRE WATCH WITH BACKUP SUPPRESSION EQUIPMENT WAS ESTABLISHED WITHIN 1 HOUR. THE SYSTEM REMAINED MANUALLY OPERABLE. 3TSH-8951 WAS SUBSEQUENTLY DETERMINED TO HAVE BEEN INOPERABLE SINCE PERFORMANCE OF THE 6-MO. CHANNEL FUNCTIONAL SURVEILLANCE ON 2/20/83 (SEE LER 83-067, DOCKET NO. 50-361). CORROSION OF THE PANEL INTERNALS WAS DUE TO WATER INTRUSION RESULTING FROM

IMPROPER CLOSURE. DAMAGED PARTS WERE REPLACED, AND THE PANEL DECLARED OPERABLE ON JULY 30, 1983.

[438] SAN ONOFRE 3 DOCKET 50-362 LER 83-024
PRESSURIZER SAMPLE VALVE FAILS TO CLOSE.
EVENT DATE: 030283 REPORT DATE: 040183 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: WKM VALVE DIVISION

(NSIC 188631) WITH THE PLANT IN MODE 4 AT 1015, PRESSURIZER SURGE LINE SAMPLE VALVE 3MV-0512 FAILED TO CLOSE DURING STROKE TESTING WHICH WAS BEING PERFORMED TO INVESTIGATE VALVE POSITION INDICATION PROBLEMS. THE VALVE WAS DECLARED INOPERABLE AND LCO 3.6.3 INVOKED. AS REQUIRED BY LCO 3.6.3, ACTION STATEMENT 'B', THE PENETRATION WAS ISOLATED BY DE-ENERGIZING AND SHUTTING THE REDUNDANT VALVE 3HV-0513 AT 1035. INABILITY OF THE VALVE TO CLOSE WAS ATTRIBUTED TO MECHANICAL BINDING OF THE PACKING. NEW PACKING HAD BEEN INSTALLED APPPOXIMATELY 3 WEEKS PRIOR TO THIS EVENT. THE VALVE HAD SATISFACTORILY PASSED A STROKE TEST AFTER THE PACKING INSTALLATION. SEVERAL VALVE ACTUATOR PARTS WERE INSPECTED AND THE VALVE WAS EXERCISED AND RETURNED TO OPERABLE STATUS USING PROCEDURE S023-3-3.30 AT 2300 ON MARCH 2, 1983. AN ENGINEERING EVALUATION WILL BE CONDUCTED TO DETERMINE IF DESIGN CHANGES OR OTHER CORRECTIVE ACTIONS ARE APPROPRIATE.

[439] SAN ONOFRE 3 DOCKET 50-362 LER 83-028
POTENTIAL OF CORE PROTECTION CALCULATOR FAILURES.
EVENT DATE: 032383 REPORT DATE: 040483 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 188700) DURING THE POST-CORE HOT FUNCTIONAL TESTING AND SUBSEQUENT FOLLOWUP TROUBLESHOOTING, A POTENTIAL SAFETY CONCERN INVOLVING CALIBRATION SHIFT OF FOXBORO 2AO-V31 MODULES ASSOCIATED WITH THE CORE PROTECTION CALCULATORS (CPC'S) WAS IDENTIFIED. IF LEFT UNCORRECTED, THIS SHIFT COULD RESULT IN ERRONEOUS PRIMARY LOOP TEMPERATURE (T HOT AND T COLD) BEING TRANSMITTED TO THE CPC'S AND THEREFORE, A NONCONSERVATIVE CALCULATION IN THE CPC'S POSSIBLY DELAYING OR PREVENTING A REACTOR TRIP SIGNAL BEING GENERATED AS DESCRIBED IN OUR FSAR. THE CALIBRATION SHIFT WAS CORRECTED BY USE OF EXTENDER CARDS. THE POTENTIAL CALIBRATION SHIFT IS ATTRIBUTED TO PROBLEMS WITH THE AMPLIFIER ASSOCIATED WITH THE 2AO-V31 MODULES. A DESIGN CHANGE HAS BEEN APPROVED TO REPLACE THE 2AO-V31 MODULES WITH 2AO-V21 MODULES NOT SUSCEPTIBLE TO THIS CALIBRATION SHIFT. THE REPLACEMENT OF THESE MODULES IS CURRENTLY UNDERWAY AND IS EXPECTED TO BE COMPLETED PRIOR TO MODE 2 ENTRY.

[440] SAN ONOFRE 3 DOCKET 50-362 LER 83-029 REV 1
UPDATE ON POTENTIAL CONCERN FOR VALVE POSITION INDICATION.
EVENT DATE: 032583 REPORT DATE: 062283 NSSS: CE TYPE: PWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188790) A POTENTIAL CONCERN INVOLVING VALVE POSITION INDICATION FOR A WESTINGHOUSE GATE VALVE WAS IDENTIFIED BY THE VENDOR. THIS VALVE INDICATES CLOSED PRIOR TO THE VALVE DISC FULLY ISOLATING FLOW. THIS SHUTDOWN COOLING SYSTEM (SDC) WARM-UP BYPASS VALVE (3HV9353) IS LOCATED BETWEEN THE LPSI HEADER AND THE SUCTION TO THE LPSI PUMPS (SDC). THE DEFICIENCY WOULD NOT HAVE PREVENTED THE SYSTEM FROM PERFORMING ITS FUNCTION. SEE ALSO LER 83-022, UNIT 2. THE CAUSE OF THIS EVENT WAS A DESIGN DEFECT. CORRECTIVE ACTION INCLUDES INSTRUCTIONS TO VISUALLY AND MANUALLY (VIA HAND WHEEL) CHECK VALVE TO ASSURE FULL SEATING EACH TIME IT IS CLOSED. A PERMANENT MODIFICATION IN ACCORDANCE WITH VENDOR RECOMMENDATIONS WILL BE PERFORMED AT A DATE TO BE ESTABLISHED.

[441] SAN ONOFRE 3 DOCKET 50-362 LER 83-064 REV 1
UPDATE ON FAILURES OF NUCLEAR SAFETY CHANNELS.
EVENT DATE: 082983 REPORT DATE: 101883 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: ELECTRICAL CONDUCTORS
VENDOR: AMPHENOL

(NSIC 188351) WITH UNIT 3 IN MODE 2, EXCORE LOGARITHMIC POWER SAFETY CHANNEL C WAS DECLARED INOPERABLE AT 1723 ON AUG. 29, 1983, AND CHANNEL B WAS DECLARED INOPERABLE AT 1600 ON SEPT. 18, 1983. IN EACH EVENT, THE INOPERABLE CHANNEL WAS PLACED IN THE BYPASSED CONDITION WITHIN ONE HOUR IN ACCORDANCE WITH TABLE 3.3.1, ACTION STATEMENT 2 OF LCO 3.3.1. INVESTIGATION REVEALED FAILED CONNECTORS ON THE AFFECTED CHANNEL SIGNAL AND/OR TEST CABLES. THE CONNECTORS WERE REPLACED, AND THE CHANNELS WERE DECLARED OPERABLE AT 1300 ON SEPT. 2, 1983, AND AT 0117 ON SEPT. 19, 1983, RESPECTIVELY. AS FURTHER CORRECTIVE ACTION, A DESIGN CHANGE TO THE CABLE CONNECTORS IS CURRENTLY UNDER CONSIDERATION.

[442] SAN ONOFRE 3 DOCKET 50-362 LER 83-091 REV 1
UPDATE ON REACTOR TRIP BREAKERS UNDERVOLTAGE ARMATURES NOT FULLY PICKED UP.
EVENT DATE: 101783 REPORT DATE: 013184 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188917) ON 10/17/83, WITH UNIT 2 IN MODE 1, THE UNDERVOLTAGE (UV) ARMATURES FOR REACTOR TRIP BREAKERS (RTB'S) 4 AND 8 WERE FOUND NOT TO BE FULLY PICKED UP. ON 10/28/83, WITH UNIT 3 IN MODE 3, RTB'S 5 AND 8 WERE OBSERVED TO BE IN THE SAME CONDITION. ON 10/31/83, WITH BOTH UNITS 2 AND 3 IN MODE 1, UNIT 2 RTB 4 AND UNIT 3 RTB'S 5 AND 8 WERE FOUND IN THIS CONDITION. BASED ON VENDOR TESTS, THE ABNORMAL ARMATURE POSITION HAS LITTLE OR NO DETECTABLE EFFECT ON THE ABILITY OF THE UV TRIP DEVICE TO TRIP THE BREAKER ON LOSS OF VOLTAGE. THE SHUT TRIP FEATURE FUNCTIONED PROPERLY. SEE LER 83-125 (DOCKET NO. 50-361). UV ARMATURES NOT BEING FULLY PICKED UP IS THE RESULT OF INTERFERENCE BETWEEN THE UV ARMATURE AND THE COPPER SHADING RING AROUND THE COIL CORE. ALL AFFECTED RTB'S WERE RESET. AS CORRECTIVE ACTION, VISUAL VERIFICATION AND MANUAL ADJUSTMENT OF PROPER CLOSED AIR GAP POSITION IS REQUIRED FOLLOWING ENERGIZATION OF THE UV DEVICE. DIODE ELIMINATION IS BEING INVESTIGATED.

[443] SAN ONOFRE 3 DOCKET 50-362 LER 83-097 REV 1
UPDATE ON SEVERAL CONTROL RODS SLIPPING.
EVENT DATE: 102983 REPORT DATE: 012084 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL ROD DRIVE MECHANISMS
VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 188873) WITH UNIT 3 IN MODE 2, CEA 57 DROPPED MORE THAN 19 INCHES AT 1329 ON 10/29/83, AND AT 0015 ON 10/30/83, AND CEA 61 DROPPED MORE THAN 19 INCHES AT 1617 ON 11/1/83. IN EACH CASE, ACTION STATEMENT 'C' OF LCO 3.1.3.1 WAS INVOKED. ACTION STATEMENT 'D' OF LCO 3.1.3.1 WAS INVOKED ON 10/29/83 AT 2143 AND ON 11/1/83 AT 1610 WHEN CEA 65 SLIPPED, ON 10/29/83 AT 2235 AND ON 11/1/83 AT 1556 AND AT 1612 WHEN CEA 61 SLIPPED. IN EACH CASE, THE ACTION STATEMENT WAS MET WHEN THE AFFECTED CEA WAS ALIGNED WITH ITS GROUP WITHIN ONE HOUR. THESE EVENTS WERE CAUSED BY SLUGGISHNESS OF THE CEA GRIPPERS. THE TIMING SEQUENCES AND VOLTAGES WERE ADJUSTED TO COMPENSATE FOR SLUGGISHNESS IN THE GRIPPER ASSEMBLIES. AN INVESTIGATION IS BEING CONDUCTED TO RESOLVE THIS PROBLEM. SEE LER 83-110, DOCKET 50-362.

[444] SAN ONOFRE 3 DOCKET 50-362 LER 83-113
CONTROL ELEMENT ASSEMBLY CALCULATOR FAILS.
EVENT DATE: 121083 REPORT DATE: 010984 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 188584) ON 12/11/83, AT 1305, WITH UNIT 3 IN MODE 1, CONTROL ELEMENT ASSEMBLY CALCULATOR (CEAC) 2 FAILED. PER LCO 3.3.1, TABLE 3.3-1, ACTION STATEMENT B, AT LEAST ONCE EVERY FOUR HOURS EACH CEA WAS VERIFIED TO BE WITHIN SEVEN INCHES OF ALL OTHER CEA'S IN ITS GROUP. ON 12/11/83, AT 1730, IN ACCORDANCE WITH PROCEDURE S023-II-6.2.3, CEAC 2 WAS RESTORED TO SERVICE AND LCO 3.3.1 WAS SATISFIED. INOPERABILITY OF CEAC 2 WAS DUE TO A FAULTY CENTRAL PROCESSING UNIT (CPU) BOARD. AS CORRECTIVE ACTION, THE BOARD WAS REPLACED. THIS IS CONSIDERED A NATURAL END OF LIFE FAILURE. NO FURTHER CORRECTIVE ACTIONS ARE PLANNED. SEE ALSO LER 83-066, DOCKET NO. 50-362.

[445] SAN ONOFRE 3 DOCKET 50-362 LER 83-115
LOSS OF CPC CHANNEL.
EVENT DATE: 121483 REPORT DATE: 011384 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 188585) ON DEC. 14, 1983, AT 0015, WITH UNIT 3 IN MODE 1 AT 80% POWER, A CORE PROTECTION CALCULATOR (CPC) CHANNEL C LOCAL POWER DENSITY (LPD) TRIP AND DEPARTURE FROM NUCLEATE BOILING RATIO (DNBR) TRIP WERE RECEIVED IN THE CONTROL ROOM. PER LCO 3.3.1, ACTION STATEMENT 2, CHANNEL C LPD AND DNBR WERE PLACED IN THE BYPASS CONDITION WITHIN ONE HOUR. THE CAUSE OF THIS INCIDENT WAS A FAILED MODULE CARD WHICH PROVIDES THE LOOP 1 HOT LEG TEMPERATURE TO CPC CHANNEL C. THE FAILED MODULE CARD WAS REPLACED, AND AT 1800 ON DEC. 14, 1983, CPC CHANNEL C WAS DECLARED OPERABLE PER PROCEDURE S023-3-3.25. A MAINTENANCE ORDER HAS BEEN WRITTEN TO TROUBLESHOOT AND REPAIR THE FAILED MODULE CARD.

[446] SAN ONOFRE 3 DOCKET 50-362 LER 83-114
SAFETY INJECTION TANK HAS LOW PRESSURE.
EVENT DATE: 121583 REPORT DATE: 011684 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188874) ON 12/15/83, AT 0054, WITH UNIT 3 IN MODE 1, DURING SURVEILLANCE TESTING, IT WAS DISCOVERED THAT THE NITROGEN COVER PRESSURE IN SIT 3T-007 WAS BELOW THE MINIMUM VALUE OF LCO 3.5.1. THE TANK WAS DECLARED INOPERABLE AND LCO 3.5.1, ACTION STATEMENT 'A', WAS INVOKED. IN ACCORDANCE WITH THIS ACTION STATEMENT, ACTIONS TO RETURN THE TANK TO OPERABLE STATUS WITHIN ONE HOUR WERE IMMEDIATELY INITIATED. SIT LOW PRESSURE WAS DUE TO EXCESSIVE DRAINING RESULTING FROM THE SAMPLING TECHNIQUE REQUIRED BY PROCEDURE SO23-3-2.7.1 WHICH ALLOWS SAMPLING OUTSIDE CONTAINMENT. THE TANK WAS REPRESSURIZED AND RETURNED TO OPERABLE STATUS AT 0101 ON 12/15/83. SAMPLING WILL BE DONE INSIDE CONTAINMENT UNTIL DESIGN MODIFICATIONS WHICH PRECLUDE SIT DRAINING WHEN SIT SAMPLING IS DONE OUTSIDE CONTAINMENT ARE MADE.

[447] SAN ONOFRE 3 DOCKET 50-362 LER 83-111
RCS SPECIFIC ACTIVITY EXCEEDED THREE TIMES.
EVENT DATE: 122283 REPORT DATE: 012384 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188791) ON 12/22/83, WITH UNIT 3 IN MODE 3, THE REACTOR COOLANT SYSTEM (RCS) SPECIFIC ACTIVITY EXCEEDED 1.0 MICROCURIE/GRAM DOSE EQUIVALENT (DE) I-131. THIS ALSO OCCURRED ON 12/23/83, AT 0010, AND ON 12/24/83, AT 1145. IN EACH EVENT LCO 3.4.7, ACTION STATEMENTS 'A' AND 'D', WERE INVOKED AND MET. THESE EVENTS WERE INDICATIONS OF IODINE SPIKING FOLLOWING POWER CHANGES ASSOCIATED WITH 2 REACTOR TRIPS. AS CORRECTIVE ACTION FOR EACH EVENT, PURIFICATION FLOW WAS INCREASED. RCS SPECIFIC ACTIVITY WAS REDUCED TO LESS THAN 1.0 MICROCURIE/GRAM DE

I-131 ON 12/22/83, AT 1220 ON 12/23/83, AT 1230, AND ON 12/24/83, AT 1945, RESPECTIVELY.

[448] SAN ONOFRE 3 DOCKET 50-362 LER 83-120
LOW CONDENSATE STORAGE TANK LEVEL.
EVENT DATE: 122283 REPORT DATE: 011384 NSSS: CE TYPE: PWR
SYSTEM: CONDENSATE STORAGE FACILITIES COMPONENT: ACCUMULATORS
VENDOR: BROWN MINNEAPOLIS TANK & FABRICATING CO.

(NSIC 188875) ON 12/22/83, AT 0323, WITH UNIT 3 IN MODE 1, BOTH MAIN FEEDWATER PUMPS TRIPPED DUE TO LOW SUCTION PRESSURE. THE OPERATOR MANUALLY TRIPPED THE REACTOR AND THE AUXILIARY FEEDWATER (AFW) SYSTEM WAS AUTOMATICALLY ACTUATED. DURING PLANT STABILIZATION, CONDENSATE STORAGE TANK (CST) 3T-121'S LEVEL DROPPED BELOW THE LIMIT OF LCO 3.7.1.3 AT 0350 AND THE ASSOCIATED ACTION STATEMENT WAS INVOKED. THE CAUSE WAS THE HIGH WATER DEMAND PLACED ON 3T-121 BY THE AFW SYSTEM. 3T-121'S LEVEL WAS RESTORED ON 12/22/83 AT 0450. A REVIEW OF THE AUTOMATIC LEVEL CONTROL SYSTEM FOR THE CST AND A PROPOSED TECH SPEC CHANGE ON ITS MINIMUM LEVEL REQUIREMENTS ARE IN PROGRESS. (SEE ALSO LER'S 83-078, DOCKET NO. 50-361, AND 83-103, DOCKET NO. 50-362.)

[449] SAN ONOFRE 3 DOCKET 50-362 LER 83-119
CORE PROTECTION CALCULATOR CHANNEL DECLARED INOPERABLE.
EVENT DATE: 122783 REPORT DATE: 012484 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 188919) ON 12/27/83, WITH UNIT 3 IN MODE 1, CPC CHANNEL A FAILED AS INDICATED BY THE CHANNEL A DNBR AND LPD TRIPS, AND THE CPC FAIL LIGHT. CPC CHANNEL A WAS DECLARED INOPERABLE AND PURSUANT TO TABLE 3.3-1, ACTION STATEMENT 2 OF LCO 3.3.1, THE CHANNEL WAS PLACED IN THE BYPASSED CONDITION WITHIN ONE HOUR. THE RPS CONTAINS 4 CPC CHANNELS AND ONLY 3 CHANNELS (ALL OF WHICH REMAINED FUNCTIONAL THROUGHOUT THE EVENT) ARE REQUIRED FOR OPERABILITY. THE CPC CHANNEL A FAILURE WAS ATTRIBUTED TO THE MULTIPURPOSE AQUISITION AND CONTROL SYSTEM ERROR CODE 10. PER THE CPC VENDOR, THIS TYPE OF FAILURE IS EXPECTED TO OCCUR OCCASIONALLY. THIS FAILURE IN NO WAY RENDERED CPC CHANNEL A UNABLE TO PERFORM ITS DESIGN SAFETY FUNCTION (I.E., THE CPC CHANNEL FAILS AS "TRIPPED.") FOLLOWING DIAGNOSTIC TESTS WHICH INDICATED THAT CPC CHANNEL A WAS FUNCTIONING PROPERLY, IT WAS DECLARED OPERABLE ON DECEMBER 27, 1983, AT 1245, IN ACCORDANCE WITH PROCEDURE SO23-II-6.2.1. NO FURTHER CORRECTIVE ACTION IS PLANNED. SEE ALSO LER NO. 83-058 (DOCKET NO. 50-361) AND LER NO. 83-079 (DOCKET NO. 50-362).

[450] SAN ONOFRE 3 DOCKET 50-362 LER 83-118
DNBR MARGIN OUTSIDE ALLOWABLE LIMITS.
EVENT DATE: 122983 REPORT DATE: 012484 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: OTHER COMPONENTS
VENDOR: SYSTEMS ENGINEERING LABORATORIES, INC.

