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Licensee Event Report (LER) Compilation

For month of February 1984

Oak Ridge National Laboratory

Prepared for
U.S. Nuclear Regulatory
Commission

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Abstract

This monthly report contains Licensee Event Report (LER) operational information that was processed into the LER data file of the Nuclear Safety Information Center (NSIC) during the one month period identified on the cover of the document. The LERs, from which this information is derived, are submitted to the Nuclear Regulatory Commission (NRC) by nuclear power plant licensees in accordance with federal regulations. Procedures for LER reporting are described in detail in NRC Regulatory Guide 1.16 and NUREG-0161, *Instructions for Preparation of Data Entry Sheets for Licensee Event Reports*. The LER summaries in this report are arranged alphabetically by facility name and then chronologically by event date for each facility. Component, system, 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 1
 UPDATE ON INADEQUATE FIRE BARRIERS.
 EVENT DATE: 091683 REPORT DATE: 110883 NSSS: BW TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187541) OBSERVATIONS OF FIRE PROTECTION DEFICIENCIES HAVE BEEN LISTED. IT 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. 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 2 DOCKET 50-368 LER 83-046
 TEST OF SECONDARY COOLANT SYSTEM NOT PERFORMED ON TIME.
 EVENT DATE: 070983 REPORT DATE: 112283 NSSS: CE TYPE: PWR
 SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187816) ON 10/27/83, A QUALITY CONTROL (QC) INSPECTOR IDENTIFIED TO RADIOCHEMISTRY PERSONNEL THAT A GROSS ACTIVITY DETERMINATION SURVEILLANCE OF THE SECONDARY COOLANT WAS PERFORMED OUTSIDE THE REQUIREMENTS OF TECH SPEC 4.7.1.4 ON 7/9/83. AT THE TIME, IT WAS BELIEVED THAT THE SURVEILLANCE FREQUENCY HAD FALLEN WITHIN SPECIFICATION; HOWEVER, THE QC INSPECTOR HAS SINCE DETERMINED THAT IT FELL OUTSIDE OF THE 72 HOUR (+ 25%) TIME PERIOD REQUIREMENT BY 3 HOURS AND 50 MINUTES. THE SAMPLE TAKEN, THOUGH NOT TAKEN WITHIN THE CORRECT TIME FRAME, WAS WITHIN SPECIFICATION. STEAM LINE RADIATION MONITORS WITH CONTINUAL INDICATION TO THE CONTROL ROOM WERE OPERABLE. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.B. OTHER (50-368) LER'S WHICH CONCERN MISSED SURVEILLANCE INCLUDE 83-028, 80-010, 79-056, 79-049, 79-041, AND 78-031. THE CAUSE OF THIS OCCURRENCE WAS AN INCORRECT DETERMINATION OF WHEN THE SURVEILLANCE WAS REQUIRED TO BE PERFORMED. THE INDIVIDUAL INVOLVED HAS BEEN COUNSELED. IN ORDER TO PREVENT RECURRENCE, TRAINING FOR RADIOCHEMISTRY PERSONNEL WAS CONDUCTED. THE TRAINING WAS COMPLETED AFTER THIS EVENT OCCURRED BUT BEFORE THE OCCURRENCE WAS ACTUALLY IDENTIFIED.

[3] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-041
 HOT LEG TEMPERATURE INDICATOR READS HIGH.
 EVENT DATE: 083183 REPORT DATE: 100383 NSSS: CE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 186200) ON 8/31/83 WHILE IN MODE 2, CORE PROTECTION CALCULATOR (CPC) CHANNEL 'D' POINT IDENTIFICATION (PID) 008, THE HOT LEG TEMPERATURE INPUT FROM TEMPERATURE INDICATOR INSTRUMENT 2TI-4606-4NB, WAS FOUND TO BE READING HIGH (CONSERVATIVE). CHANNEL 'D' WAS DECLARED INOPERABLE AND THE CHANNEL WAS PLACED IN BYPASS PER TECH SPEC TABLE 3.3-1, ACTION 2. THE OTHER 3 CPC CHANNELS WERE OPERABLE, THUS THE MINIMUM OPERABLE CHANNEL REQUIREMENT WAS MET. THIS OCCURRENCE IS REPORTABLE PER TECH SPEC 6.9.1.9.B. ALTHOUGH PREVIOUS LER'S HAVE BEEN FILED CONCERNING THE CPC'S, NONE ARE SIMILAR TO THIS EVENT. THE ROOT CAUSE OF THE HIGH TEMPERATURE READINGS COULD NOT BE DETERMINED. THE WIRING CONNECTIONS FOR THE INSTRUMENTATION SUPPLYING PID 008 WERE CHECKED AND FOUND TO BE TIGHT. VOLTAGE READINGS WERE HIGH FOR THE OUTPUT OF TEMPERATURE CONVERTER 2TY-4735-4. IN THE

PROCESS OF CHECKING FOR CHARGE BUILDUP ON 2TY-4735-4, THE BUILDUP WAS DISCHARGED. VOLTAGE READINGS FOR THE OUTPUT OF 2TY-4735-4 WERE RECHECKED AND FOUND TO BE NORMAL. TEMPERATURE INDICATIONS ALSO RETURNED TO NORMAL. AN EVALUATION WILL BE PERFORMED TO DETERMINE THE ROOT CAUSE AND CORRECTIVE ACTIONS.

[4] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-045
INADEQUATE FIRE BARRIERS.
EVENT DATE: 091683 REPORT DATE: 101983 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187431) OBSERVATION 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 (50 368) 83-035. 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.