(NSIC 188918) ON 12/29/83, WITH UNIT 3 IN MODE 1 AND THE CORE OPERATING LIMIT SUPERVISORY SYSTEM (COLSS) OUT OF SERVICE, CALCULATIONS USING PROCEDURE SO23-3-3.6 INDICATED THAT THE DEPARTURE FROM NUCLEATE BOILING RATIO (DNBR) MARGIN WAS OUTSIDE ALLOWABLE LIMITS. AT 1226 THE ACTION STATEMENT ASSOCIATED WITH LCO 3.2.4 WAS ENTERED. ACCEPTABLE DNBR MARGIN WAS VERIFIED AT 1233 WHEN COLSS WAS RETURNED TO SERVICE. CONSERVATISM INHERENT IN PROCEDURE SO23-3-3.6 CAUSES THE DNBR MARGIN TO BE OUTSIDE ALLOWABLE LIMITS WHENEVER IT IS USED INSTEAD OF COLSS TO CALCULATE DNBR MARGIN WITH THE UNIT OPERATING OVER 85% POWER. SIMILAR OCCURRENCES WERE REPORTED IN LER NOS. 83-106 (DOCKET NO. 50-362), 83-116, 83-121, 83-129 AND 83-131 (DOCKET NO. 50-361). IN THESE LER'S IT WAS STATED THAT CORRECTIVE ACTION WAS CONSIDERED BEING TAKEN TO IMPROVE THE RELIABILITY OF THE

COLSS PROGRAM AND THE PLANT COMPUTER. THIS MEASURE IS BEING CONTINUALLY PURSUED AS CORRECTIVE ACTION.

[451] SAN ONOFRE 3 DOCKET 50-362 LER 83-116
UNDERVOLTAGE TRIP DEVICE OF RTB EXHIBITS UNACCEPTABLE RESPONSE TIME.
EVENT DATE: 123083 REPORT DATE: 013084 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188792) ON DECEMBER 30, 1983, WITH UNIT 3 IN MODE 1, REACTOR TRIP BREAKER (RTB) SURVEILLANCE TESTING WAS IN PROGRESS. DURING THIS TESTING, THE UNDERVOLTAGE (UV) TRIP DEVICE OF RTB #9 (SERIAL NO. 256A4002-656-8) EXHIBITED A PROCEDURALLY UNACCEPTABLE RESPONSE TIME. THE BREAKER WAS LOCATED IN THE NON-SAFETY RELATED CROSSTIE POSITION WHICH DOES NOT OPEN ON A REACTOR TRIP. THE BREAKER CONTINUES TO FUNCTION PROPERLY USING THE SHUNT TRIP DEVICE. RTB SERIAL NO. 256A4002-656-8 WAS REMOVED FROM SERVICE AND REPLACED WITH AN ACCEPTABLE SPARE. RTB SERIAL NO. 256A4002-656-8 WILL NOT BE RETURNED TO SERVICE. RTB INVESTIGATIONS CONTINUE. SEE ALSO LER 83-125, REV. 0 AND LER 83-125, REV. 1 (DOCKET 50-361).

[452] SEQUOYAH 1 DOCKET 50-327 LER 83-002
PRESSURIZER LEVEL SWITCHES INOPERABLE.
EVENT DATE: 011583 REPORT DATE: 021183 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ITT-BARTON

(NSIC 188574) UNIT 1 IN MODE 5 WITH THE RCS TEMPERATURE AND PRESSURE AT 140 DEGREES F AND 0 PSIG. WHILE RUNNING A SHORTENED VERSION OF SURVEILLANCE INSTRUCTION (SI) 196 AS COMMITTED TO IN SQRO-50-327/82-35 R1, IT WAS DISCOVERED THAT TWO OF FOUR LEVEL SWITCHES WERE OUT OF TOLERANCE. THIS CONDITION WAS DISCOVERED IN MODE 5 BUT COULD HAVE EXISTED IN APPLICABLE MODES PER LCO 3.5.1.2. PREVIOUS OCCURRENCES - SQRO-50-327/82-135 AND SQRO-50-328/82-137. 1-LS-87-21 AND -22 WERE OUT OF TOLERANCE AS SPECIFIED IN SURVEILLANCE REQUIREMENT 4.5.1.2.C.1. THE PROBABLE CAUSE WAS INSTRUMENT DRIFT FOR 1-LS-87-21 AND A BAD MICRO SWITCH FOR 1-LS-87-22. BOTH WERE REPAIRED, RECALIBRATED, AND RETURNED TO SERVICE. ALL FOUR LEVEL SWITCHES WILL BE RECHECKED IN 30 DAYS PER TVA'S PREVIOUS COMMITMENT. DESIGN AND/OR ANALYSIS TO REVISE SETPOINTS ARE BEING CONSIDERED.

[453] SEQUOYAH 1 DOCKET 50-327 LER 83-177
DIESEL GENERATOR DECLARED INOPERABLE.
EVENT DATE: 112283 REPORT DATE: 122183 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: RELAYS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188424) WITH UNIT 1 IN MODE 1 AND UNIT 2 IN MODE 1 (BOTH AT 100% REACTOR POWER) AT 0940 CST ON 11/22/83, DIESEL GENERATOR (DG) 2A-A WAS DECLARED INOPERABLE DUE TO FAILING TO MEET SURVEILLANCE REQUIREMENTS. PREVIOUS OCCURRENCES - NONE. DURING PERFORMANCE OF SI-102, DG 2A-A FAILED TO TRIP ON DEMAND DURING RELAY TESTING. THE CAUSE OF THE FAILURE OF DIFFERENTIAL RELAY 87A DURING TESTING IS UNKNOWN. THE RELAY WAS REPLACED AND A RETEST MADE WHICH CORRECTED THE PROBLEM. THE DG WAS RETURNED TO OPERABLE STATUS AT 1235 CST ON 11/22/83. NO FURTHER ACTION IS PLANNED.

[454] SEQUOYAH 1 DOCKET 50-327 LER 83-176
SG FLOW TRANSMITTER READS HIGH.
EVENT DATE: 112483 REPORT DATE: 122283 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188423) WITH UNIT 1 IN MODE 3 (0% REACTOR POWER) AT 1925 CST AT 11/24/83, ONE STEAM GENERATOR (SG) FLOW CHANNEL 1-FT-1-28A WAS DECLARED INOPERABLE DUE TO READING HIGH. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT (7) OF LCO 3.3.1.1. PREVIOUS OCCURRENCES - NONE. TROUBLESHOOTING THE INOPERABLE CHANNEL REVEALED THE DELTA-PRESSURE (D/P) UNIT TO BE RUPTURED. THE CAUSE IS UNKNOWN AND THE TRANSMITTER HAS BEEN RETURNED TO BARTON FOR REVIEW AND REPAIR. PRESENTLY, THE UNIT IS IN AN OUTAGE AND THE TRANSMITTER WILL BE REPLACED AND OPERABLE BEFORE STARTUP.

[455] SEQUOYAH 1 DOCKET 50-327 LER 83-183
STEAM SUPPLY VALVE FAILS.
EVENT DATE: 120283 REPORT DATE: 123083 NSSS: WE TYPE: PWR
SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: VALVE OPERATORS
VENDOR: LIMITORQUE CORP.

(NSIC 188343) WITH UNIT 1 IN MODE 5 (0% RX POWER) AT 0430 CST ON 12/02/83, DURING STROKE TESTING OF ONE TURBINE-DRIVEN AUXILIARY FEEDWATER PUMP, STEAM SUPPLY VALVE (1-FCV-1-18) FAILED TO MEET SURVEILLANCE REQUIREMENTS. THIS CONDITION COULD HAVE EXISTED WITH THE UNIT IN OPERATION. PREVIOUS OCCURRENCES - NONE. TROUBLESHOOTING THE FAILED VALVE REVEALED THAT THE LIMITORQUE OPERATOR GEARED LIMIT SWITCH FAILED. THIS WAS CAUSED BY THE SOLIDIFICATION OF OPERATOR GREASE, MOST PROBABLY DUE TO EXCESSIVE HEAT FROM A STEAM LEAK AT POWER. THE GEARED LIMIT SWITCH WAS REPLACED AND NEW GREASE ADDED. THE VALVE WAS VERIFIED OPERABLE ON 12/14/83. THE VALVE ENVIRONMENT WILL BE CHECKED FOR STEAM LEAKS WHEN THE UNIT RETURNS TO POWER.

[456] SEQUOYAH 1 DOCKET 50-327 LER 83-178
WASTE GAS DECAY TANK FOUND WITH HIGH OXYGEN CONCENTRATION.
EVENT DATE: 120683 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: OTHER COMPONENTS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188342) UNIT 1 IN MODE 5 (134 DEGREES F, 300 PSIG) AND UNIT 2 IN MODE 1 AT 100% RTP. AT 0815 (C) ON 12/06/83, THE "G" WASTE GAS DECAY TANK WAS FOUND WITH AN OXYGEN CONCENTRATION OF 2.2% EXCEEDING THE 2% LIMIT. THIS EVENT REQUIRED ENTRY INTO LCO 3.11.2.5. PREVIOUS OCCURRENCES - THREE (SQRO-50-327/83102, 83143, AND 83159). NITROGEN WAS ADDED TO THE TANK IN ORDER TO REDUCE THE OXYGEN CONCENTRATION. THE OXYGEN CONCENTRATION WAS REDUCED BELOW THE 2% LIMIT AND THE TANK RETURNED TO SERVICE AT 2356 (C) ON 12/06/83. THE EXACT CAUSE OF THE EVENT IS UNKNOWN. AN INVESTIGATION OF THIS AND OTHER SIMILAR EVENTS IS CONTINUING.

[457] SEQUOYAH 1 DOCKET 50-327 LER 83-180
THERMAL OVERLOAD RELAY HEATERS FOR SEVERAL MOTOR-OPERATED VALVES FAIL TEST.
EVENT DATE: 120683 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: OTHER SYSTEMS COMPONENT: VALVE OPERATORS

(NSIC 188425) UNIT 1 IN MODE 5 (130 DEGREES F, 300 PSIG) AND UNIT 2 IN MODE 1 AT 100% RTP. ON 12/06/83 DURING PERFORMANCE OF SI-251.1, "CHANNEL CALIBRATION OF CLASS 1E MOTOR-OPERATED VALVE THERMAL OVERLOAD RELAY HEATERS", THE THERMAL OVERLOAD DEVICES ON SEVERAL MOTOR-OPERATED VALVES FAILED THE TRIP CHECK TEST. THIS EVENT REQUIRED ENTRY INTO LCO 3.8.3.2. PREVIOUS OCCURRENCES - NONE. THE THERMAL OVERLOAD RELAY HEATERS WHICH FAILED THE TEST WERE DETERMINED TO BE IMPROPERLY SIZED. ALTHOUGH THE THERMAL OVERLOADS WERE IMPROPERLY SIZED, THE OPERATION OF THE VALVES WAS NOT JEOPARDIZED. THE THERMAL OVERLOADS WERE REPLACED WITH PROPERLY SIZED OVERLOAD HEATERS AND SATISFACTORILY TESTED.

[458] SEQUOYAH 1 DOCKET 50-327 LER 83-182
ESSENTIAL RAW COOLING WATER PUMP TIME RELAY FAILS.
EVENT DATE: 120683 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: ONSITE POWER SYSTEM & CONTROL COMPONENT: RELAYS
VENDOR: AGASTAT RELAY CO.

(NSIC 188426) UNIT 1 IN MODE 5 (134 DEGREES F, 300 PSIG) AND UNIT 2 IN MODE 1 AT 100% RTP. ESSENTIAL RAW COOLING WATER PUMP JA TIME DELAY RELAY ST-1A FAILED SI-220.1, "LOAD SEQUENCE TIMER FUNCTIONAL TEST", ON 12/06/83. FAILURE OF THIS RELAY MAY HAVE RESULTED IN THE 1A-A DIESEL GENERATOR BEING INOPERABLE AND REQUIRED ENTRY INTO LCO 3.8.1.1. PREVIOUS OCCURRENCES - NONE. THE RELAY WAS IMMEDIATELY ADJUSTED AND RETURNED TO SERVICE. THE CAUSE OF THE OUT-OF-TOLERANCE SETPOINT HAS BEEN ATTRIBUTED TO INSTRUMENT DRIFT. NO ADDITIONAL CORRECTIVE ACTION IS REQUIRED.

[459] SEQUOYAH 1 DOCKET 50-327 LER 83-186
DIESEL GENERATOR TRIPS ON HIGH CRANKCASE PRESSURE.
EVENT DATE: 120983 REPORT DATE: 010684 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: GENERAL MOTORS

(NSIC 188427) UNIT 1 IN MODE 5 (134 DEGREES F, 340 PSIG) AND UNIT 2 IN MODE 1 AT 100% RPT. DURING PERFORMANCE OF ROUTINE SURVEILLANCE TESTING OF DIESEL GENERATOR 1A-A, THE DIESEL TRIPPED ON HIGH CRANKCASE PRESSURE. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT 'A' OF LCO 3.8.1.1. PREVIOUS OCCURRENCES - NONE. INVESTIGATION REVEALED A BROKEN PISTON, TWO CRACKED LINERS, AND PLANETARY GEAR TRAIN DAMAGE (IN THE TURBOCHARGER). INVESTIGATION REVEALED THAT WRIST PIN BOLTS ON THE NUMBER 8 CYLINDER WERE NOT PROPERLY TORQUED BY GENERAL MOTORS ELECTROMOTIVE DIVISION. THE DIESEL WAS REPAIRED AND RETURNED TO SERVICE AT 0435 (C) ON 12/12/83.

[460] SEQUOYAH 1 DOCKET 50-327 LER 83-187
TWO RADIATION MONITORS DECLARED INOPERABLE.
EVENT DATE: 123183 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: MOTORS
VENDOR: BALDOR ELECTRIC

(NSIC 188773) UNIT 1 IN MODE 4 (204 DEGREES F, 540 PSIG) AND UNIT 2 IN MODE 1 AT 100% RX POWER. ON 12/31/83 AT 0900, RADIATION MONITORS O-RM-90-133 AND O-RM-90-140, THE ESSENTIAL RAW COOLING WATER LIQUID MONITORS FOR HEADER A, WERE DECLARED INOPERABLE. THIS EVENT REQUIRED ENTRY INTO LCO 3.3.3.9. PREVIOUS OCCURRENCES - NONE. THE SAMPLE PUMP MOTOR FAILED ON THE EFFLUENT MONITORS WHILE IN SERVICE. THE MOTOR WAS REPLACED AND RETURNED TO SERVICE ON 01/03/84 AFTER PERFORMING A FUNCTIONAL CHECK PER SURVEILLANCE INSTRUCTIONS ON THE RADIATION MONITORS. NORMAL WEAR AND TEAR CAUSED THE MOTOR TO FAIL. NO FURTHER ACTION IS REQUIRED.

[461] SEQUOYAH 2 DOCKET 50-328 LER 83-171
DG DECLARED INOPERABLE WHEN REMOTE SPEED CONTROL FAILS.
EVENT DATE: 120683 REPORT DATE: 010684 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188428) UNIT 2 IN MODE 1 (100% POWER). AT 2109 CST ON 12/06/83, DIESEL GENERATOR 1A-A WAS DECLARED INOPERABLE WHEN THE REMOTE SPEED CONTROL FAILED TO OPERATE PROPERLY. PREVIOUS OCCURRENCES - TWO (SQRO-50-327/81-025, SQRO-50-328/81-155). INVESTIGATION REVEALED A BAD WINDING (IN THE DECREASE LOAD DIRECTION) IN THE POTENTIOMETER DRIVE MOTOR. THE MOTOR OPERATED POTENTIOMETER

WAS REPLACED AS A UNIT AND THE DIESEL WAS DECLARED OPERABLE ON 12/07/83 AT 1146 CST. NO ADDITIONAL CORRECTIVE ACTION IS PLANNED.

[462] SEQUOYAH 2 DOCKET 50-328 LER 83-185
GLYCOL CONTAINMENT ISOLATION VALVE FAILS TO CLEAR ITS OPEN LIMIT SWITCH.
EVENT DATE: 120783 REPORT DATE: 010684 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS

(NSIC 188431) UNIT 2 IN MODE 1 AT 100% RTP. AT 1612 (C) ON 12/07/83, GLYCOL CONTAINMENT ISOLATION VALVE 2-FCV-61-97 WOULD NOT CLEAR ITS OPEN LIMIT SWITCH. THIS EVENT REQUIRED ENTRY INTO LCO 3.6.3. PREVIOUS OCCURRENCES - NONE. INVESTIGATION REVEALED AN IMPROPERLY TIGHTENED BOLT ON THE LIMIT SWITCH MOUNTING BRACKET HAD ALLOWED THE LIMIT SWITCH TO SLIP OUT OF POSITION AND PREVENTED PROPER CONTACT. THE BOLT WAS TIGHTENED, THE LIMIT SWITCH PROPERLY ADJUSTED, AND THE VALVE RETURNED TO SERVICE ON 12/07/83.

[463] SEQUOYAH 2 DOCKET 50-328 LER 83-190
RCS SUBCOOLING MARGIN MONITOR DECLARED INOPERABLE.
EVENT DATE: 121183 REPORT DATE: 010684 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188432) WITH UNIT 2 IN MODE 1 (100% REACTOR POWER) AT 0726 CST ON 12/11/83, THE REACTOR COOLANT SYSTEM (RCS) SUBCOOLING MARGIN MONITOR WAS DECLARED INOPERABLE DUE TO THE LOSS OF THE UNIT P-250 COMPUTER. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT (A) OF LCO 3.3.3.7. PREVIOUS OCCURRENCES - TWO (SQRO-50-327/83-158, SQRO-50-328/83-034). INVESTIGATION INTO THE LOSS OF THE UNIT P-250 COMPUTER REVEALED THAT THE COMPUTER HALTED MOST PROBABLY DUE TO A PROGRAM ERROR. FURTHER INVESTIGATION DID NOT REVEAL ANY INDICATION AS TO WHAT TYPE ERROR OCCURRED, AND UPON RESTART OF THE COMPUTER, NO FURTHER PROBLEMS WERE NOTED. THE RCS SUBCOOLING MARGIN MONITOR WAS RETURNED TO SERVICE AT 0740 CST ON 12/11/83.

[464] SEQUOYAH 2 DOCKET 50-328 LER 83-184
CONTAINMENT PERSONNEL DOOR FAILS TO CLOSE.
EVENT DATE: 121283 REPORT DATE: 011084 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS,PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 188430) UNIT 2 IN MODE 1 AT 100% RTP. AT 1142 (C) ON 12/12/83, THE LOWER CONTAINMENT PERSONNEL AIRLOCK OUTER DOOR WOULD NOT CLOSE. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT 'A' OF LCO 3.6.1.3. PREVIOUS OCCURRENCES - FIVE (SQRO-50-327/83056, SQRO-50-328/82049, 82060, 82120, AND 83081). INVESTIGATION REVEALED THREE CAM FOLLOWER BEARINGS HAD FAILED IN THE MECHANICAL LINKAGE DUE TO NORMAL WEAR. THE CAM FOLLOWER BEARINGS WERE REPLACED, THE DOOR SATISFACTORILY TESTED, AND THE DOOR RETURNED TO SERVICE AT 1800 (C) ON 12/12/83.

[465] SEQUOYAH 2 DOCKET 50-328 LER 83-188
DG LOSES ENTIRE LOAD.
EVENT DATE: 122183 REPORT DATE: 011984 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: OTHER COMPONENTS
VENDOR: AMPHENOL

(NSIC 188575) UNIT 1 IN MODE 5 (0% POWER, 130 DEGREES F, 275 PSIG) AND UNIT 2 IN MODE 1 (100% POWER). ON 12/21/83 AT 1220 CST DURING PERFORMANCE OF SI-7, "ELECTRICAL POWER SYSTEMS: DIESEL GENERATORS," DIESEL GENERATOR (DG) 1A-A WAS LOADED TO 4 MWE. WHILE ATTEMPTING TO REDUCE LOAD, THE LOAD DROPPED INSTANTLY TO ZERO. THIS EVENT REQUIRED ENTRY INTO LCO 3.8.1.1. PREVIOUS OCCURRENCES - NONE. THE CANNON PLUG CONNECTOR ON ENGINE NUMBER 1 GOVERNOR WAS FOUND TO BE LOOSE AND

DIRTY. THE CONNECTOR HAD A TRACE OF OIL AND CORROSION PRODUCTS INSIDE. IT WAS CLEANED AND RETIGHTENED. THE MAINTENANCE INSTRUCTION WILL BE REVISED TO CHECK THIS CONNECTOR EVERY SIX MONTHS.

[466] SEQUOYAH 2 DOCKET 50-328 LER 83-181
INVERTER TAKEN OUT OF SERVICE TO PERFORM TEST - UNIT 2 NOT NOTIFIED.
EVENT DATE: 122383 REPORT DATE: 010584 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: GENERATORS

(NSIC 188429) UNIT 1 IN MODE 5 (130 DEGREES F, 300 PSIG) AND UNIT 2 IN MODE 1 (100% POWER). ON 12/23/83, IT WAS DISCOVERED THAT 120V AC VITAL INVERTER 1-I HAD BEEN TAKEN OUT OF SERVICE FOR TEST MI-10.6, "120V VITAL INSTRUMENT POWER BOARD CHECK", AND HAD NOT BEEN RETURNED TO SERVICE WITHIN 24 HOURS. THIS EVENT REQUIRED ENTRY INTO LCO 3.8.2.1. PREVIOUS OCCURRENCES - NONE. ONLY UNIT 1 WAS NOTIFIED THAT THE INVERTER WAS TAKEN OUT OF SERVICE. THIS INVERTER WAS NOT REQUIRED PER TECH SPECS IN MODE 5 ON UNIT 1, BUT IT WAS REQUIRED FOR UNIT 2. MAINTENANCE INSTRUCTION 10.6 IS BEING REVISED TO INCLUDE SIGNOFFS FOR BOTH UNITS TO ENSURE BOTH UNIT NOTIFICATION AND APPLICABILITY.

[467] SEQUOYAH 2 DOCKET 50-328 LER 83-189
FEEDWATER FLOW CHANNEL AND RWST LEVEL TRANSMITTER DECLARED INOPERABLE.
EVENT DATE: 122483 REPORT DATE: 011984 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 188576) WITH UNIT 2 IN MODE 1 (100% RX POWER) AT 0455 CST ON 12/24/83, FEEDWATER FLOW CHANNEL 2-FT-3-90 WAS DECLARED INOPERABLE DUE TO A FROZEN SENSE LINE. A SIMILAR EVENT OCCURRED AT 1500 CST ON 12/24/83 FOR REFUELING WATER STORAGE TANK LEVEL TRANSMITTER 2-LT-63-51. FOR EACH EVENT, THE UNIT COMPLIED WITH THE ACTION REQUIREMENTS OF LCO 3.3.1 AND 3.3.2. PREVIOUS OCCURRENCES - SIX (SQRO-50-327/80206, 81003, 81154, SQRO-50-328/82010, 82013, 83006). TROUBLESHOOTING BOTH EVENTS FOUND THE SENSE LINES TO BE FROZEN DUE TO THE EXTREMELY LOW OUTSIDE TEMPERATURES. FURTHER INVESTIGATION REVEALED A BLOWN FUSE IN THE HEAT TRACE CIRCUIT FOR THE FEEDWATER CHANNEL. THE FUSE WAS REPLACED WITH THE CHANNEL BEING RETURNED TO SERVICE AFTER THAWING AT 1058 CST ON 12/25/83. THE RWST CHANNEL WAS FOUND TO HAVE INADEQUATE INSULATION AT THE TANK. AFTER ADDING HEAT TRACING AND INSULATION, THE LINE WAS RETURNED TO SERVICE AT 1825 CST ON 12/24/83.

[468] SEQUOYAH 2 DOCKET 50-328 LER 83-191
ROD POSITION INDICATOR BEHAVES ERRATICALLY.
EVENT DATE: 122783 REPORT DATE: 012584 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188774) WITH UNIT 2 IN MODE 1 (100% RX POWER) AT 0939 CST ON 12/27/83, ROD POSITION INDICATOR FOR SHUTDOWN BANK 'C', ROD C-11, WAS DECLARED INOPERABLE DUE TO ERRATIC BEHAVIOR. THE UNIT COMPLIED WITH THE ACTION REQUIREMENTS OF LCO 3.1.3.2. PREVIOUS OCCURRENCES - THREE (SQRO-50-327/80186, 83031, AND SQRO-50-328/82032). TROUBLESHOOTING THE INOPERABLE RPI SHOWED THAT A HIGH RESISTANCE WAS ON THE SECONDARY COIL MOST PROBABLY CAUSED BY A FAULTY CONNECTION AT THE REACTOR VESSEL HEAD. A LOW CURRENT 500-VOLT CHARGE WAS PLACED ON THE CABLE WHICH WELDED THE FAULTY CONNECTION. SUBSEQUENT CHECK FOUND THE INDICATOR TO BE READING CORRECTLY. IT WAS RETURNED TO SERVICE AT 0950 CST ON 12/27/83. NO FURTHER ACTION IS REQUIRED.

[469] ST. LUCIE 1 DOCKET 50-335 LER 83-014
IODINE ACTIVITY IN PRIMARY COOLANT.
EVENT DATE: 022683 REPORT DATE: 032883 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 188618) DURING POWER REDUCTION IN PREPARATION FOR THE 1983 REFUELING OUTAGE, DOSE EQUIVALENT IODINE (DEQ I-131) EXCEEDED THE TECH SPEC LIMIT (TECH SPEC 3.4.8.A) OF 1.0 MICRO CURIES/GM. DEQ WAS FIRST MEASURED ABOVE ITS LIMIT AT 2235, FEB. 26, 1983, AND REMAINED ABOVE THE LIMIT FOR APPROXIMATELY 28 HOURS. THIS IS THE 15TH OCCURRENCE OF THIS TYPE. IODINE SPIKING IS EXPECTED ON POWER REDUCTIONS BASED ON PAST OPERATING HISTORY.

[470] ST. LUCIE 2 DOCKET 50-389 LER 83-012
PORV POSITION INDICATOR INOPERABLE.
EVENT DATE: 052383 REPORT DATE: 062283 NSSS: CE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GARRETT FLUID COMPONENTS
OMAHA PUBLIC POWER DISTRICT

(NSIC 188712) WHILE IN MODE 3 DURING PREOPERATIONAL TESTING, IT WAS DISCOVERED THAT THE POSITION INDICATION LIGHTS FOR POWER OPERATED RELIEF VALVE (PORV) 1474 WERE OUT. THIS CONDITION IS NOT IN ACCORDANCE WITH TECH SPEC 3.3.3.6. THIS CONDITION WAS SUBSEQUENTLY CORRECTED. DURING THE EVENT NO ADVERSE EFFECT OCCURRED. THIS IS THE SECOND LER OF THIS TYPE (SEE 389-83-008). THE CAUSE OF LOSS OF POSITION INDICATION WAS A FAILED MAGNETIC SLUG LOCATED ON THE VALVE STEM. IT IS BELIEVED THAT THE MAGNET FAILED IN THE HIGH TEMPERATURES ASSOCIATED WITH THE VALVE'S ENVIRONMENT. A NEW MAGNET WITH ANNEALED METAL WAS USED AS A REPLACEMENT. SUBSEQUENT TESTING PROVED SATISFACTORY. VALVE MANUFACTURED BY GARRETT FLUID COMPONENTS.

[471] ST. LUCIE 2 DOCKET 50-389 LER 83-015
SAFETY RELATED BUSES DEENERGIZED.
EVENT DATE: 052783 REPORT DATE: 062483 NSSS: CE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188713) DURING PREOPERATIONAL TESTING BOTH EHE 2A3 AND THE 2B3 4160 V SAFETY RELATED BUSES WERE BRIEFLY DEENERGIZED. THE DEENERGIZATIONS OCCURRED APPROXIMATELY 25 MINUTES APART. IN BOTH CASES THE EMERGENCY DIESEL GENERATORS AUTOMATICALLY STARTED AND REENERGIZED THE BUSES WITHIN 10 SEC. SEE LER #83-010. THE 2A3 BUS WAS DEENERGIZED WHEN ITS TIE BREAKER TRIPPED AS AN OPERATOR WAS OPENING THE BREAKER CUBICLE DOOR. THE BREAKER PROTECTIVE RELAYS WERE APPARENTLY JARRED. THE 2B3 BUS WAS DEENERGIZED WHEN ITS TIE BREAKER TRIPPED WHILE CONSTRUCTION PERSONNEL WERE CLEANING THE SWITCHGEAR. NO EXACT CAUSE COULD BE ESTABLISHED.

[472] ST. LUCIE 2 DOCKET 50-389 LER 83-017
CONTAINMENT ISOLATION SIGNAL OCCURS.
EVENT DATE: 052783 REPORT DATE: 062483 NSSS: CE TYPE: PWR
SYSTEM: ONSITE POWER SYSTEM & CONTROL COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188884) DURING PREOPERATIONAL TESTING THE "MB" INSTRUMENT BUS INVERTER WAS BRIEFLY DEENERGIZED. BECAUSE ANOTHER CHANNEL'S CONTAINMENT HIGH RADIATION BISTABLE WAS IN "TRIP", A CONTAINMENT ISOLATION SIGNAL OCCURRED. POWER TO THE INVERTER WAS IMMEDIATELY RESTORED AND THE CIS WAS RESET. THIS IS THE FIRST LER

INVOLVING LOSS OF POWER TO AN INSTRUMENT BUS INVERTER. AN OPERATOR OPENED THE INVERTER'S SUPPLY BREAKER BY MISTAKE.

[473] ST. LUCIE 2 DOCKET 50-389 LER 83-054
WATER LEAK FROM ICW HEADER.
EVENT DATE: 090883 REPORT DATE: 101083 NSSS: CE TYPE: PWR
SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: PIPES,FITTINGS

(NSIC 188714) WHILE SHUTDOWN, WATER WAS FOUND SPRAYING FROM A SMALL HOLE IN THE "B" ICW HEADER. THE PIPING HAD A DEFECT AT A WELD AND THE CEMENT LINING ON INTERIOR OF THE PIPE SURFACE WAS CRACKED. ACTION WAS TAKEN IN ACCORDANCE WITH TECH SPEC 3.7.4. THIS PIPING WAS REPAIRED AND RETURNED TO SERVICE WITHIN 40 HOURS. THIS EVENT WAS THE FIRST OF ITS TYPE. THE HOLE APPEARED TO BE CAUSED BY A WELD DEFECT. THIS WELD WAS REPAIRED.

[474] ST. LUCIE 2 DOCKET 50-389 LER 83-052
ESCAPE AIR LOCK NOT TESTED.
EVENT DATE: 091383 REPORT DATE: 100583 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS,PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 188885) WHILE IN MODE 2 (STARTUP) THE SEAL WIRE ON THE ESCAPE AIRLOCK WAS FOUND TO BE BROKEN. AN INVESTIGATION REVEALED THE DOORS HAD BEEN OPENED ON JULY 25 AND SEP T. 8 WITHOUT THE LEAK TEST REQUIRED BY TECH SPEC 4.6.1. 3. THE DOORS WERE IMMEDIATELY TESTED AND FOUND TO BE SATISFACTORY. THIS IS THE FIRST EVENT OF THIS TYPE. THE CAUSE OF THE EVENT WAS A COMBINATION OF PERSONNEL ERRORS AND INADEQUATE PROCEDURES. APPLICABLE PERSONNEL HAVE BEEN REINSTRUCTED REGARDING AIRLOCK TEST REQUIREMENTS AND A DAILY SURVEILLANCE OF THE SEAL WIRE IS BEING ADDED. PERSONNEL INVOLVED INCLUDED LICENSED, NONLICENSED, AND MAINTENANCE PERSONNEL.

[475] ST. LUCIE 2 DOCKET 50-389 LER 83-077
DG FAILS TO START WITHIN REQUIRED TIME AND FUEL OIL TANK IS LOW.
EVENT DATE: 122183 REPORT DATE: 012084 NSSS: CE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: TRANSAMERICA DELAVAL

(NSIC 188599) WHILE AT 100% POWER, 2B DIESEL GENERATOR (DG) FAILED TO START WITHIN THE REQUIRED 10 SECONDS DURING A PERIODIC SURVEILLANCE. IT WAS ALSO FOUND THAT THE 2B2 FUEL OIL DAY TANK WOULD NOT AUTOMATICALLY FILL ABOVE THE 30% LEVEL. ACTION WAS TAKEN PER TECH SPEC 3.8.1.1B WITH THE 2B DG RETURNED TO SERVICE WITHIN 12 HOURS. THIS IS THE SECOND EVENT OF ITS TYPE (SEE LER 83-37). NO CAUSE FOR THE SLOW START TIME WAS FOUND. THE DG WAS SUBSEQUENTLY HOT AND COLD STARTED SATISFACTORILY AND PLACED BACK IN SERVICE. THE DAY TANK LEVEL CONTROL WAS REPAIRED BY REPLACING A HOLDING RELAY MODULE. THIS MODULE IS MADE BY TRANSAMERICA DEVALAR (MODEL SD-28196).

[476] SUMMER 1 DOCKET 50-395 LER 83-003
FW FLOW INDICATOR FAILS LOW.
EVENT DATE: 010883 REPORT DATE: 020783 NSSS: WE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: INTERNATIONAL INSTRUMENTS, INC.

(NSIC 188715) ON JAN. 8, 1983, MAIN CONTROL BOARD INDICATION FOR STEAM GENERATOR "A" FEEDWATER FLOW (IFI-477) FAILED LOW. ON JAN. 20, 1983, IFI-477 FAILED 20% BELOW REDUNDANT CHANNELS. IFI-477 FEEDS REACTOR PROTECTION CIRCUITRY FOR A TRIP ON STEAM FLOW - FEEDWATER FLOW MISMATCH CONCIDENT WITH A LOW STEAM GENERATOR

WATER LEVEL. THERE WERE NO ADVERSE CONSEQUENCES AS THE INSTRUMENT FAILED IN THE SAFE DIRECTION, AND A REACTOR TRIP WOULD STILL HAVE OCCURRED UPON SETPOINT ACTUATION. THE JAN. 8, 1983 EVENT IS ATTRIBUTED TO HIGH INSTRUMENT CABINET TEMPERATURE. THE POWER SUPPLY CARD WAS REPLACED. THE JAN. 20, 1983 EVENT IS ATTRIBUTED TO INSTRUMENT DRIFT OF THE CARD REPLACED FOR THE JAN. 8, 1983 EVENT. THE CARD WAS RECALIBRATED. RELAY ROOM VENTILATION IS TO BE MODIFIED FOR MORE EFFECTIVE COOLING OF THE INSTRUMENT CABINETS AND COMPONENTS.

[477] SUMMER 1 DOCKET 50-395 LER 83-018
THREE SAMPLE VALVES FAIL TO CLOSE.
EVENT DATE: 030683 REPORT DATE: 082583 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES
VENDOR: YUBA HEAT TRANSFER

(NSIC 188716) ON MAR. 6, 1983, WITH THE PLANT IN MODE 1, NUCLEAR SAMPLING SYSTEM VALVES 9398 A, B, AND C FAILED TO CLOSE DURING THE INITIAL PERFORMANCE OF THE ACCELERATED TEST PROGRAM ESTABLISHED TO EXERCISE THESE VALVES ON A WEEKLY BASIS. NO ADVERSE CONSEQUENCES RESULTED FROM THIS EVENT. THE COMPLIANCE WITH THE ACTION STATEMENTS (A AND C) OF TECH SPEC 3.6.4 MINIMIZED THE POSSIBILITY OF A LOSS OF CONTAINMENT INTEGRITY. THE EVENT WAS DUE TO CRUD BUILDUP ON THE VALVE SEATS. VALVE 9398C ALSO EXPERIENCED A LIMIT SWITCH FAILURE WHICH INTERFERRED WITH POSITION INDICATION. THE CRUD WAS DISLODGED, AND THE LIMIT SWITCH REPAIRED. THE LICENSEE PLANS TO REPLACE THE VALVES WHEN A SUITABLE ALTERNATE IS OBTAINED AND WILL CONTINUE AN ACCELERATED TEST PROGRAM.

[478] SUMMER 1 DOCKET 50-395 LER 83-076 REV 1
UPDATE ON PRESSURIZER PORV FAILS TO STROKE.
EVENT DATE: 070783 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVE OPERATORS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188600) ON JULY 7, 1983, AT 0300 HOURS, WITH THE PLANT IN MODE 1, PRESSURIZER POWER OPERATED RELIEF VALVE PCV-444B-RC WOULD NOT FULLY STROKE WHEN OPERATED FROM THE MAIN CONTROL BOARD. THE LOW PRESSURE NITROGEN RESERVOIR FOR PCV-444B-RC WOULD NOT CHARGE UP TO NORMAL PRESSURE. THERE WERE NO ADVERSE CONSEQUENCES AS THE PLANT WAS IN COMPLIANCE WITH TECH SPEC 3.4.4, ACTION STATEMENT A, AND THE PRESSURIZER CODE SAFETY VALVES WERE OPERABLE. THE CAUSE OF THE OCCURRENCE HAS BEEN ATTRIBUTED TO LOW OPERATING PRESSURE FOR PORV PCV-444B-RC. THE NITROGEN SUPPLY HEADER PRESSURE CONTROL REGULATOR (IPV-6307B) FOR PORV PCV-444B-RC WAS REPLACED. BEFORE BEING RETURNED TO SERVICE ON NOV. 24, 1983, AT 2101 HOURS, A VALVE OPERABILITY SURVEILLANCE TEST WAS SATISFACTORILY PERFORMED. NO FURTHER ACTION IS PLANNED OTHER THAN NORMAL SURVEILLANCE TESTING.

[479] SUMMER 1 DOCKET 50-395 LER 83-091 REV 1
UPDATE ON LOW ACCUMULATOR LEVEL.
EVENT DATE: 080283 REPORT DATE: 121583 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: ROCKWELL MANUFACTURING COMPANY

(NSIC 188601) ON AUG. 2, 1983, WITH THE PLANT IN MODE 1, THE BORATED WATER VOLUME OF ACCUMULATOR "A" DECREASED TO 7354 GALLONS BECAUSE OF VALVE LEAKAGE. TECH SPEC 3.5.1 REQUIRES THAT A MINIMUM VOLUME OF 7368 GALLONS BE MAINTAINED IN MODES 1, 2, AND 3. NORMAL LEVEL AND PRESSURE WERE REESTABLISHED WITHIN 18 MINUTES OF THE OCCURRENCE. THE CAUSE OF THIS EVENT WAS LEAKAGE THROUGH VALVES IN THE ECCS CHECK VALVE LEAK DETECTION SYSTEM. THE VALVES WERE VERIFIED TO BE IN THE LOCKED CLOSED POSITION. A BLANK FLANGE WAS THEN INSTALLED TO STOP THE LEAKAGE UNTIL THE VALVES COULD BE REPAIRED. VALVE XVT-61A WAS REPLACED ON 12/5/83 AND XVT-3B WILL BE

REPAIRED DURING THE NEXT MAINTENANCE OUTAGE, TENTATIVELY SCHEDULED TO BEGIN IN APRIL 1984.

[480] SUMMER 1 DOCKET 50-395 LER 83-100 REV 1
UPDATE ON POTENTIAL OF PRESSURIZER RELIEF VALVE FAILING TO OPEN.
EVENT DATE: 083183 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188886) ON AUGUST 31, 1983, WITH THE PLANT IN MODE 1, PRESSURIZER POWER OPERATED RELIEF VALVE (PORV) PCV-445A WAS DECLARED INOPERABLE WHEN A CONCERN WAS IDENTIFIED OVER THE POSSIBLE INADVERTENT OPENING OF THE VALVE UPON LOSS OF POWER TO PROTECTION CABINET IV. THE PRESENT PLANT DESIGN, WITH A LOSS OF POWER TO THE PROTECTION CABINET, WOULD ARM AND ACTUATE THE PORV BY MEANS OF THE COLD OVERPRESSURE PROTECTION SYSTEM. THE CAUSE IS ATTRIBUTED TO DESIGN ERROR. THE ASSOCIATED BLOCK VALVE FOR PORV PCV-445A WAS CLOSED AND DE-ENERGIZED IN ACCORDANCE WITH ACTION STATEMTENT (A) OF TECH SPEC 3.4.4 TO PREVENT A POSSIBLE LOCA. A TECH SPEC CHANGE REQUEST HAS BEEN SUBMITTED TO USE THE RESIDUAL HEAT REMOVAL SYSTEM RELIEF VALVES AS THE PRIMARY METHOD OF MITIGATING COLD OVERPRESSURIZATION TRANSIENTS.

[481] SUMMER 1 DOCKET 50-395 LER 83-138
SNUBBER AND HANGERS FAIL.
EVENT DATE: 120583 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS

(NSIC 188359) ON DEC. 5 AND 9, 1983, WITH THE PLANT IN MODE 5, QUALITY CONTROL PERSONNEL WERE CONDUCTING A HANGER/SNUBBER INSPECTION OF THE FEEDWATER AND THE STEAM GENERATOR BLOWDOWN SYSTEMS. OUT OF THE TOTAL INSPECTED, ONE FROZEN SNUBBER AND SEVERAL ROTATED PIPE CLAMPS WERE IDENTIFIED. AN ENGINEERING EVALUATION WAS PERFORMED PER TECH SPEC 3.7.7, WHICH REVEALED NO ADVERSE IMPACT ON THE SYSTEMS' OPERABILITY. THE FEEDWATER SYSTEM PREWARMING PIPING HAS BEEN EXPERIENCING SOME WATER HAMMER PROBLEMS DURING STARTUP PRIOR TO TRANSFERRING TO THE MAIN FEEDWATER PUMPS. SYSTEM WALKDOWNS REVEALED THE DISCREPANCIES AS NOTED ABOVE. THE DISCREPANCIES WERE EVALUATED BY ENGINEERING AND RETURNED TO OPERABLE STATUS UPON SUCCESSFUL COMPLETION OF APPROPRIATE MAINTENANCE AND SURVEILLANCE TESTING. A PROCEDURE CHANGE WAS GENERATED TO ALTER THE VALVE LINE-UP SEQUENCE TO ELIMINATE THE POTENTIAL FOR WATER HAMMER IN THE PREWARMING PIPING DURING STARTUP.

[482] SUMMER 1 DOCKET 50-395 LER 83-139
INTERMEDIATE BUILDING SPRINKLER SYSTEM GOES INTO ALARM MODE.
EVENT DATE: 121483 REPORT DATE: 010984 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188602) ON DEC. 14, 1983 REMOTE INFORMATION ACQUISITION CABINET 12 TRIPPED WHICH CAUSED THE INTERMEDIATE BUILDING SPRINKLER SYSTEM, ZONE BB, TO GO INTO ALARM MODE, AND IT WOULD NOT RESET. THE LICENSEE COMPLIED WITH ACTION STATEMENT A OF TECH SPEC 3.7.9.2, "SPRINKLER SYSTEM." THE CAUSE OF THE EVENT WAS THE RESULT OF WATER ENTERING THE PANEL AND SHORTING OUT TWO ELECTRONIC CARDS. THE CARDS WERE REPLACED, THE APPLICABLE SURVEILLANCE TEST PERFORMED AND THE UNIT DECLARED OPERABLE AT 1600 HOURS, DEC. 14, 1983. THIS PANEL HAS BEEN COVERED TO PRECLUDE RECURRENCE. THE LICENSEE PLANS NO ADDITIONAL ACTION.

[483] SUMMER 1 DOCKET 50-395 LER 83-141
TWO SNUBBERS DECLARED INOPERABLE.
EVENT DATE: 121583 REPORT DATE: 011284 NSSS: WE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: PACIFIC SCIENTIFIC COMPANY

(NSIC 188460) ON DEC. 15, 1983, WITH THE PLANT IN MODE 2, SNUBBER MSH-324 FAILED A FUNCTIONAL TEST AND WAS DECLARED INOPERABLE. DURING AN ENGINEERING EVALUATION, AS REQUIRED BY TECH SPECS, SNUBBER MSH-325 WAS ALSO IDENTIFIED AS BEING INOPERABLE. THE LICENSEE COMPLIED WITH TECH SPEC 3.3.7, "SNUBBERS." ENGINEERING HAS DETERMINED THAT THIS EVENT WAS DUE TO A TRANSIENT IN THE THIRTY-TWO INCH MAIN STEAM LINE WHICH INDUCED AN EIGHT HUNDRED AND FIFTY POUND PLUS LOAD INTO THE FOUR INCH MAIN STEAM LINE. THE SNUBBERS WERE REPLACED, FUNCTIONAL TESTED, AND DECLARED OPERABLE AT 1640 HOURS, DEC. 16, 1983. THE LICENSEE PLANS NO ADDITIONAL ACTION.

[484] SUMMER 1 DOCKET 50-395 LER 83-142
RCS EXCEEDS LEAKAGE LIMIT.
EVENT DATE: 121683 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: VALVES
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188461) AT 1331 HOURS ON DEC. 16, 1983, WITH THE PLANT IN MODE 3, THE IDENTIFIED LEAKAGE FROM THE REACTOR COOLANT SYSTEM (RCS) WAS DETERMINED TO BE 10.4 GPM. ACTION STATEMENT (B) OF TECH SPEC 3.4.6.2.D APPLIED SINCE THE LEAKAGE LIMIT OF 10 GPM HAD BEEN EXCEEDED. THE PLANT ENTERED MODE 5 AT 0002 HOURS ON DEC. 17, 1983, IN COMPLIANCE WITH THE ACTION STATEMENT. THE RCS LEAKAGE WAS ATTRIBUTED TO EXCESSIVE LEAKAGE FROM THE NO. 2 SEAL ON REACTOR COOLANT PUMP (RCP) "C" AND PACKING LEAKS FROM THE PRESSURIZER SPRAY VALVES (PCV-444C & D) AND THE PORV BLOCK VALVE XVG-8000A. THE SEAL ON THE RCP WAS RESEATED AND THE VALVE PACKING WAS REPLACED. A SATISFACTORY LEAK TEST WAS PERFORMED ON DEC. 18, 1983. NO ADDITIONAL ACTION IS REQUIRED.

[485] SUMMER 1 DOCKET 50-395 LER 83-144
POWER RANGE INSTRUMENT OPERATES ERRATICALLY.
EVENT DATE: 122383 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188717) DURING NORMAL OPERATION AT 100%, THE PLANT EXPERIENCED ERRATIC BEHAVIOR FROM POWER RANGE NUCLEAR INSTRUMENT NI-42 DURING THREE EVENTS, TWO OF WHICH WERE SHORT IN DURATION. THE THIRD AND MOST RECENT EVENT NECESSITATED THAT A QUADRANT POWER TILT RATIO (QPTR) MEASUREMENT BE PERFORMED. NONSYMMETRICAL CORE THIMBLE PATHS HAD TO BE USED DUE TO A BLOCKED THIMBLE. NONSYMMETRICAL READINGS CAUSED THE QPTR TO EXCEED TECH SPEC ALLOWANCE. NI-42 WAS RESTORED WITHIN TIME TO AVOID A POWER REDUCTION. NO ADVERSE CONSEQUENCES RESULTED. THE CAUSE OF THE ERRATIC BEHAVIOR IS UNKNOWN. FOR EACH OF THE EVENTS THE ASSOCIATED BISTABLES WERE PLACED IN THE TRIPPED CONDITION IN COMPLIANCE WITH TECH SPECS. UPON RESTORATION OF NI-42, A FULL CORE FLUX MAP WAS PERFORMED SATISFACTORILY. NO FURTHER RECURRENCE OF THE PROBLEM HAS BEEN EXPERIENCED. THE LICENSEE IS STILL EVALUATING THE CAUSE OF THE PROBLEM.

[486] SUMMER 1 DOCKET 50-395 LER 83-140
INSTRUMENT LINES FREEZE FOR RWST LEVEL TRANSMITTERS.
EVENT DATE: 122483 REPORT DATE: 010684 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188813) ON DECEMBER 24, 1983, WITH THE PLANT IN MODE 1, THE INSTRUMENT LINES FROZE FOR THE REFUELING WATER STORAGE TANK (RWST) LEVEL TRANSMITTERS. ADDITIONAL FAILURES OCCURRED TO TRANSMITTER LT-993 ON DECEMBER 25TH AND 31ST DUE TO LOOSE INSULATION ON SENSING LINES. FOR APPROXIMATELY 31 MINUTES, PLANT PERSONNEL WOULD HAVE HAD TO MANUALLY PERFORM THE TRANSFER OF SUCTION FOR THE RESIDUAL HEAT REMOVAL AND SPRAY PUMPS IN THE EVENT AUTOMATIC TRANSFER DID NOT

OCCUR. THE FAILURE OF THE RWST LEVEL INSTRUMENTATION WAS DUE TO INSTRUMENT LINES FREEZING IN THE ABNORMALLY COLD TEMPERATURES EXPERIENCED DURING THE SUBJECT PERIOD OF TIME. DUE TO PLACEMENT OF HEAT TRACE SENSORS, PORTIONS OF SENSING LINES FREEZE BEFORE HEAT TRACE ACTIVATES. HEAT WAS SUBSEQUENTLY APPLIED TO THE TRANSMITTERS TO RETURN THEM TO OPERABLE STATUS. MODIFICATIONS TO HEAT TRACE SETPOINTS AND COMPONENT INSULATION WILL BE COMPLETED BY JANUARY 20, 1984.

[487] SUMMER 1 DOCKET 50-395 LER 83-143
CST LEVEL TRANSMITTER FAILS HIGH.
EVENT DATE: 122483 REPORT DATE: 012384 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ROSEMOUNT, INC.

(NSIC 188603) ON DEC. 24, 1983, WITH THE PLANT IN MODE 1, THE INDICATION FOR CONDENSATE STORAGE TANK (CST) LEVEL TRANSMITTER LT-3621 FAILED HIGH BECAUSE OF FROZEN INSTRUMENT LINES. THIS IS A POST ACCIDENT MONITORING SYSTEM (PAMS) INSTRUMENT, AND ACTION STATEMENT A OF TECH SPEC 3.3.3.6 APPLIED. LEVEL INDICATION WAS AVAILABLE FROM THE REDUNDANT CST LEVEL INDICATION CHANNELS. THE FAILURE OF THE LT-3621 WAS DUE TO INSTRUMENT LINES FREEZING IN THE ABNORMALLY COLD TEMPERATURES. THE HEAT TRACE SETPOINTS WERE INCREASED AT THE TIME OF THE OCCURRENCE AND LT-3621 WAS RETURNED TO OPERABLE STATUS ON DEC. 25, 1983. TO PREVENT A FUTURE RECURRENCE, THE SETPOINTS FOR BOTH TRAINS OF HEAT TRACE WERE INCREASED ON JAN. 12, 1984.

[488] SURRY 1 DOCKET 50-280 LER 81-020 REV 1
UPDATE ON WALLS NOT MEETING DESIGN REQUIREMENTS.
EVENT DATE: 072481 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188527) WITH BOTH UNITS AT 100% POWER, THE A/E NOTIFIED VEPCO THAT 7 MASONRY BLOCK WALL SECTIONS IN THE FUEL BUILDING DO NOT MEET THE DESIGN REQUIREMENTS OF IEB 80-11. IN THE EVENT OF A DESIGN BASIS EARTHQUAKE, THESE BLOCK WALLS MAY FAIL, AND PORTIONS MAY FALL INTO THE SPENT FUEL POOL. IT HAS NOT BEEN POSSIBLE TO DEMONSTRATE THAT INTEGRITY OF THE SPENT FUEL POOL WOULD BE ASSURED. THIS IS REPORTABLE PER TECH SPEC 6.6.2.B.(4). THERE IS A PROBABILITY OF A SEISMIC EVENT PLUS THE EXPECTED MITIGATING EFFECT OF THE WATER IN THE FUEL POOL. ONGOING STRUCTURAL ANALYSIS BY THE A/E, IN RESPONSE TO IEB 80-11, RESULTED IN THIS DETERMINATION. THE AFFECTED MASONRY BLOCK WALLS WILL BE REMOVED AND REPLACED WITH "BLOW-OFF" SIDING ATTACHED TO A STEEL GIRT SYSTEM.

[489] SURRY 1 DOCKET 50-280 LER 82-049 REV 1
UPDATE ON CHARGING PUMP SERVICE WATER PUMP INOPERABLE.
EVENT DATE: 041982 REPORT DATE: 090382 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PUMPS
VENDOR: INGERSOL-RAND CO.

(NSIC 188831) ON 04-19-82, WITH THE UNIT AT 100% POWER, CHARGING PUMP SERVICE WATER PUMP 1-SW-P 10B WAS FOUND TO HAVE ZERO DISCHARGE PRESSURE AS A RESULT OF LOSS OF SUCTION TO THE PUMP. INOPERABILITY OF THIS PUMP IS CONTRARY TO TECH SPEC 3.3.A.8.B AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE REDUNDANT PUMP REMAINED OPERABLE. INCREASED USE OF SERVICE WATER BY THE CHILLERS CAN CAUSE A LOSS OF SUCTION TO THE CHARGING PUMP SERVICE WATER PUMPS. THE CONTROL ROOM CHILLER WAS SECURED WHICH RESULTED IN FLOODING THE SUCTION LINE TO THE CHARGING PUMP SERVICE WATER PUMP. THE PUMP WAS RESTORED TO OPERATION.

[490] SURRY 1 DOCKET 50-280 LER 83-058
FEED REGULATOR VALVE FAILS TO FULLY CLOSE TWICE.
EVENT DATE: 121583 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: COPES-VULCAN, INC.

(NSIC 188395) ON DECEMBER 15 AND DECEMBER 24, 1983, "C" FEEDWATER REGULATOR VALVE (FRV) DID NOT FULLY CLOSE UPON RECEIPT OF A LOW T-AVE ISOLATION SIGNAL FOLLOWING A REACTOR TRIP. THE FRV MAY NOT HAVE CLOSED HAD IT RECEIVED A SI SIGNAL. THIS IS CONTRARY TO TECH SPEC TABLE 3.7-3 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). REDUNDANT MEANS OF FEEDWATER ISOLATION REMAINED OPERABLE. THE FAILURE TO CLOSE WAS DUE TO MECHANICAL BINDING. ON DECEMBER 15, A LOOSE CAGE WAS TIGHTENED AND ON DECEMBER 24, THE VALVE OPERATOR ASSEMBLY WAS ADJUSTED.

[491] SURRY 1 DOCKET 50-280 LER 83-059
ROD POSITION INDICATORS GIVE ERRONEOUS INDICATIONS.
EVENT DATE: 122583 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188396) ON DEC. 25, 1983 WITH UNIT 1 AT HOT SHUTDOWN AND ON DEC. 26, 1983 WITH UNIT 1 JUST CRITICAL, ROD POSITION INDICATORS (RPI) G-3 AND F-12 RESPECTIVELY WERE INDICATING MORE THAN 12 STEPS FROM THEIR BANK. THIS IS CONTRARY TO TECH SPEC 3.12.E.1 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE INDICATOR MISALIGNMENT DID NOT AFFECT CONTROL OF THE RODS, AND ALL RODS WERE CAPABLE OF BEING DROPPED. SIGNAL CONDITIONING MODULE DRIFT CAUSED INDICATOR F-12 TO DEVIATE. INDICATOR G-3 HAD A STICKING METER. RPI G-3 WAS REPAIRED, THE OTHER RPI WAS RECALIBRATED. BOTH RPI'S WERE TESTED AND RETURNED TO SERVICE.

[492] SURRY 2 DOCKET 50-281 LER 83-002
STEAM FLOW INDICATOR INOPERABLE.
EVENT DATE: 012183 REPORT DATE: 021883 NSSS: WE TYPE: PWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS
VENDOR: BOSTROM-BERGEN METAL PRODUCTS

(NSIC 188490) ON 1/21/83, WITH THE UNIT STEADY AT 100% POWER, STEAM FLOW INDICATION 2-FI-474 BEGAN OPERATING ERRATICALLY AND WAS DECLARED INOPERABLE. INOPERABILITY OF THIS INSTRUMENT IS CONTRARY TO TECH SPEC 3.7 AND IS REPORTABLE PER TECH SPEC 6.6.2.B(2). REDUNDANT INSTRUMENTATION REMAINED OPERABLE AND THE FAILED INSTRUMENTS' BISTABLES WERE PLACED IN TRIP. THE ERRATIC INDICATION WAS CAUSED BY A FAILED SPLICE IN THE JUNCTION BOX AT THE TRANSMITTER. THE SPLICE WAS REPLACED AND THE INSTRUMENTATION WAS RETURNED TO SERVICE.

[493] SURRY 2 DOCKET 50-281 LER 83-014
CVCS HEAT TRACING FAILS.
EVENT DATE: 032383 REPORT DATE: 041883 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: HEATERS,ELECTRIC
VENDOR: THERMON MANUFACTURING

(NSIC 188491) WITH UNIT 2 AT 100% POWER, PT-27 REVEALED THAT AMP READINGS FOR HEAT TRACING PANEL 8 CIRCUIT 23C AND PANEL 9 CIRCUIT 6A WERE BELOW THE ACCEPTANCE CRITERIA STIPULATED IN THE PT. THIS EVENT IS CONTRARY TO TECH SPEC 3.2.C.5 AND IS REPORTABLE PER TECH SPEC 6.6.2.B(2). THE REDUNDANT HEAT TRACING WAS OPERABLE. THE LOSS OF HEAT TRACING WAS DUE TO EXCESSIVE HEAT. THE DEFECTIVE HEAT TRACING WAS REPLACED AND TESTED. A DESIGN CHANGE HAS BEEN PREPARED TO CHANGE THE MANNER BY WHICH THESE BORATED LINES ARE HEAT TRACED. INSTALLATION OF THIS DESIGN CHANGE HAS COMMENCED.

[494] SURRY 2 DOCKET 50-281 LER 83-020
DRIFT OF ROD POSITION INDICATORS.
EVENT DATE: 041383 REPORT DATE: 051383 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MAGNETICS DIV SPANG INDUSTRIES, INC.

(NSIC 188492) WITH THE UNIT AT 49% POWER, THE ROD POSITION INDICATORS FOR E-11 AND G-3 WERE OBSERVED TO BE GREATER THAN 12 STEPS OUT OF ALIGNMENT WITH OTHER RODS IN THEIR RESPECTIVE BANKS. THIS IS CONTRARY TO TECH SPEC 3.12.E.1 AND REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE CONTROL OF RODS G-3 AND E-11 WAS NOT AFFECTED AND ALL RODS WERE CAPABLE OF BEING DROPPED WHEN REQUIRED. THE RPI MALFUNCTIONS FOR RODS E-11 AND G-3 WERE THE RESULT OF DRIFT IN THE SIGNAL CONDITIONING MODULE. IN ADDITION, THE CONTROL ROOM INDICATOR FOR ROD G-3 WAS FOUND TO HAVE DRIFTED. INSTRUMENTATION WAS CALIBRATED AND RETURNED TO SERVICE.

[495] SURRY 2 DOCKET 50-281 LER 83-021
STEAM FLOW INDICATOR INOPERABLE.
EVENT DATE: 041383 REPORT DATE: 051383 NSSS: WE TYPE: PWR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ROSEMOUNT ENGINEERING COMPANY

(NSIC 188493) WITH UNIT 2 AT 47% POWER, STEAM FLOW CHANNEL, FI-2474, WAS INDICATING LESS THAN THE REDUNDANT CHANNEL. THIS IS CONTRARY TO TECH SPEC 3.7.B TABLE 3.7.2 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE REDUNDANT CHANNEL REMAINED OPERABLE AND FI-2474 WAS PLACED IN TRIP, THEREBY ESTABLISHING THE REQUIRED DEGREE OF REDUNDANCY. A STEAM LEAK WAS FOUNDED IN ONE OF THE TRANSMITTER ROOT VALVES, HENCE FI-2474 WAS SENSING A LOWER DIFFERENTIAL PRESSURE. THE DEFECTIVE ROOT VALVE WAS REPLACED.

[496] SURRY 2 DOCKET 50-281 LER 83-029
ACCOUSTICAL MONITORING INOPERABLE.
EVENT DATE: 052983 REPORT DATE: 062783 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BABCOCK & WILCOX COMPANY

(NSIC 188494) WITH UNIT 2 AT 100% POWER, THE ACCOUSTICAL MONITORING PANEL LOST POWER AND THEREBY BECAME INOPERABLE. THIS IS CONTRARY TO TECH SPEC TABLE 3.7-6 AND REPORTABLE PER TECH SPEC 6.6.2.B.(2). DIVERSE INSTRUMENTATION THAT MONITORS PRESSURIZER SAFETY VALVES AND PORV POSITION WAS OPERABLE. THE LOSS OF POWER WAS DUE TO BLOWN FUSES IN REDUNDANT POWER SUPPLIES. THE FUSES WERE REPLACED AND THE PANEL RETURNED TO SERVICE.

[497] SURRY 2 DOCKET 50-281 LER 83-030
LOW PREESSURE ON SERVICE WATER PUMPS.
EVENT DATE: 060783 REPORT DATE: 062783 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PUMPS
VENDOR: INGERSOL-RAND CO.

(NSIC 188847) WITH THE UNIT AT 100% POWER, 2-SW-P-10A AND 2-SW-P-10B FAILED TO DEVELOP SUFFICIENT DISCHARGE PRESSURE DURING THE PERFORMANCE OF PT-18.8. THIS IS CONTRARY TO TECH SPEC 3.3.A.8.(B) AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). SERVICE WATER FLOW TO THE CHARGING PUMPS WAS PRESENT THROUGHOUT THE EVENT. THE LOW DISCHARGE PRESSURE WAS DUE TO INSUFFICIENT NPSH. SERVICE WATER FLOW TO PARALLEL COMPONENTS (AIR CONDITIONING CHILLERS) WAS ADJUSTED; PUMP SUCTION REFLOODED; PUMPS WERE VENTED AND RETURNED TO SERVICE.

[498] SURRY 2 DOCKET 50-281 LER 83-035
ONE CHANNEL DID NOT CLOSE MSIVS DURING TESTS.
EVENT DATE: 091783 REPORT DATE: 101783 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS

(NSIC 188848) THE PERFORMANCE OF PT 8.5A REVEALED THAT TV-MS-201B WOULD NOT RESPOND TO A TRAIN "A" ACTUATION SIGNAL. THIS IS CONTRARY TO TECH SPEC 3.8.A.1 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE REDUNDANT ACTUATION SIGNAL, TRAIN A, WAS VERIFIED TO BE OPERABLE. TROUBLESHOOTING THE CONTROL CIRCUITRY FOR THE TRIP VALVE AND THE CONTROLLING SOLENOID VALVE DISCLOSED NO REPEAT FAILURES.

[499] SURRY 2 DOCKET 50-281 LER 83-036
FEEDWATER BYPASS VALVE FAILS TO CLOSE.
EVENT DATE: 091883 REPORT DATE: 101783 NSSS: WE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVE OPERATORS
VENDOR: FISHER CONTROLS CO.

(NSIC 188495) WITH UNIT 2 AT COLD SHUTDOWN, DURING THE PERFORMANCE OF PT'S 18.2A AND 18.2B (S.I. TEST H & J TRAIN). HCV-FW-255A ('A' FEEDWATER BYPASS VALVE) WOULD NOT FULLY CLOSE ON A S.I. SIGNAL. THIS IS A NONCONSERVATISM WITH RESPECT TO TECH SPEC 3.7 AND IS BEING REPORTED PER TECH SPEC 6.6.2.B.(2). FEEDWATER ISOLATION, PROVIDED BY FEED REG. AND BYPASS VALVE CLOSURE AND FEEDWATER PUMP TRIPS, UPON S.I., MITIGATE THE CONSEQUENCES OF A STEAM LINE RUPTURE. THE FEEDWATER PUMPS WOULD HAVE TRIPPED ON A S.I. SIGNAL. THE VALVES ARE CONTROLLED BY CHANGING AIR PRESSURE ON EITHER SIDE OF A PISTON WITHIN A CYLINDER ATTACHED TO THE VALVE. PNEUMATIC RELAYS IN THE VALVE POSITIONER, WHICH CONTROL AIR FLOW TO EITHER SIDE OF THE PISTON WERE OUT OF ADJUSTMENT. THE RELAYS WERE ADJUSTED FOR PROPER VALVE ACTION AND THE VALVE WAS SATISFACTORILY STROKED.

[500] SURRY 2 DOCKET 50-281 LER 83-037
FEEDWATER ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 091883 REPORT DATE: 101783 NSSS: WE TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVE OPERATORS
VENDOR: COPES-VULCAN, INC.

(NSIC 188496) WITH UNIT 2 AT COLD SHUTDOWN, DURING THE PERFORMANCE OF PT'S 18.2A AND 18.2B (S.I. TEST H & J TRAIN). FCV-FW-2488 ('B' FEED REG. VALVE) WOULD NOT FULLY CLOSE ON A S.I. SIGNAL. THIS IS A NONCONSERVATISM WITH RESPECT TO TECH SPEC 3.7 AND IS BEING REPORTED PER TECH SPEC 6.6.2.B.(2). FEEDWATER ISOLATION PROVIDED BY FEED REG. AND BYPASS VALVE CLOSURE AND FEEDWATER PUMP TRIPS UPON S.I., MITIGATE THE CONSEQUENCES OF A STEAM LINE RUPTURE. THE FEEDWATER PUMPS WOULD HAVE TRIPPED ON A S.I. SIGNAL. THE CAUSE HAS NOT BEEN DETERMINED. ELECTRICIANS CHECKED THE VALVE AND VERIFIED THAT THE SOLENOID VALVES, WHICH DE-ENERGIZE ON A S.I. SIGNAL AND BLOCK AIR TO THE VALVE, FUNCTIONED PROPERLY AND THE VALVE CLOSED SATISFACTORILY.

[501] SURRY 2 DOCKET 50-281 LER 83-058
TWO ROD POSITION INDICATORS DRIFT.
EVENT DATE: 122883 REPORT DATE: 012484 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188397) ON DEC. 28, 1983 WITH UNIT 2 AT 65% POWER AND DEC. 29 WITH UNIT 2 AT 96% POWER, RPI'S F-6 AND F-4 RESPECTIVELY, INDICATED MORE THAN 12 STEPS FROM THEIR BANK. THIS IS CONTRARY TO TECH SPEC 3.12.E.1 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE INDICATOR MISALIGNMENT DID NOT AFFECT CONTROL OF THE RODS, AND ALL RODS WERE CAPABLE OF BEING DROPPED. SIGNAL CONDITIONING MODULE DRIFT

CAUSED INDICATORS F-4 AND F-6 TO DEVIATE. BOTH RPI'S WERE TESTED AND RETURNED TO SERVICE.

[502] SUSQUEHANNA 1 DOCKET 50-387 LER 83-018
ERROR IN APRM SETPOINT.
EVENT DATE: 012683 REPORT DATE: 022583 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188882) DURING THE STARTUP TEST PROGRAM, IT WAS DETERMINED THAT AN INACCURATE VALUE FOR 100% RATED RECIRCULATION FLOW WAS BEING UTILIZED TO ESTABLISH THE APRM FLOW-BIASED ROD BLOCK AND SCRAM SETPOINTS. INCORPORATION OF THIS VALUE (EXTRAPOLATED FROM 75% POWER DATA) RESULTED IN DISCOVERY OF "AS FOUND" SETTINGS FOR THE "B" APRM OF TECH SPEC TRIP SETPOINT. THIS IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.1.9.A. THE FLOW-BIASED NETWORK CONTAINING CHANNEL "3" AUCTIONEERS ITS TWO INPUT SIGNALS AND SELECTS THE LOWER OF THE TWO SIGNALS. DUE TO CHANGES IN PLANT PARAMETERS BETWEEN THE TIME THE APRM FLOW BIASED ROD BLOCKS AND SCRAM POINTS WERE SET, AND ACHIEVING 100% POWER, THE POINTS WERE LESS CONSERVATIVE THAN PREVIOUSLY BELIEVED. USING MORE ACCURATE DATA, THE POINTS WERE RESET. GERMANE ITEMS OF THE STARTUP TEST CHANGE NOTICE THAT CORRECTED THE PROCEDURAL ERROR WILL BE INCORPORATED INTO THE UNIT 2 PROCEDURE.

[503] SUSQUEHANNA 1 DOCKET 50-387 LER 83-088 REV 1
UPDATE ON RCIC PUMP DISCHARGE VALVE FAILS TO OPEN.
EVENT DATE: 053083 REPORT DATE: 011684 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188633) DURING TESTING OF THE REACTOR CORE ISOLATION COOLING (RCIC) PUMP DISCHARGE VALVE FAILED TO OPEN RESULTING IN THE LIMITING CONDITION FOR OPERATION (LCO) PER TECH SPEC 3.7.3. AN INVESTIGATION OF THE PROBLEM WAS INITIATED; RESULTING IN THE IDENTIFICATION OF A DEFICIENCY INVOLVING G.E. 250V CONTROL CENTERS. DURING THE EVENT, TECH SPEC ACTION STATEMENTS WERE FOLLOWED. GAPS WERE FOUND TO EXIST BETWEEN BREAKER MALE AND FEMALE STAB CLIPS; OTHER TESTABLE SAFETY RELATED LOADS WITH SIMILAR ELECTRICAL DEVICES WERE VERIFIED OPERABLE. INVESTIGATIONS IDENTIFIED A LACK OF CLEARANCE IN GE 7700 CONTROL CENTERS RESULTING IN CHANGES TO PROCEDURE MT-GE-014 "D.C. SWITCHGEAR AND BREAKER MAINTENANCE" FOR CLEARING OBSTRUCTIONS, REFORMING CONTACTS, CONTACT INSPECTION AND TESTING.

[504] SUSQUEHANNA 1 DOCKET 50-387 LER 83-109 REV 1
UPDATE ON RCIC CONDENSATE PUMP FAILURE.
EVENT DATE: 072483 REPORT DATE: 011384 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: MOTORS
VENDOR: RELIANCE ELECTRIC COMPANY

(NSIC 188634) THE RCIC BAROMETRIC CONDENSER CONDENSATE VACUUM PUMP MOTOR PUMP TRIPPED WHILE THE RCIC SYSTEM WAS RUNNING FOR SPRAY POND TESTING. RESULTS FROM INVESTIGATIONS INDICATE THIS EVENT WAS CAUSED BY MECHANICAL FAILURE OF THE CONDENSATE PUMP MOTOR COMMUTATOR. THE RCIC IS NOT AN EMERGENCY CORE COOLING SYSTEM (ECCS) AND IS NOT REQUIRED FOR SAFE SHUTDOWN. FAILURE OF THE CONDENSATE PUMP CAUSED WATER LEVEL IN THE BAROMETRIC CONDENSER TO RISE, TRIPPING THE VACUUM PUMP ON THERMAL OVERLOAD. THE CONDENSATE MOTOR WAS REPLACED; VACUUM PUMP OVERLOADS RE-SET; THE SYSTEM WAS TESTED AND RETURNED TO SERVICE. SINCE, INVESTIGATIONS FOUND THE CONDENSATE PUMP MOTOR COMMUTATOR SUFFERED MECHANICAL FAILURE.

[505] SUSQUEHANNA 1 DOCKET 50-387 LER 83-127
AVAILABLE WEIGHT OF SODIUM PENTABORATE WAS BELOW THE LIMIT.
EVENT DATE: 090983 REPORT DATE: 100783 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188711) DURING PERFORMANCE OF A MONTHLY SURVEILLANCE ON THE STANDBY LIQUID CONTROL SYSTEM (SLC), THE AVAILABLE WEIGHT OF SODIUM PENTABORATE (5250 LBS.) WAS BELOW THE LIMIT OF 5500 LBS. THE SLC PROVIDES A BACKUP CAPABILITY FOR BRINGING THE REACTOR FROM FULL POWER TO A COLD, XENON FREE SHUTDOWN ASSUMING NONE OF THE WITHDRAWN CONTROL RODS CAN BE INSERTED. THERE WERE NO OCCURRENCES WHICH WOULD HAVE REQUIRED THIS ACTION. DUE TO SYSTEM CONFIGURATION, THE PERFORMANCE OF THE QUARTERLY FLOW VERIFICATION FOR SLC NECESSITATES THAT BORON SOLUTION BE PUMPED FROM THE STORAGE TANK TO THE TEST TANK. THE QUARTERLY SURVEILLANCE PROCEDURE WILL BE CHANGED TO REQUIRE CHEMISTRY TO VERIFY AN ACCEPTABLE AMOUNT OF BORON IS AVAILABLE IN THE STORAGE TANK AFTER THE FLOW VERIFICATION.

[506] SUSQUEHANNA 1 DOCKET 50-387 LER 83-159
POSITION INDICATOR FOR POST ACCIDENT SAMPLING SYSTEM VALVE FAILS.
EVENT DATE: 112683 REPORT DATE: 122283 NSSS: GE TYPE: BWR
SYSTEM: OTHER AUX PROCESS SYS & CONT COMPONENT: VALVES
VENDOR: TARGET ROCK CORP.

(NSIC 188358) WHILE PERFORMING SURVEILLANCE ON VALVE SV-15736A LOCATED IN THE RETURN LINE FROM THE PASS CONTAINMENT RADIATION DETECTION SYSTEM, AND H2/O2 ANALYZERS, A DUAL INDICATION WAS RECEIVED WHEN THE VALVE POSITION SWITCH WAS PLACED IN THE "CLOSE" POSITION; RESULTING IN THE LCO AS SPECIFIED IN TECH SPEC 3.6.3.A. DURING THIS EVENT A SECOND RETURN LINE ISOLATON VALVE REMAINED CLOSED. DUAL INDICATION IS DUE TO INFREQUENT VALVE OPERATION; A LIST OF TARGET ROCK SOLENOID VALVES HAS BEEN IDENTIFIED; THE CURRENT CYCLING FREQUENCY WILL BE INVESTIGATED AND WHEN DEEMED NECESSARY, THIS FREQUENCY WILL BE INCREASED.

[507] SUSQUEHANNA 1 DOCKET 50-387 LER 83-162
RHRSW MOTOR OPERATED VALVE FAILS TO OPERATE.
EVENT DATE: 112883 REPORT DATE: 122883 NSSS: GE TYPE: BWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: CUTLER-HAMMER

(NSIC 188594) WHILE AT 100% POWER, THE "B" RHR SERVICE WATER MOTOR OPERATED VALVE HV11210B WOULD NOT OPERATE IN THE OPEN DIRECTION FOR SUPPRESSION POOL COOLING. THE AUXILIARY CONTACT IN THE VALVES ASSOCIATED CIRCUIT BREAKER FAILED. THE CONTACT WAS REPLACED AND THE BREAKER WAS RETURNED TO SERVICE. VALVE HV11210B WAS OPERATED SUCCESSFULLY. THE LIMITING CONDITION FOR OPERATION WAS CLEARED FIVE HOURS FOLLOWING ITS INITIATION. DURING THIS EVENT THE "A" RHRSW SYSTEM REMAINED OPERABLE. FAILURE OF MOTOR OPERATED VALVE HV11210B IN THE "B" RHRSW SYSTEM TO OPERATE WAS ATTRIBUTED TO THE FAILURE OF AN AUXILIARY CONTACT IN THE VALVES ASSOCIATED CIRCUIT BREAKER. THE AUXILIARY CONTACT WAS REPLACED; BOTH THE BREAKER AND THE VALVE WERE RETURNED TO SERVICE. HISTORY FILES HAVE BEEN REVIEWED AND THIS EVENT HAS BEEN DETERMINED TO BE AN ISOLATED OCCURRENCE.

[508] SUSQUEHANNA 1 DOCKET 50-387 LER 83-166
REACTOR LEVEL INDICATION SWITCH FAILS DUE TO SETPOINT DRIFT.
EVENT DATE: 112983 REPORT DATE: 122983 NSSS: GE TYPE: BWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 188595) DURING SURVEILLANCE TESTING, LIS 1422ID'S SETPOINT WAS FOUND TO BE OUT OF CALIBRATION BY 1.2 INCHES (REFERENCE LEG INDICATION WAS 209.5 INCHES WATER VERSUS A SETPOINT OF 208.3 INCHES) RESULTING IN AN LCO PER TECH SPEC 3.3.2. LIS 14221D PROVIDES SIGNALS ON LOW-LOW-LOW REACTOR VESSEL WATER LEVEL TO ISOLATED

VALVES IN VARIOUS CONTAINMENT SYSTEMS. THE LIS WAS RECALIBRATED AND THE LCO CLEARED IN ONE (1) HOUR. DURING THIS EVENT REDUNDANT LEVEL INDICATION REMAINED AVAILABLE TO PERFORM THE SAME FUNCTIONS SERVED BY LIS 1422ID. THE INDICATED TRIP SETPOINT FOR LIS 14221D FOUND DURING SURVEILLANCE INDICATED SETPOINT DRIFT HAD OCCURRED. THE PERFORMANCE OF LIS 14221D WILL BE MONITORED. A REOCCURRENCE OF SETPOINT DRIFT WILL INITIATE THE REPLACEMENT OF THE INSTRUMENT.

[509] SUSQUEHANNA 1 DOCKET 50-387 LER 83-152
SECONDARY CONTAINMENT WITHDRAW TIME IS LONGER THAN STATED IN FSAR.
EVENT DATE: 120183 REPORT DATE: 121583 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188357) WHILE REVIEWING THE ANALYSIS OF THE STANDBY GAS TREATMENT SYSTEM (SGTS) IN PREPARATION FOR REQUIRED CHANGES DUE TO THE TIE-IN OF UNIT 2, ENGINEERING FOUND THE ANALYZED DRAWDOWN TIME OF SECONDARY CONTAINMENT TO BE LONGER THAN THE SIXTY SECONDS STATED IN THE FSAR (SECTION 6.2.3.2.1; FIGURE 6.2-60). AN ADDITIONAL FORTY SECONDS IS REQUIRED TO DRAWDOWN THE AREA TO THE -1/4" W.G. PRESSURE SPECIFICATION WHEN CONSIDERING CONCURRENT LOSS OF OFFSITE POWER AND SINGLE FAILURE. THE CAUSE OF THE ERROR IN THE FSAR HAS NOT BEEN DETERMINED. CORRECTIVE ACTIONS ARE BEING PURSUED TO CORRECT THIS CONDITION. A DETAILED EVALUATION HAS IDENTIFIED FURTHER PROBLEMS WHEN REVIEWING THIS SITUATION FOR TWO UNIT OPERATION. SUBSTANTIAL TESTING AND POSSIBLE MODIFICATIONS ARE BEING EXPEDITIOUSLY PURSUED DURING THE CURRENT UNIT 2 TIE-IN OUTAGE. THIS LER IS AN INTERIM REPORT AND WILL BE UPDATED.

[510] SUSQUEHANNA 1 DOCKET 50-387 LER 83-167
UNDERVOLTAGE RELAYS OUT OF ADJUSTMENT.
EVENT DATE: 120883 REPORT DATE: 010684 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: RELAYS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188458) WHILE PERFORMING 4KV BUS UNDERVOLTAGE CHANNEL CALIBRATION, THE LOSS OF VOLTAGE RELAYS ASSOCIATED WITH ESS BUSSES A AND C WERE FOUND TO HAVE TRIP SETPOINTS OF 17 VOLTS VERSUS 24 PLUS OR MINUS 1.7 VOLTS AS SPECIFIED BY TECH SPEC TABLE 3.3.3-2. SUBSEQUENT TESTING FOUND THE LOSS OF VOLTAGE RELAYS FOR BUSSES B AND D TO HAVE SIMILAR SETPOINT VALUES. ENGINEERING CONCLUDED THE LOWER SETPOINT PRODUCED A NEGLIGIBLE CHANGE IN THE RELAY'S TIME DELAY TABLE 3.3.3-2 AND NO LOSS IN THE PERFORMANCE OF THE SYSTEMS SAFETY FUNCTIONS. THE CAUSE OF THIS EVENT IS NOT KNOWN SINCE ALL INSTRUMENT SETTINGS WERE APPROXIMATELY 17 VOLTS. THE LOSS OF VOLTAGE RELAY TRIP SETTINGS WERE ADJUSTED TO 24 PLUS OR MINUS 1.7 VOLTS AND RETURNED TO SERVICE.

[511] SUSQUEHANNA 1 DOCKET 50-387 LER 83-168
MICROPROCESSOR FOR ANALYZING SBGT RAD MONITOR FLOW RATE DATA FAILS.
EVENT DATE: 120983 REPORT DATE: 010684 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: EBERLINE INSTRUMENT CORP.

(NSIC 188596) BETWEEN DECEMBER 4 THRU 9, 1983, THE ALARMS/INDICATION/RECORDS FOR THE SAMPLE FLOW RATE OF THE STANDBY GAS TREATMENT (SBGT) VENT RADIATION MONITOR WAS LOST. A MICROPROCESSOR ANALYZING THE FLOW RATE DATA FAILED; THE WORD "NORMAL" WAS PRINTED FOR THE CHANNEL OUTPUT DURING EACH DAILY SURVEILLANCE. WHEN DISCOVERED, LCO PER TECH SPEC 3.3.7.11 WAS ENTERED, THE MICROPROCESSOR WAS REPLACED AND THE SYSTEM RETURNED TO SERVICE. DURING THE EVENT, SAMPLE FLOW WAS NOT LOST AND ALL OTHER ALARMS/INDICATION/PRINTOUTS FUNCTIONED PROPERLY. THE CAUSE OF THIS EVENT WAS THE FAILURE OF THE MICROPROCESSOR, WHICH WAS REPLACED. THE DAILY SURVEILLANCE PROCEDURE IS BEING CHANGED TO GIVE THE OPERATOR MORE

INFORMATION TO INTERPRET THE OUTPUT AND TO ENSURE THAT THE WORD "NORMAL" IS NOT RELIED UPON AS THE SOLE INDICATOR OF CHANNEL CONDITION.

[512] SUSQUEHANNA 1 DOCKET 50-387 LER 83-169
LOSS OF SHUTDOWN COOLING.
EVENT DATE: 121383 REPORT DATE: 011284 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188597) DURING THE PERFORMANCE OF A SURVEILLANCE TEST, AN I&C TECHNICIAN INADVERTENTLY CAUSED A LOSS OF POWER TO THE NORMALLY ENERGIZED/DEENERGIZE TO OPERATE PRIMARY CONTAINMENT ISOLATION SYSTEM (PCIS). THE PCIS ACTED AS DESIGNED AND, CONSEQUENTLY, THE SHUTDOWN COOLING SUCTION INBOARD AND OUTBOARD ISOLATION VALVES CLOSED. UNTIL THE VALVES WERE REOPENED AND SHUTDOWN COOLING REESTABLISHED, A HALF HR. LATER, THE UNIT WAS IN A CONDITION CONTRARY TO TECH SPEC 3.9.11.1. THE LOSS OF SHUTDOWN COOLING WAS CAUSED BY THE UNINTENTIONAL ACTUATION OF THE PCIS. THE SURVEILLANCE PROCEDURE USED HAS BEEN VERIFIED TO BE WRITTEN PROPERLY. THE I&C TECH. INADVERTENTLY GROUNDED THE TEST EQUIPMENT AFTER MAKING A CONNECTION AROUND THE WRONG RELAY AND CAUSED THE LOSS OF PCIS POWER.

[513] SUSQUEHANNA 1 DOCKET 50-387 LER 83-170
CONTROL ROOM CHARCOAL FILTERS FAIL.
EVENT DATE: 121383 REPORT DATE: 011284 NSSS: GE TYPE: BWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: FILTERS
VENDOR: FARR CO.

(NSIC 188459) DURING SURVEILLANCE TESTING, THE CHARCOAL FILTERS IN TRAIN 'A' OF THE CREOASS DID NOT SATISFY TEST SPECIFICATIONS DURING THE FREON LEAK TEST RESULTING IN AN LCO PER TECH SPEC 3.7.2.B.1. THE CHARCOAL WAS REMOVED AND REPACKED INTO THE FILTER; REPACKING REQUIRED ADDITIONAL CHARCOAL. TRAIN 'A' WAS SUCCESSFULLY RETESTED AND RETURNED TO SERVICE; THE LCO WAS CLEARED IN NINE DAYS. CREOASS TRAIN 'B' WAS PLACED IN SERVICE PER TECH SPEC ACTION STATEMENTS. THIS EVENT WAS CAUSED BY INSUFFICIENT CHARCOAL IN THE CHARCOAL FILTER OF THE TRAIN 'A' CREOASS. THE CHARCOAL WAS REMOVED AND REPACKED INTO THE FILTER; REPACKING REQUIRED ADDITIONAL CHARCOAL. THE SYSTEM WAS SUCCESSFULLY RETESTED AND RETURNED TO SERVICE. SINCE THIS IS DONE INFREQUENTLY, AND NO SIMILAR OCCURRENCES HAVE HAPPENED IN THE PAST, NO ADDITIONAL ACTIONS ARE NECESSARY.

[514] SUSQUEHANNA 1 DOCKET 50-387 LER 83-171
TWO RWCU PRESSURE SWITCHES HAVE HIGH TRIP SETTINGS.
EVENT DATE: 121783 REPORT DATE: 011684 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 188598) DURING THE PERFORMANCE OF THE REGULARLY SCHEDULED 18-MONTH REACTOR WATER CLEANUP (RWCU) SYSTEM HIGH DELTA-PRESSURE CHANNEL CALIBRATION, BOTH OF THE SWITCHES TESTED HAD 'AS FOUND' TRIP SETTINGS GREATER THAN THE 'ALLOWABLE VALUE' SPECIFIED IN TECH SPEC TABLE 3.3.2-2. THERE WERE NO OCCURRENCES DURING WHICH THE SWITCHES WERE REQUIRED TO PERFORM THEIR PRIMARY CONTAINMENT ISOLATION FUNCTION. ONE OF THE TWO SWITCHES WAS REPLACED DUE TO THE FAILURE OF ITS BELLOWS. THE REPLACEMENT SWITCH WAS PROPERLY CALIBRATED. THE OTHER SWITCH WAS RECALIBRATED TO WITHIN FINAL TOLERANCES. THERE ARE NO OTHER CORRECTIVE ACTIONS PLANNED.

[515] SUSQUEHANNA 1 DOCKET 50-387 LER 83-172
SHUTDOWN COOLING LOST.
EVENT DATE: 123083 REPORT DATE: 012784 NSSS: GE TYPE: BWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188883) DURING THE UNIT 1-UNIT 2 TIE-IN OUTAGE, ONE OF THE 'B' REACTOR PROTECTION SYSTEM MOTOR GENERATOR SET ELECTRICAL PROTECTION ASSEMBLY (EPA) BREAKERS TRIPPED AND CAUSED A PRIMARY CONTAINMENT ISOLATION RESULTING IN A LOSS OF SHUTDOWN (S/D) COOLING DUE TO THE CLOSURE OF S/D COOLING SUCTION INBOARD AND OUTBOARD ISOLATION VALVES. THE UNIT COMPLIED WITH ACTION STATEMENT B OF TECH SPEC 3.9.11.1. THE LOSS OF SHUTDOWN (S/D) COOLING WAS CAUSED BY THE TRIP OF THE EPA BREAKER AND SUBSEQUENT PCIS ACTUATION. REACTOR COOLANT CIRCULATION WAS ESTABLISHED THROUGH THE FUEL POOL COOLING SYSTEM. (CORE SPRAY SYSTEM ALSO AVAILABLE). REACTOR COOLANT TEMPERATURE IS MONITORED ONCE/HR IN MODE 5 PER PLANT PROCEDURES. CAUSE OF BREAKER TRIP IS UNDER INVESTIGATION. FAILED BREAKER WAS REPLACED AND S/D COOLING REESTABLISHED WITHIN 3 HRS.

[516] THREE MILE ISLAND 1 DOCKET 50-289 LER 83-041
RUBBER SEAT OF CONTAINMENT ISOLATION VALVE CRACKS.
EVENT DATE: 102583 REPORT DATE: 010484 NSSS: BW TYPE: PWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: VALVES
VENDOR: PRATT, HENRY COMPANY

(NSIC 188499) WHILE AT COLD SHUTDOWN, CRACKING WAS OBSERVED ON THE MOLDED RUBBER SEAT RING OF CONTAINMENT PURGE ISOLATION VALVE AH-V1B. THE VALVE SEATS DID NOT FAIL TO PERFORM THEIR CONTAINMENT ISOLATION FUNCTION. NOT REPORTABLE PER TECH SPECS. ROOT CAUSE WAS THAT THERE WAS INSUFFICIENT ADHESION BETWEEN THE PLIES OF THE SEAT MATERIAL. THE CRACKED SEAT SEGMENT WAS REPLACED IN AH-V1B. MONTHLY INSPECTIONS ARE NOW BEING PERFORMED (NORMAL FREQUENCY IS YEARLY). THE SEATS OF ALL FOUR PURGE VALVES WILL BE REPLACED AND LEAK TESTED WHEN NEW MATERIAL IS RECEIVED FROM VENDOR.

[517] THREE MILE ISLAND 1 DOCKET 50-289 LER 83-047
FIRE SEALS MISSING.
EVENT DATE: 121983 REPORT DATE: 012384 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188500) WHILE IN COLD SHUTDOWN, DURING TELEPHONE CIRCUIT REROUTING, 2 CABLE FIRE SEALS WERE IDENTIFIED WITH NO SEAL MATERIAL INSIDE THE CONDUITS. A FIRE WATCH WAS POSTED WITHIN 1 HOUR OF DISCOVERY PER TECH SPEC 3.18.7.2. THIS IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.2.B.2. THE CONDUITS WERE INSTALLED WITH NO FIRE BARRIER SEALS INSIDE THE CONDUITS. SEAL INSTALLATION AND REPAIR PROCEDURE MP 1420-FB-1 USED FOR SEALING OF THESE CONDUITS PROVIDED INADEQUATE GUIDANCE. SEAL REPAIRS HAVE BEEN COMPLETED. REVISION 8 TO MP 1420-FB-1 PROVIDES ADEQUATE GUIDANCE FOR CONDUIT FIRE SEALS.

[518] THREE MILE ISLAND 2 DOCKET 50-320 LER 81-008 REV 1
UPDATE ON FIRE PUMP DIESEL NOT STARTING.
EVENT DATE: 041681 REPORT DATE: 051983 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: BATTERIES & CHARGERS

(NSIC 188725) ON APR. 16, 1981 WHILE UNIT 1 WAS FLUSHING THE FIRE SYSTEM LOOP, UNIT I DIESEL DRIVEN FIRE PUMP RECEIVED AN AUTOMATIC START SIGNAL BUT FAILED TO START. THIS IS NOT A VIOLATION OF THE TECH SPECS. IT IS REPORTABLE UNDER SECTION 6.9.1.9(B) DUE TO INADVERTENT ENTRY INTO THE ACTION STATEMENT OF SECTION 3.7.10.1. THE ROOT CAUSE OF THE EVENT WAS DETERMINED TO BE A FAILED BATTERY ("A" BANK) AS A RESULT OF OLD AGE. THE DIESEL WAS SWITCHED TO THE "B" BANK AND DECLARED OPERABLE AFTER COMPLETION OF SURVEILLANCE PROCEDURE 3303-MI. PREVENTIVE MAINTENANCE PROCEDURE E-60 (REV. 1) INCORPORATES REPLACING UNIT 2 FIRE SERVICE DIESEL BATTERIES EVERY FIVE YEARS.

[519] THREE MILE ISLAND 2 DOCKET 50-320 LER 81-036 REV 1
UPDATE ON LOSS OF WIND DIRECTION INSTRUMENT.
EVENT DATE: 121481 REPORT DATE: 051983 NSSS: BW TYPE: PWR
SYSTEM: OTHER SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: TELEDYNE-GEOTECH

(NSIC 188726) AT 2215 HOURS ON DEC. 14, 1981, THE WIND DIRECTION MONITORING INSTRUMENT LOCATED ON THE METEOROLOGICAL TOWER BECAME INOPERABLE DUE TO ICE FORMATION ON THE INSTRUMENT. THIS EVENT IS CONSIDERED REPORTABLE PER SECTION 6.9.1.8(B) AS A VIOLATION OF THE ACTION STATEMENT OF TECH SPEC 3.3.3.4 DUE TO THE INABILITY OF THE MONITOR TO PERFORM ITS INTENDED FUNCTION. LER 81-035/03L-0 REPORTED AN IDENTICAL OCCURRENCE. THE ICING OF THE WIND DIRECTION MONITORING INSTRUMENT IS BELIEVED TO BE DUE TO THE UNIQUE ADVERSE WEATHER CONDITIONS EXISTING AT THE TIME. THERE WAS NO IMMEDIATE CORRECTIVE ACTION TAKEN DUE TO THE ADVERSE WEATHER CONDITIONS. THE INSTRUMENT WAS HEAT TRACED AS A TEMPORARY MEASURE, A PERMANENT WEATHER STATION JACKET HEATER WAS INSTALLED ON THE INSTRUMENT ON NOV. 9, 1982.

[520] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-014 REV 2
UPDATE ON ACTUATION OF SERVICE TUNNEL HALON SYSTEM.
EVENT DATE: 050683 REPORT DATE: 103183 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188864) AT 1745 HRS ON MAY 6, 1983, THE AIR INTAKE TUNNEL (AIT) HALON SYSTEM ACTUATED. THIS CAUSED THE ACTUATION OF THE AIT DELUGE SYSTEM AND TRIPPED THE AUXILIARY AND FUEL HANDLING BUILDINGS SUPPLY AND EXHAUST FANS. THIS EVENT IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.1.9(B) DUE TO ENTRY INTO AND COMPLIANCE WITH THE ACTION STATEMENTS OF TECH SPEC 3.9.12 AND 3.7.10.3 AS A RESULT OF LOW VENTILATION FLOWRATE AND INOPERABILITY (DUE TO DISCHARGE) OF THE HALON SYSTEM, RESPECTIVELY. SIMILAR EVENTS: LER'S 83-09, 82-23, AND 82-18. THE INITIATING CAUSE OF THE EVENT IS ATTRIBUTED TO WELDING NEAR THE AIT, ACTUATING THE ULTRAVIOLET LIGHT DETECTORS IN THE AIT. THE SYSTEM OPERATED AS DESIGNED PERFORMING THE SUBSEQUENT SYSTEM ACTUATING/TRIPS. THE HALON AND DELUGE SYSTEMS WERE SECURED AND THE VENTILATION SYSTEMS RESTORED AT 1822 HRS ON MAY 6, 1983. THE HALON SYSTEM WAS RECHARGED AND RETURNED TO SERVICE AT 1350 HRS ON MAY 20, 1983.

[521] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-053
RHR SNUBBERS INOPERABLE.
EVENT DATE: 062883 REPORT DATE: 122283 NSSS: BW TYPE: PWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: PACIFIC SCIENTIFIC COMPANY

(NSIC 188689) ON JUNE 28, 1983, TWO (MECHANICAL) SEISMIC RESTRAINT SNUBBERS ON THE DECAY HEAT AUXILIARY SPRAY LINE WOULD NOT RESPOND TO INPLACE EXERCISING. SUBSEQUENT TO REMOVAL AND DISASSEMBLY, THESE SNUBBERS WERE FOUND TO HAVE FAILED IN A BOUND-UP RIGID CONDITION. THE REACTOR COOLANT SYSTEM WAS IN A LOW PRESSURE, LOW TEMPERATURE CONDITION. DUE TO THE NATURE OF THIS EVENT, THIS IS A SPECIAL REPORT. THE PROXIMATE CAUSE OF THIS SNUBBER FAILURE IS MOST PROBABLY EXCESSIVE LOADING. THE TWO FAILED SNUBBERS WERE REPLACED IN LIKE KIND. ADDITIONAL STUDIES ARE BEING CONSIDERED TO ESTABLISH THE ROOT CAUSE OF THIS EVENT.

[522] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-060
AUXILIARY BUILDING HVAC SYSTEM FAILURE.
EVENT DATE: 111083 REPORT DATE: 121283 NSSS: BW TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVES
VENDOR: BUFFALO FORGE COMPANY

(NSIC 188341) ON TWO SEPARATE OCCASIONS, NOVEMBER 10, 1983, AT 1450 HOURS, AND NOVEMBER 22, 1983, AT 1005 HOURS, THE AUXILIARY BUILDING EXHAUST FANS AH-E-8C/D BEGAN CYCLING, PERIODICALLY, DECREASING THE FLOWRATE TO BELOW THE TECH SPEC 3.9.12.2A LIMIT OF 54,000 CFM, A AND B FANS WERE OUT-OF-SERVICE FOR MAINTENANCE. THIS PLACED THE UNIT IN THE ACTION STATEMENT. THIS EVENT IS REPORTABLE PER TECH SPEC 6.9.1.9(B). SIMILAR LER'S ARE 83-20, 81-26, AND 81-28. EXHAUST FANS AH-E-8A/B WERE RETURNED TO SERVICE AFTER MAINTENANCE. REPAIR WORK WAS STARTED ON THE C/D FANS. PRELIMINARY RESULTS INDICATE BROKEN LINKAGE ON A VORTEX DAMPER SPORADICALLY STICKING WHICH CAUSED THE CYCLING. TROUBLESHOOTING WILL CONTINUE AND THE LINKAGE WILL BE REPLACED. CORRECTIVE ACTIONS WILL BE CONFIRMED IN AN UPDATE.

[523] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-063
AUX. BUILDING VENTILATION SYSTEM CEASES TO OPERATE.
EVENT DATE: 122283 REPORT DATE: 011884 NSSS: BW TYPE: PWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVES
VENDOR: BUFFALO FORGE COMPANY

(NSIC 188865) ON DEC. 22, 1983, MAINTENANCE WAS PERFORMED ON THE AUXILIARY BUILDING (AB) EXHAUST FILTER TRAIN "A". HOWEVER, AFTER COMPLETION OF THE MAINTENANCE, THE SWITCHING ORDER ISSUED BY THE CRO INCORRECTLY REQUIRED THE "B" TRAIN TO BE RETURNED TO SERVICE. SUBSEQUENTLY, THE OPERATOR PERFORMING THE ORDER INADVERTENTLY CLOSED THE INLET DAMPER OF THE "B" TRAIN WHICH TRIPPED THE AB EXHAUST FANS. THIS EVENT IS REPORTABLE PURSUANT TO SECTION 6.9.1.9(B) DUE TO ENTRY INTO AND COMPLIANCE WITH THE ACTION STATEMENT OF TECH SPEC 3.9.12.2. THE CRO WHO ISSUED THE SWITCHING ORDER IDENTIFIED THE WRONG EXHAUST FILTER TRAIN TO BE RETURNED TO SERVICE AND THE OPERATOR WHO PERFORMED THE SWITCHING ORDER INADVERTENTLY OPERATED THE WRONG DAMPER CONTROLLER. THE CRO AND THE OPERATOR HAVE BEEN COUNSELED.

[524] TROJAN DOCKET 50-344 LER 83-017
ECCS TRAIN VALVE LINEUP TEST NOT PERFORMED.
EVENT DATE: 112383 REPORT DATE: 122283 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188441) DURING AN AUDIT OF PLANT OPERATIONAL TEST (POT) RECORDS, IT WAS FOUND THAT PERIODIC OPERATING TEST POT-2-3DB WAS NOT RUN FOR THE MONTH OF AUG. 1983. THIS POT VERIFIED THE 'B' TRAIN ECCS VALVE LINEUPS PER TECH SPECS 4.1.2, 4.5.1, 4.5.2, AND 4.0.5. THE REDUNDANT 'A' TRAIN ECCS WAS VERIFIED TO BE OPERABLE FOR THE TIME IN QUESTION. CAUSE WAS PERSONNEL ERROR IN THE COMPUTER SCHEDULING OF THE POT WHEN THE POT WAS INADVERTENTLY LISTED ON THE TEST SCHEDULE WITH ANOTHER POT IDENTIFICATION. THE POT WAS VERIFIED TO HAVE BEEN RUN IN OCT. AND THE PERSON RESPONSIBLE FOR SCHEDULING WAS COUNSELED TO BE MORE COMPLETE AND ACCURATE WHEN SCHEDULING THE POT.

[525] TROJAN DOCKET 50-344 LER 83-018
REACTOR COOLANT DRAIN TANK OUTLET CONTAINMENT ISOLATION VALVE DOES NOT CLOSE WITHIN THE LIMIT.
EVENT DATE: 112683 REPORT DATE: 122283 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: ASCO VALVES
MILLER FLUID POWER CO.

(NSIC 188442) ON NOV. 26, 1983 DURING NORMAL PLANT OPERATION AT 100% POWER, INSERVICE SURVEILLANCE TESTING FOUND THE REACTOR COOLANT DRAIN TANK OUTLET CONTAINMENT ISOLATION VALVE, CV-4006, WAS NOT CLOSING WITHIN 10 SECONDS, PER TECH SPEC 3.6.3.1; THUS PLACING THE PLANT IN A DEGRADED MODE OF OPERATION. THE REACTOR COOLANT DRAIN TANK DID REMAIN ISOLABLE AT ALL TIMES. CV-4006 REACTOR

COOLANT DRAIN TANK OUTLET ISOLATION VALVE FAILED TO CLOSE AS REQUIRED DUE TO SLOW DEPRESSURIZATION THROUGH THE AIR SOLENOID VALVE OPERATING MECHANISM. IMMEDIATE CORRECTIVE ACTION WAS TO CYCLE CV-4006 AND HAVE MAINTENANCE PERSONNEL INVESTIGATE THE CAUSE OF FAILURE. FOLLOWUP ACTION WAS TO CLEAN THE VALVE STEM AND REPLACE THE AIR OPERATING DEVICE TO MORE RAPIDLY VENT CONTROL AIR PRESSURE.

[526] TROJAN DOCKET 50-344 LER 83-020
RHR PUMP FAILS TO RESTART.
EVENT DATE: 120783 REPORT DATE: 010584 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188444) FOLLOWING ROUTINE TESTING, THE 'A' TRAIN RHR PUMP FAILED TO RESTART FROM THE CONTROL ROOM. THIS RESULTED IN OPERATION WITH LESS THAN THE MINIMUM NUMBER OF OPERABLE RHR PUMPS REQUIRED BY TECH SPEC 3.5.2. THE CAUSE OF THE OCCURRENCE WAS LOOSE MOUNTING BOLTS ON THE CIRCUIT BREAKER POSITION SWITCH. THE SWITCH MOUNTING BOLTS WERE TIGHTENED AND CHECKED FOR PROPER OPERATION.

[527] TROJAN DOCKET 50-344 LER 83-019
TWO CONTAINMENT SPRAY VALVES FAIL TO OPEN.
EVENT DATE: 120883 REPORT DATE: 010584 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: LIMITORQUE CORP.

(NSIC 183443) WITH THE PLANT IN MODE 1 AT 100% POWER, TECH SPECS 3.6.2.1 AND 3.6.3.1 WERE NOT MET WHEN CONTAINMENT SPRAY CONTAINMENT ISOLATION VALVE MO-2053A FAILED TO MEET FIRST VALVE TRAVEL TIME CRITERIA AND TECH SPEC 3.6.2.2 WAS NOT MET WHEN NAOH SPRAY ADDITIVE VALVE MO-2056A ALSO FAILED FIRST VALVE TRAVEL TIME CRITERIA (BOTH FAILED TO OPEN). THE REDUNDANT TRAIN OF CONTAINMENT SPRAY WAS OPERABLE AT ALL TIMES. MO-2053A FAILED DUE TO AN IMPROPERLY POSITIONED ELECTRICAL WIRE THAT INTERFERRED WITH THE TORQUE SWITCH. THE WIRE WAS PROPERLY ROUTED, TIED DOWN, AND THE VALVE TESTED AND DECLARED OPERABLE. MO-2056 FAILED DUE TO A BUILDUP OF NAOH CRYSTALS ON THE STEM. THE VALVE WAS CLEANED, THE PACKING ADJUSTED, TESTED, AND DECLARED OPERABLE.

[528] TROJAN DOCKET 50-344 LER 83-021
CONTROL ROD DRIVE SYSTEM FAILS.
EVENT DATE: 122083 REPORT DATE: 011984 NSSS: WE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188697) ON DECEMBER 20, 1983 THE CONTROL RODS FAILED TO RESPOND TO A DEMAND FOR ROD MOTION WHILE THE RODS WERE IN MANUAL CONTROL. THE PROBLEM WAS DETERMINED TO BE A FAILED MASTER PULSER CARD IN THE ROD CONTROL SYSTEM. THIS PLACED THE PLANT IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION (TECH SPEC 3.1.3.1). THE RODS WERE CAPABLE OF BEING TRIPPED BOTH MANUALLY AND AUTOMATICALLY DURING THE TWO AND ONE-HALF HOUR PERIOD THAT THE ROD CONTROL SYSTEM WAS INOPERABLE. THE CAUSE OF THIS OCCURRENCE WAS A FAILED MASTER PULSER CARD IN THE ROD CONTROL SYSTEM. THE CARD WAS REPLACED WITHIN TWO AND ONE-HALF HOURS. THE RODS WERE CAPABLE OF BEING TRIPPED IF NECESSARY DURING THIS PERIOD.

[529] TROJAN DOCKET 50-344 LER 83-023
UNDERFREQUENCY RELAY HAS SLUGGISH RESPONSE AND ERRATIC SETPOINT.
EVENT DATE: 122983 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: RELAYS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 188785) DURING PERFORMANCE OF PICT -21-2, AN UNDERFREQUENCY RELAY 281-2/1 ON BUS H-2 WAS FOUND TO HAVE A SLUGGISH RESPONSE AND AN ERRATIC SETPOINT AROUND THE TECH SPEC LIMIT. THE QUESTIONABLE RELAY HAD THE EFFECT OF REDUCING UNDERFREQUENCY REACTOR TRIP LOGIC FROM ONE OUT OF TWO TAKEN TWICE, TO ONE OUT OF ONE, AND ONE OUT OF TWO. THE PLANT DID NOT HAVE A BUS UNDERFREQUENCY CONDITION DURING THE INTERVAL OF QUESTIONABLE RELAY OPERATION. THE CAUSE OF THE EVENT WAS DETERMINED TO BE DIRTY COMPONENTS WITHIN THE RELAY. THE RELAY WAS DECLARED INOPERABLE AND TRIPPED. SUBSEQUENTLY, THE UNIT WAS CLEANED AND RETESTED SATISFACTORILY.

[530] TROJAN DOCKET 50-344 LER 83-022
AFW PUMP FAILS TO START.
EVENT DATE: 010384 REPORT DATE: 012784 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: LIMITORQUE CORP.

(NSIC 188780) FOLLOWING MAINTENANCE AN OPERABILITY TEST WAS RUN ON THE 'A' TRAIN, STEAM-DRIVEN AUXILIARY FEEDWATER PUMP. THE PUMP FAILED TO START DUE TO AN INOPERABLE TRIP AND THROTTLE VALVE. SUBSEQUENT INVESTIGATION INDICATED THAT THE VALVE WAS NOT CAPABLE OF BEING OPERATED REMOTELY. THIS SITUATION EXISTED SINCE THE PUMP WAS PREVIOUSLY SHUT DOWN ON NOVEMBER 23, 1983. THIS OCCURRENCE WAS DUE TO COMPONENT FAILURE CAUSED BY EXCESSIVE GREASE BUILDUP ON THE TORQUE SWITCH FOR THE TURBINE TRIP AND THROTTLE VALVE MO-3071 WHICH ALLOWED THE PROTECTIVE OVERLOAD CONTACTS TO OPEN FOLLOWING THE VALVE CLOSURE. IMMEDIATE CORRECTIVE ACTION WAS TO CLEAN AND TEST THE VALVE. FOLLOWUP CORRECTIVE ACTION WILL INSPECT THE VALVE EVERY THREE YEARS AND IMPLEMENT A DESIGN CHANGE TO ALARM IN CONTROL ROOM THE TRIPPED THERMAL OVERLOAD CONTACTS.

[531] TURKEY POINT 3 DOCKET 50-250 LER 83-023
SPENT FUEL PIT EXHAUST RADIATION MONITOR FOUND TO BE DE-ENERGIZED.
EVENT DATE: 120183 REPORT DATE: 010484 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188313) WHILE UNIT 3 WAS SHUTDOWN, A CHEMISTRY TECHNICIAN NOTICED THAT THE UNIT 3 SPENT FUEL PIT EXHAUST RADIATION MONITOR WAS DE-ENERGIZED. SUBSEQUENT INVESTIGATIONS REVEALED THAT THE MONITOR WAS OUT OF SERVICE FOR ABOUT 98 HOURS. THIS IS REPORTABLE UNDER THE PROVISIONS SET FORTH BY TECH SPEC 3.9.2.D. ESTIMATED ACTIVITY IN THE SPENT FUEL PIT DURING THE INCIDENT WAS CALCULATED TO BE 2.4 E-5 CURIES OF I-131 AND NO DETECTABLE PARTICULATE ACTIVITY. A SIMILAR INCIDENT WAS REPORTED UNDER LER 250-79-18. THE ROOT CAUSE COULD NOT BE POSITIVELY DETERMINED. THE NUCLEAR OPERATOR ON SHIFT SIMPLY SWITCHED THE POWER FEED BREAKER (LP 38 CIRCUIT 16) TO THE OFF AND ON POSITIONS AND THE MONITOR WAS ENERGIZED. THERE WAS NO INDICATION OF THE BREAKER BEING TRIPPED. AS A CORRECTIVE ACTION, A SIGN WILL BE POSTED BY LP 38 CIRCUIT 16 IDENTIFYING THE BREAKER AS A TECH SPEC ITEM.

[532] TURKEY POINT 3 DOCKET 50-250 LER 83-025
EMERGENCY DG FAILS TO START.
EVENT DATE: 121683 REPORT DATE: 011684 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: VALVES
VENDOR: NORGREN

(NSIC 188388) WITH UNIT 3 IN THE COLD SHUTDOWN CONDITION, A SPURIOUS ENGINEERED SAFEGUARDS ACTUATION SIGNAL WAS RECEIVED AND THE "B" EMERGENCY DIESEL GENERATOR (DG) FAILED TO START. THIS IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.2.B.2. SIMILAR LERS WERE 250-83-003 AND 250-82-006. THE ROOT CAUSE WAS DETERMINED TO BE THE MALFUNCTION OF THE DIESEL AIR START PRESSURE REGULATOR. A NEW AIR START

PRESSURE REGULATOR WAS INSTALLED. THE "B" EMERGENCY DIESEL GENERATOR WAS SUCCESSFULLY TESTED AND RETURNED TO SERVICE ON 12/21/83.

[533] TURKEY POINT 4 DOCKET 50-251 LER 83-002 REV 1
UPDATE ON SPENT FUEL ASSEMBLY DROPS.
EVENT DATE: 040583 REPORT DATE: 122283 NSSS: WE TYPE: PWR
SYSTEM: FUEL HANDLING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: P&H HEVI-LIFT HOISTS

(NSIC 188839) WHILE LIFTING SPENT FUEL ASSEMBLY X-13 OUT OF ITS DESIGNATED RACK IN THE UNIT 4 SPENT FUEL POOL, THE HOISTING CABLE ON THE FUEL HANDLING CRANE PARTED AND ASSEMBLY X-13 DROPPED BACK INTO ITS RACK FROM THE FULLY LIFTED POSITION. THIS IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.2.A.2. THERE IS NO INDICATION OF FUEL CLADDING DAMAGE, AS RADIATION MONITOR READINGS AND SURVEY RESULTS ARE UNCHANGED FROM PRE-EVENT VALUES. SIMILAR LER'S WERE 251-73-2 AND 251-75-7. A MALFUNCTION OF THE TWO LIMIT SWITCHES ON THE HOISTING CRANE FAILED TO STOP THE UPWARD MOVEMENT OF THE FUEL ASSEMBLY. THIS CAUSED THE CABLE TO BE OVERSTRESSED. SUBSEQUENTLY, THE CABLE PARTED. REPAIRS HAVE BEEN MADE TO THE LIMIT SWITCHES. ADDITIONAL INSPECTIONS OF X-13 WERE CONDUCTED IN THE SPENT FUEL POOL. NO SIGNS OF CLADDING DAMAGE TO THE ASSEMBLY WERE REVEALED.

[534] TURKEY POINT 4 DOCKET 50-251 LER 83-014
CONTAINMENT SPRAY PUMP OUT OF SERVICE.
EVENT DATE: 091783 REPORT DATE: 101183 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188469) DURING NORMAL FULL POWER OPERATION, THE 4B CONTAINMENT SPRAY PUMP WAS OUT OF SERVICE LONGER THAN THE TIME LIMIT ALLOWED BY TECH SPEC 3.4.2.B.2 WHILE THE SUCTION PIPING WAS BEING MODIFIED IN ACCORDANCE WITH IEB 79-14. ACTIONS WERE INITIATED TO BRING THE UNIT TO HOT SHUTDOWN. THIS IS REPORTABLE UNDER TECH SPEC 6.9.2.B.2. A SIMILAR EVENT WAS REPORTED AS LER 250-83-008. PRIOR TO INITIATING WORK, THE 4A CONTAINMENT SPRAY PUMP HAD BEEN SATISFACTORILY TESTED. THE PUMP WAS OUT OF SERVICE LONGER THAN THE ALLOWABLE TIME AS A RESULT OF CONSTRUCTION DELAYS. WHEN REPAIRS WERE COMPLETED, THE PUMP WAS TESTED, RETURNED TO SERVICE, AND THE UNIT WAS RETURNED TO FULL POWER.

[535] TURKEY POINT 4 DOCKET 50-251 LER 83-020
NEW DISCHARGE PIPING NOT HYDROTESTED ON TIME.
EVENT DATE: 112383 REPORT DATE: 122283 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188389) DURING AN OUTAGE OF UNIT 4, FULL-FLOW RECIRC PIPING WAS ADDED TO THE 4A AND 4B HIGH HEAD SAFETY INJECTION PUMP DISCHARGE PIPING. WHEN RETURNING THE UNIT TO OPERATION, THE REACTOR WAS TAKEN CRITICAL BEFORE THE NEWLY MODIFIED DISCHARGE PIPING WAS HYDROTESTED AT PUMP DISCHARGE PRESSURE WITH A QUALIFIED INSPECTOR PRESENT. THIS IS REPORTABLE UNDER TECH SPEC 6.9.2.B.3. THE NEW WELDS HAD BEEN LIQUID-PENETRANT TESTED. A SYSTEM OPERABILITY TEST AT THE PUMP DISCHARGE PRESSURE WAS SUCCESSFULLY COMPLETED SEVERAL DAYS EARLIER. A SIMILAR LER WAS 250-82-015. A LOWER PRESSURE, 10-YEAR HYDROTEST PERFORMED A WEEK EARLIER WAS MISTAKENLY CONSIDERED TO HAVE SATISFIED THE DESIGN PACKAGE'S HYDROTEST REQUIREMENT. THE MISUNDERSTANDING BETWEEN THE CONCERNED DEPARTMENTS WAS RESOLVED, THE REQUIRED HYDROSTATIC TEST WAS COMPLETED WITHIN APPROX. 5 HOURS AFTER CRITICALITY, AND CORRECTIVE ACTIONS HAVE BEEN TAKEN IN THE FORM OF INCREASED MANAGEMENT ATTENTION TO THIS AREA.

[536] TURKEY POINT 4 DOCKET 50-251 LER 83-022
THREE BAST'S EXCEED BORON CONCENTRATION LIMITS.
EVENT DATE: 121983 REPORT DATE: 011884 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188390) WHILE UNIT 4 WAS AT 100% POWER, A ROUTINE SAMPLE OF THE BORIC ACID STORAGE TANKS (BAST) BORON CONCENTRATION REVEALED THAT ALL THREE TANKS WERE EXCEEDING TECH SPECS LIMITS (20,000 TO 22,500 PPM). UNIT 3 WAS AT COLD SHUTDOWN AT THE TIME. THIS IS REPORTABLE PURSUANT TO TECH SPEC 6.9.2.B.2. SIMILAR INCIDENTS WERE REPORTED UNDER LERS 250-76-04 AND 251-76-04. THE ROOT CAUSE WAS DETERMINED TO BE LACK OF COMMUNICATION BETWEEN CHEMISTRY AND OPERATIONS PERSONNEL WHILE BATCHING AND TRANSFERRING BORIC ACID WITHIN THE CHEMICAL AND VOLUME CONTROL SYSTEM. THIS EVENT AND ITS IMPORTANCE WILL BE REVIEWED IN THE OPERATORS REQUALIFICATION CLASSES AND IN CHEMISTRY LAB PERSONNEL TRAINING. THE "C" BAST WAS RETURNED TO TECH SPECS LIMITS IN APPROXIMATELY 4 HOURS.

[537] VERMONT YANKEE DOCKET 50-271 LER 83-020
EDG AND CORE SPRAY VALVE FAILURES CAUSE REACTOR SHUTDOWN.
EVENT DATE: 082683 REPORT DATE: 091283 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: RELAYS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188842) WHILE PERFORMING EMERGENCY DIESEL GENERATOR SURVEILLANCE, THE "B" DIESEL GENERATOR FAILED TO START AS REQUIRED BY TECH SPEC 3.10.A.1. ALTERNATE SURVEILLANCE TESTING WAS STARTED PER TECH SPEC 4.5.H.1. DURING ALTERNATE TESTING, CORE SPRAY VALVE CS-7B FAILED TO STROKE. REACTOR SHUTDOWN WAS IMMEDIATELY INITIATED PER TECH SPEC 3.5.A.6 AND AN UNUSUAL EVENT DECLARED. THERE HAVE BEEN NO SIMILAR OCCURRENCES OF THIS TYPE REPORTED IN THE LAST FIVE YEARS. THE CAUSE OF THIS EVENT WAS ATTRIBUTED TO TWO FAILURES: 1) THE DIESEL STOPPING RELAY SOLENOID FAILED AND INTERRUPTED FUEL FLOW TO THE DG. IT WAS SUBSEQUENTLY REPLACED. 2) THE CS-7B VALVE BREAKER TRIPPED ON HIGH STARTING TORQUE. THE BREAKER WAS SUBSEQUENTLY REPLACED, AND THE CS-7B VALVE WAS CYCLED AND DECLARED OPERABLE.

[538] WPPSS 2 DOCKET 50-397 LER 83-003
FIRE DAMPERS DO NOT MEET REQUIREMENTS.
EVENT DATE: 122283 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVES
VENDOR: RUSKIN MANUFACTURING COMPANY

(NSIC 188925) A WALK DOWN WAS PERFORMED ON FIRE DAMPERS AND THOSE LISTED BELOW WERE FOUND WHICH DID NOT MEET UL FIRE RATING REQUIRED, THUS VIOLATING TECH SPEC 3/4.7.7. THE SYSTEM REMAINED FULLY FUNCTIONAL EVEN THOUGH THE DAMPERS WERE NOT IN COMPLIANCE WITH UL STANDARDS. THUS, POTENTIAL CONSEQUENCES WERE MINIMAL. DAMPER IDENTIFICATION: WMA-FD-1, -2, -7, -8, -9, -10, -11, -14, -15, -18, DRA-FD-34-1. FIRE DAMPERS WERE MODIFIED BY CUTTING TO REQUIRED SIZE BY VENDOR, THUS VOIDING UL LISTING. THESE DAMPERS WILL BE REPLACED TO ASSURE UL COMPLIANCE. IN THE INTERIM THE ACTION STATEMENT OF TECH SPEC 3/4.7.7.A WAS INSTITUTED.

[539] WPPSS 2 DOCKET 50-397 LER 83-004
LOSS OF FIRE DETECTION INSTRUMENTATION.
EVENT DATE: 122283 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188926) A LOSS OF FIRE DETECTION INSTRUMENTATION OCCURRED ON 606 FT. ELEVATION OF REACTOR BUILDING. THIS IS A VIOLATION OF TECH SPEC 3.3.7.9. THE CONSEQUENCE WAS LOSS OF THE SUPERVISORY ALARM INDICATION OF A POTENTIAL FIRE. CONDENSATION SHORTED OUT THE DETECTION SYSTEM THUS REQUIRING POWER SUPPLY

REPLACEMENT. THE ACTION STATEMENT OF TECH SPEC 3.3.7.9.A.2 WAS INSTITUTED. POWER SUPPLY WAS REPLACED AND THE SOURCE OF THE CONDENSATION IS BEING CORRECTED.

[540] WPPSS 2 DOCKET 50-397 LER 83-006
FIRE DOOR ISOLATED.
EVENT DATE: 122283 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188928) A FIRE RATED DOOR (#D-104) WAS VIOLATED CAUSING A LOSS OF FIRE BOUNDARY INTEGRITY PER TECH SPEC 3.4.7.7. THE CONSEQUENCES OF THIS VIOLATION ARE MINIMAL SINCE THE DOOR WAS CAPABLE OF BEING CLOSED. A FIRE RATED DOOR CLOSED, PINCHING A WELDING LEAD AND MELTING HOLE IN DOOR. DOOR IS TO BE REPLACED. UPGRADES AND MODIFICATIONS MANAGER HAS BEEN DIRECTED TO ASSURE CRAFTSMEN CONFORM TO OWNERS INDUSTRIAL SAFETY AND FIRE PROTECTION MANUAL, SECTION 7.1.4D. IN THE INTERIM, THE REQUIREMENTS OF ACTION STATEMENT 3.7.7.A WERE IMPLEMENTED.

[541] WPPSS 2 DOCKET 50-397 LER 83-007
FIRE HYDRANT FREEZES.
EVENT DATE: 122283 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
VENDOR: KENNEDY VALVE MFG CO.

(NSIC 188815) FIRE HYDRANT FP-HT-1G DID NOT DRAIN AND FROZE DURING COLD WEATHER, PLACING IT OUT OF SERVICE IN VIOLATION OF TECH SPEC 3.7.6.5. TWO OTHER HYDRANTS PROVIDED ADEQUATE COVERAGE WITH AVAILABLE HOSE SATISFYING TECH SPEC 3.7.6.5 ACTION. THIS WAS CAUSED BY CONTRACTOR CRAFTSMEN INADVERTENTLY BLOCKING THE DRAIN PORT FOR HYDRANT WHILE POURING CONCRETE NEARBY. HYDRANT IS TO BE REPAIRED. UPGRADES AND MODIFICATIONS MANAGER HAS BEEN DIRECTED TO ASSURE CRAFTSMEN HAVE BEEN INSTRUCTED TO USE CAUTION.

[542] WPPSS 2 DOCKET 50-397 LER 83-008
DAMPER BINDS IN ITS TRACKS.
EVENT DATE: 122283 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVES
VENDOR: RUSKIN MANUFACTURING COMPANY

(NSIC 188816) A SYSTEM SURVEILLANCE FOUND A DAMPER (WOA-SMD-1B) WHICH DID NOT FUNCTION CORRECTLY, THUS VIOLATING TECH SPEC 3/4.7.7. THIS IS A LOSS OF FIRE BOUNDARY INTEGRITY AND THE CONSEQUENCES WERE MINIMAL. THIS GUILLOTINE DAMPER BINDED IN ITS TRACK AND WAS LEFT IN THE OPEN POSITION, UNABLE TO CLOSE AUTOMATICALLY. IN THE INTERIM, THE REQUIREMENTS OF TECH SPEC 3/4.7.7A WERE IMPLEMENTED. THE CAUSE OF THE BINDING WILL BE DETERMINED AND CORRECTED.

[543] WPPSS 2 DOCKET 50-397 LER 83-009
FIRE DAMPER RENDERED INOPERABLE.
EVENT DATE: 122283 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188929) FIRE DAMPER WOA-SMD-1A WAS MANUALLY PROPPED OPEN, RENDERING IT INOPERABLE IN VIOLATION OF TECH SPEC 3.4.7.7. THIS IS A LOSS IN FIRE BOUNDARY INTEGRITY AND THE CONSEQUENCE WAS MINIMAL. THE LINK HOLDING THE DAMPER OPEN FUSED DUE TO FLUX OF DUST TO ACTIVATING DETECTOR. NO SPARE WAS IMMEDIATELY AVAILABLE. THE ACTION STATEMENT OF TECH SPEC 3.4.7.7.A WAS INSTITUTED, UNTIL A NEW LINK WAS INSTALLED UPON RECEIPT.

[544] WPPSS 2 DOCKET 50-397 LER 83-005
FIRE RATED SEALS REMOVED TO PERFORM CONSTRUCTION.
EVENT DATE: 122383 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188927) PLANT MODIFICATION REQUIRED REMOVAL OF FIRE RATED SEALS TO PERFORM CONSTRUCTION WORK. THE INEFFECTIVE FIRE RATED SEALS CONSTITUTE A LOSS OF FIRE BOUNDARY INTEGRITY PER TECH SPEC 3.4.7.7. THE ACTION STATEMENT OF TECH SPEC 3.4.7.7.A WAS INSTITUTED AND POTENTIAL CONSEQUENCES WERE MINIMAL. SEALS - RM C206-2005.4; C209-3001.5; C237-1003, 1003.1; C304-4011, 4011.1, 5003, 5004; R13-1001B; R105-4004.1; R206-4222, 4222.1, 5004. PLANT MODIFICATION REQUIRED REMOVAL OF THE SEALS. SEALS WILL BE REPLACED AS SOON AS THE ASSOCIATED CONSTRUCTION WORK IS COMPLETED.

[545] WPPSS 2 DOCKET 50-397 LER 83-001
FUEL HANDLING INTERLOCKS INOPERABLE.
EVENT DATE: 122583 REPORT DATE: 010984 NSSS: GE TYPE: BWR
SYSTEM: FUEL HANDLING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: DILLON, W.C. & CO., INC.

(NSIC 188718) WHEN LOADING THE FIRST FUEL BUNDLE, THE ROD BLOCK PROTECTIVE INTERLOCK WAS LOST, VIOLATING THE REFUELING INTERLOCK TECH SPEC (TECH SPEC 4.9.6). THIS EVENT CAUSED NO SIGNIFICANT OCCURRENCE OR EVENT. NO SIMILAR EVENT HAS OCCURRED AT THIS FACILITY. BOTH THE LOADED INTERLOCK AND ITS BACKUP WERE SIMILARLY AFFECTED. BRIDGE REVERSE MOTION AND HOIST JAM INTERLOCKS MAY HAVE BEEN AFFECTED SINCE BOTH ROD BLOCK AND REVERSE MOTION INTERLOCKS ARE GOVERNED BY SIMILAR FORCE SWITCHES. SYSTEM ENGINEER MISINTERPRETED INTENT OF TECH SPEC. TECH SPEC LOAD SETPOINTS ARE INTENDED TO BE CABLE LOAD SETPOINTS, NOT GRAPPLE LOAD. FORCE SWITCH TRIP POINTS WERE SET TOO HIGH. WHEN WEIGHT OF REFUEL MAST TRANSFERRED TO CABLE TO BRIDGE STRUCTURE, WEIGHT OF FUEL BUNDLE WAS INSUFFICIENT TO RETAIN INTERLOCK. CALIBRATION AND SURVEILLANCE PROCEDURES ARE BEING CHANGED TO MORE PRECISELY SPECIFY HOW TO SET AND VERIFY FORCE SWITCH SETPOINTS.

[546] WPPSS 2 DOCKET 50-397 LER 83-002
FIRE PROTECTION WATER STORAGE TANK HAS LOW WATER LEVEL.
EVENT DATE: 123183 REPORT DATE: 012084 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 188814) DURING A ROUTINE OPERATOR TOUR, FIRE PROTECTION STORAGE WATER LEVEL IN FP-TK-100 WAS FOUND LESS THAN 280,000 GAL. IN VIOLATION OF TECH SPEC 3.7.6.1.B. NO SIGNIFICANT OCCURRENCE RESULTED AND THE LEVEL WAS RESTORED TO NORMAL IN 20 MINUTES. EVENTS WHICH PERMITTED THE LOW LEVEL WERE AIR BINDING OF THE FILTER EFFLUENT PUMP WHILE FP-P-107 WAS IN MANUAL VERSUS "AUTO" AS A RESULT OF INADEQUATE PROCEDURAL INSTRUCTIONS. REDUNDANT FIRE PROTECTION EXISTED AND THE EXISTING WATER VOLUME WAS ABOUT 98% OF THE REQUIRED LEVEL. FILTRATION PLANT EFFLUENT PUMP FP-P-120 AIR BOUND AND WELL WATER SUPPLY PUMP FP-P-107 IN MANUAL VERSUS "AUTO" MODE. CORRECTIVE ACTIONS INCLUDED PLACING FP-P-107 IN AUTO MODE, FILLED STORAGE TANK TO REQUIRED LEVEL, AND PROCEDUPAL CHANGES INITIATED TO PREVENT AIR BINDING AND ENSURE THAT FP-P-107 "AUTO" MODE STATUS IS DEFINED.

[547] YANKEE ROWE DOCKET 50-029 LER 83-038 REV 1
UPDATE ON VITAL BUS TRANSFER SWITCH FAILS TO OPERATE.
EVENT DATE: 100683 REPORT DATE: 011384 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: ELECTRO SWITCH CORP.

(NSIC 188532) IN MODE I DURING STARTUP FOLLOWING A PLANT TRIP, WHILE REPAIRING THE NO. 2 VITAL BUS INVERTER, THE VITAL BUS TRANSFER SWITCH MALFUNCTIONED DURING

ITS OPERATION RESULTING IN AN APPROXIMATELY 3 SECOND LOSS OF NO. 2 VITAL BUS. THE 120V NO. 2 VITAL BUS IS REQUIRED TO BE OPERABLE IN MODE 1 BY TECH SPEC 3.8.2.1.B.4. THIS IS THE FIRST OCCURRENCE OF THIS NATURE. INSTRUMENTATION INDICATION POWERED BY THE BUS RECOVERED ON RETURN OF POWER. THE ROOT CAUSE OF THIS OCCURRENCE HAS BEEN ATTRIBUTED TO IMPROPER ASSEMBLY DURING MANUFACTURE WHICH ALLOWED THE SWITCH CAM ASSEMBLY TO GO BEYOND ITS NORMAL TRAVEL. THE SWITCH WAS REPAIRED, INSTALLED AND SATISFACTORILY TESTED. NO. 1 INVERTER WILL BE INSPECTED NEXT REFUELING OUTAGE.

[548] YANKEE ROWE DOCKET 50-029 LER 83-042
STEAM GENERATOR BLOWDOWN RADIATION MONITOR FAILS.
EVENT DATE: 111483 REPORT DATE: 121483 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: NUCLEAR RESEARCH CORP.

(NSIC 188308) WHILE IN MODE 1, OPERATING AT FULL POWER, THE NUMBER 4 STEAM GENERATOR BLOWDOWN RADIATION MONITOR FAILED. THIS IS CONTRARY TO TECH SPEC TABLE 3.3-4. PREVIOUS FAILURE OF THIS NATURE WAS REPORTED IN LER 83-35. THE STEAM GENERATOR BLOWDOWN TANK RADIATION MONITOR AND THE STEAM JET AIR EJECTOR RADIATION MONITOR WERE AVAILABLE AND OPERATIONAL DURING THIS TIME. THIS EVENT HAS BEEN ATTRIBUTED TO THE RATEMETER CARD PB-3 ELECTRICAL CONTACTS WITHIN THE SOCKET FOR PB-3 WERE NOT MAKING PROPER CONTACT WITH THE CIRCUIT BOARD. THE RATEMETER IS A MODEL AR2S MADE BY NUCLEAR RESEARCH CORP. THE CONTACTS WITHIN THE SOCKET FOR THE PB-3 WERE READJUSTED TO MAKE PROPER CONTACT WITH THE CIRCUIT BOARD; TO ELIMINATE THIS PROBLEM (AND THE PROBLEM OF TARNISH BUILDUP) OF THE CONTACTS, OPERATIONAL PROCEDURE OP-4674 ATTACHMENT A, WILL BE REVISED TO INSPECT FOR THIS ON ALL PLUG-IN CIRCUIT BOARDS COVERED BY THIS PROCEDURAL ATTACHMENT, AND TO CORRECT, AS APPLICABLE.

[549] YANKEE ROWE DOCKET 50-029 LER 83-043
SAFETY INJECTION ACCUMULATOR RELAY NOT TESTED.
EVENT DATE: 122383 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: AGASTAT RELAY CO.

(NSIC 188663) WHILE IN MODE 1, OPERATING AT FULL POWER, IT WAS DETERMINED THAT A MONTHLY SURVEILLANCE HAD BEEN MISSED FOR THE SI ACCUMULATOR TIME DELAY RELAY ACTUATION VERIFICATION. THIS IS CONTRARY TO TECH SPEC 4.5.1.C.2. THE SURVEILLANCE WAS IMMEDIATELY PERFORMED AND THE SETPOINTS FOUND TO BE WITHIN LIMITS. A SIMILAR EVENT WAS REPORTED BY THE I&C DEPARTMENT AS ABNORMAL OCCURRENCE 75-2. THE ROOT CAUSE OF THIS EVENT WAS PERSONNEL ERROR. THE REQUIRED DUE DATE WAS INADVERTANTLY NOT TRANSFERRED FROM THE I&C MASTER SURVEILLANCE LIST TO THE MONTHLY SURVEILLANCE WORK SHEET. THE SURVEILLANCE WAS PERFORMED SIX DAYS LATE. THE I&C DEPARTMENT SURVEILLANCE TRACKING SYSTEM HAS BEEN REVAMPED TO ELIMINATE A RECURRENCE OF THIS NATURE.

[550] ZION 1 DOCKET 50-295 LER 83-055
DRIFT OF CONTAINMENT PURGE RADIATION RECORDER.
EVENT DATE: 061383 REPORT DATE: 030584 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: LEEDS & NORTHRUP CO.

(NSIC 188903) DURING SEMIANNUAL CALIBRATION OF CONTAINMENT PURGE RADIATION MONITOR 1RT-PR09C, THE MONITOR RECORDER WAS FOUND OUT OF TOLERANCE LOW BY A FACTOR OF 4 ON THE LOW END OF THE SCALE AND BY A FACTOR OF 10 ON THE HIGH END OF THE SCALE. THE ACTUAL MONITOR RESPONSE WAS WITHIN TOLERANCE; HENCE, THE MONITOR CONTROL FUNCTION WOULD HAVE BEEN OPERABLE AT THE PROPER SETPOINT & ACTIVITY LEVEL. NO SAFETY IMPLICATIONS RESULTED. THE CAUSE OF THE DRIFT IN CALIBRATION

COULD NOT BE DETERMINED. THE RECORDER WAS RECALIBRATED TO WITHIN TOLERANCE. A PREVENTIVE MAINTENANCE PROGRAM HAS BEEN IMPLEMENTED FOR RADIATION MONITOR RECORDERS. NO ADDITIONAL CORRECTIVE ACTION IS NECESSARY.

[551] ZION 1 DOCKET 50-295 LER 83-026
DIESEL GENERATOR FAILS.
EVENT DATE: 080183 REPORT DATE: 083083 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES,INTERNAL COMBUSTION
VENDOR: COOPER-BESSEMER CO.

(NSIC 188503) AFTER 2 HOURS OF OPERATION AT 4 MW IN PARALLEL WITH THE SYSTEM WHILE BEING PREPARED FOR HOT WEB DEFLECTION MEASUREMENTS D/G 0 ENGINE TRIPPED. THE REVERSE POWER RELAY OPERATED PROPERLY TO TRIP ITS OUTPUT CIRCUIT BREAKER. FIRST-OUT ANNUNCIATION WAS OVERSPEED TRIP. BOTH ZION UNITS WERE AFFECTED. THE OTHER FOUR D/G'S WERE TESTED AND VERIFIED TO BE OPERABLE. D/G 0 TRIPPED DUE TO FAILURE OF THE NORGREN TYPE 11-002, 30 PSI AIR PRESSURE REGULATOR, COOPER BESSMER PART #2-04V-028-004. A LEAK DEVELOPED AT THE BODY TO BONNET INTERFACE. THIS IS THE FIRST FAILURE OF THIS TYPE. THE REGULATOR WAS REPLACED AND THE D/G WAS TESTED SATISFACTORILY. THE REGULATORS ON THE OTHER D/G'S WILL BE CHANGED.

[552] ZION 1 DOCKET 50-295 LER 83-031
COILS FOR MSIVS NOT TESTED.
EVENT DATE: 081983 REPORT DATE: 091683 NSSS: WE TYPE: PWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVE OPERATORS

(NSIC 188852) WHILE REVIEWING MAIN STEAM ISOLATION VALVE (MSIV) SCHEMATIC DRAWINGS, PLANT PERSONNEL NOTICED THAT CONTINUITY OF BOTH THE KEANE SOLENOID VALVE COIL AND THE HFA OPERATE RELAY COIL COULD NOT BE VERIFIED USING THE EXISTING TEST PROCEDURE PT-10. THIS TEST IS REQUIRED BY ZION TECH SPEC PARAGRAPHS 4.9.4 & 4.9.4.A. MSIV SOLENOID AND HFA COILS WERE VERIFIED OPERABLE BY OHMIC CHECK. THE SOLENOID AND RELAY COIL ARE WIRED IN PARALLEL. BY CHECKING CONTINUITY ACROSS THE PARALLEL COIL CIRCUIT, A FAILURE OF A KEANE SOLENOID VALVE COIL WOULD NOT BE DETECTED. A PROCEDURE CHANGE HAS BEEN INITIATED TO VERIFY CONTINUITY OF BOTH THE KEANE SOLENOID AND HFA COILS SEPARATELY. NO FURTHER ACTION REQUIRED.

[553] ZION 1 DOCKET 50-295 LER 83-052
SNUBBERS FAIL TESTS.
EVENT DATE: 122283 REPORT DATE: 011284 NSSS: WE TYPE: PWR
SYSTEM: OTHER SYSTEMS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: ITT GRINNELL

(NSIC 188682) PER TECH SPEC 4.22.1.A SNUBBER DTRS 1029 FAILED; TEN ADDITIONAL SNUBBERS TESTED SATISFACTORY. PER TECH SPEC 4.22.1.D FOUND THE FOLLOWING SNUBBERS INOPERABLE; (INACCESSIBLE) RCRS 1082, SIRS 1004; (ACCESSIBLE), CCRS 1086, BDRS 1058, RHRS 1117, RHRS 1110. THE SNUBBERS ARE DESIGNED TO FUNCTION DURING A SEISMIC EVENT WHICH DID NOT OCCUR. SIMILAR EVENTS:
50-295/77-8,55,64,69,70,80,92,81-12,46,82-04; 50-304/78-34,120,79-31,47, 83-014. THE HYDRAULIC FLUID LEAKED OUT DUE TO POOR SEAL CONDITION. NEW ETHYLENE PROPYLENE SEALS WERE INSTALLED WHICH SHOULD STOP FUTURE LEAKAGE. THE SNUBBERS WERE TESTED AND REINSTALLED. THE STATION'S OVERHAUL AND PERIODIC INSPECTION SCHEDULE IDENTIFIES AND CORRECTS PROBLEM SNUBBERS. OPEN ITEMS TRACKED UNDER AIR 22-83-34.

[554] ZION 1 DOCKET 50-295 LER 83-053
SIX LEVEL TRANSMITTERS FOUND OUT-OF-TOLERANCE HIGH.
EVENT DATE: 122383 REPORT DATE: 012084 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MAGNETROL, INC.

(NSIC 188399) ON 12/23/83 WITH UNIT ONE IN REFUELING COLD SHUTDOWN, SAFETY INJECTION ACCUMULATOR TANKS A, C, B LEVEL TRANSMITTERS 1LT-950, 951, 952, 953, 956, AND 957 WERE FOUND OUT-OF-TOLERANCE HIGH. THIS DEVIATION CONSTITUTES A VIOLATION OF TECH SPEC 3.8.5.A.1. ACCUMULATOR TANK D LEVEL WAS VERIFIED WITHIN TOLERANCE DURING THE LAST OPERATING CYCLE. REFERENCE PREVIOUS R.O. #50-295/82-24. THE CAUSE APPEARS TO BE REFUELING DEPRESSURIZATION EFFECTS ON THE CAPACITANCE LEVEL PROBES (MAGNETROL #82). DISCUSSION WITH MAGNETROL REVEALED THAT HYSTERESIS MAY OCCUR UPON TANK/PROBE DEPRESSURIZATION. CALIBRATION PROCEDURES WILL BE CHANGED TO REQUIRE "AS FOUND" READINGS PRIOR TO DEPRESSURIZATION. THIS ITEM WILL BE TRACKED BY AIR 22-82-16.

[555] ZION 2 DOCKET 50-304 LER 83-005 REV 1
UPDATE ON ELECTRICAL PENETRATION DECLARED INOPERABLE.
EVENT DATE: 021283 REPORT DATE: 092683 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 188327) ELECTRICAL PENETRATION ZONE 1 LINE PRESSURE DROPPED BELOW 47 PSIG WHEN ITS RUPTURE DISC BLEW. ZONE 1 WAS DECLARED INOPERABLE AND THIS PLACED THE SYSTEM IN A DEGRADED MODE (TECH SPEC 3.9.2.A). LCO WAS NOT EXCEEDED. OTHER ZONES WERE OPERATING SATISFACTORILY. PREVIOUS LERS: 50-304/83-04, 50-295/77-14. THE CAUSE WAS MALFUNCTION OF REGULATOR 2PCV-PP08. WHEN ZONE PRESSURE DECREASED TO BELOW 47 LBS., THE REGULATOR SENSED LOW PRESSURE AND OPENED ABRUPTLY INSTEAD OF A SMOOTH PROPORTIONAL MANNER THEREFORE EXCEEDING THE BLOWOUT DISC DESIGN RUPTURE POINT. THE REGULATOR WAS CALIBRATED, THE RUPTURE DISC REPLACED AND THE ZONE RETURNED TO SERVICE.

[556] ZION 2 DOCKET 50-304 LER 83-044 REV 1
UPDATE ON CONTAINMENT PURIFICATION VALVE FAILURE.
EVENT DATE: 111183 REPORT DATE: 120983 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: VALVES
VENDOR: DARLING VALVE & MFG CO.

(NSIC 188855) DURING SAFEGUARDS TESTING PT-10, VALVE 2MOV-CS0006 FAILED TO STROKE WHEN ACTUATED. THIS FAILURE PLACED UNIT 2 IN A DEGRADED MODE PER TECH SPEC 3.6.1.C. DUE TO THE LENGTH OF TIME REQUIRED TO REPAIR 2MOV-CS0006, THE UNIT WAS BROUGHT TO HOT SHUTDOWN. UPON DISASSEMBLY OF 2MOV-CS0006, THE LIMITORQUE OPERATOR MAIN DRIVE SLEEVE WAS FOUND FAILED. THE LIMITORQUE OPERATOR WAS REBUILT. IN ADDITION, THE VALVE WAS INSPECTED FOR DAMAGE; NONE WAS FOUND. AFTER REPAIRS, 2MOV-CS0006 WAS SUCCESSFULLY TESTED FROM SAFEGUARDS PT-10.

[557] ZION 2 DOCKET 50-304 LER 83-046
TRAIN B OF SAFEGUARDS WOULD NOT RESET FROM TEST.
EVENT DATE: 112983 REPORT DATE: 122983 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188401) TRAIN B OF SAFEGUARDS WOULD NOT RESET FROM TEST AT THE COMPLETION OF TEST PT-10A ON TRAIN B. THE BLUE PERMISSIVE LIGHT FOR "SAFETY INJECTION ACTUATION" DID RESET WHEN THE RESET PUSHBUTTON WAS PUSHED, BUT TRAIN B IN TEST (ANNUN.) DID NOT RESET. AFTER REINITIATING S.I. ON TRAIN B AND FOLLOWING PT-10A RESET PROCEDURE, TRAIN B RETURNED TO NORMAL. THE CAUSE IS UNKNOWN AT THIS TIME.

TEST EQUIPMENT WILL BE USED TO MONITOR POINTS IN THE CIRCUITRY DURING THE NEXT PT-10A. AN UPDATE WILL FOLLOW.

[558] ZION 2 DOCKET 50-304 LER 83-045
ONE TUBE OF COOLING COIL OF RCFC LEAKS.
EVENT DATE: 121383 REPORT DATE: 122183 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: HEAT EXCHANGERS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 188400) DURING A CONTAINMENT INSPECTION TO LOCATE A CONTAINMENT SUMP INPUT OF APPROX. 1 GPM, A PINHOLE LEAK IN ONE TUBE OF THE COOLING COIL OF 2C REACTOR CONTAINMENT FAN COOLER (RCFC) WAS FOUND. THIS EVENT DID NOT VIOLATE ANY TECH SPECS. THE TUBE LEAKAGE APPEARS TO BE CAUSED BY INTERNAL PITTING. THE BANK CONTAINING THE LEAKING TUBE WAS ISOLATED WITH BLIND FLANGES. THE REMAINING UNIT 2 RCFC'S WERE INSPECTED FOR LEAKAGE AND NO OTHER LEAKAGE WAS OBSERVED.

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

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