[5] ARKANSAS NUCLEAR 2 DOCKET 50-368 LER 83-047
TEST OF SOURCE RANGE MONITORS NOT PERFORMED ON TIME.
EVENT DATE: 102383 REPORT DATE: 112283 NSSS: CE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187432) ON 10/23/83, WITH THE UNIT IN MODE 6, MAINTENANCE PERSONNEL WERE REMOVING INCORE DETECTORS FROM THE REACTOR VESSEL WHEN IT WAS REALIZED THAT A CHANNEL FUNCTIONAL TEST OF THE SOURCE RANGE NEUTRON FLUX MONITORS HAD NOT OCCURRED WITHIN THE PREVIOUS EIGHT HOURS AS REQUIRED BY TECH SPEC 4.9.2.C. THIS EVENT IS REPORTABLE PER TECH SPEC 6.9.1.9.B. OTHER LER'S CONCERNING MISSED SURVEILLANCES INCLUDE (50-368) 83-046, 83-028, 80-010, 79-056, 79-049, 79-041 AND 78-031. THE CAUSE OF THIS EVENT WAS A FAILURE TO RECOGNIZE THE APPLICABLE SURVEILLANCE REQUIREMENTS. THE PROBLEM WAS ENHANCED BY THE FACT THAT THE PROCEDURE BEING FOLLOWED IN THE REMOVAL OF THE DETECTORS DID NOT SPECIFY THIS SURVEILLANCE REQUIREMENT. CORRECTIVE ACTIONS WERE TO CEASE CORE ALTERATION ACTIVITIES AND TO PERFORM THE CHANNEL FUNCTIONAL TEST OF THE MONITORS. IN ORDER TO PREVENT RECURRENCE OF THIS EVENT, THE PROCEDURE WAS CHANGED TO SPECIFICALLY REQUIRE VERIFICATION OF THE SURVEILLANCE REQUIREMENT PRIOR TO CORE ALTERATIONS.

[6] ARNOLD DOCKET 50-331 LER 83-016 REV 1
UPDATE ON DIESEL GENERATOR FAILURE TO RESET.
EVENT DATE: 071883 REPORT DATE: 112883 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS
VENDOR: AMPHENOL

(NSIC 187855) DURING NORMAL OPERATION, WHILE PERFORMING SURVEILLANCE TESTING, EMERGENCY DIESEL GENERATOR 1G-31 FAILED TO ELECTRICALLY RESET AFTER SUCCESSFUL COMPLETION OF A DIESEL START, RUN AND STOP TEST. PER TECH SPEC 3.5.G.1, A 7-DAY LCO COMMENCED. TECH SPEC 4.5.G.1 EQUIPMENT PROVEN OPERABLE. 1G-31 RETURNED OPERABLE ON 7-19-83. NO PREVIOUS SIMILAR OCCURRENCES. EVENT DISCOVERED WHEN 1G-31 STOP RELAY RESET LIGHT FAILED TO LIGHT AFTER DG SHUTDOWN AND REQUIRED TIME

DELAY. LOOSE AMPHENOL CONNECTOR ON DG SPEED SWITCH WHICH CAUSED PROBLEM WAS
TIGHTENED. ALSO, JACKET COOLANT PRESSURE SWITCHES HAD SWITCH ACTUATOR REALIGNED.
IDENTICAL COMPONENTS ON REDUNDANT DG INSPECTED AND FOUND SATISFACTORY. NO FURTHER
CORRECTIVE ACTION PLANNED.

[7] ARNOLD DOCKET 50-331 LER 83-035
LO-LO REACTOR WATER LEVEL SWITCHES DRIFT.
EVENT DATE: 090683 REPORT DATE: 100683 NSSS: GE TYPE: BWR
SYSTEM: ENGRND SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: YARWAY CORP.

(NSIC 186178) DURING SURVEILLANCE TESTING LI'S 4531 AND 4533 REACTOR WATER LO-LO SWITCHES 3 AND 4 TRIPPED IN THE NONCONSERVATIVE DIRECTION AT 113.2 AND 113.4 INCHES RESPECTIVELY. THESE INSTRUMENTS INITIATE HPCI/RCIC. TECH SPEC 3.2.B LIMIT IS GREATER THAN OR EQUAL TO 119.5 INCHES. REDUNDANT TRIP SYSTEM FOUND WITHIN CALIBRATION. PREVIOUS SIMILAR REPORTS: RO 75-064, 76-001, 76-045, 77-002. CAUSE WAS INSTRUMENT DRIFT. SWITCHES WERE RECALIBRATED AND TESTED SATISFACTORILY PER STP. SUBJECT INSTRUMENT MODEL TO BE OBSERVED FOR FUTURE TRENDS. NAMEPLATE DATA: YARWAY MODEL 4418C.

[8] ARNOLD DOCKET 50-331 LER 83-040
DRYWELL EQUIPMENT DRAIN LINE VALVE FAILS TO CLOSE.
EVENT DATE: 091383 REPORT DATE: 101383 NSSS: GE TYPE: BWR
SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: VALVES
VENDOR: ANCHOR/DARLING VALVE CO.

(NSIC 186115) DURING SURVEILLANCE TESTING, DRYWELL EQUIPMENT DRAIN LINE (CONTAINMENT ISOLATION) VALVE CV-3729 DID NOT CLOSE WHEN GIVEN A MANUAL CLOSURE SIGNAL. AFTER CYCLING THE HANDSWITCH SEVERAL TIMES THE VALVE BEGAN TO OPERATE PROPERLY. REDUNDANT ISOLATION VALVE CV-3728 WAS OPERABLE. OPERABILITY REQUIREMENTS ARE LISTED IN TECH SPEC 3.7.D. ONE PREVIOUS OCCURRENCE CONCERNING CV-3729 (SEE RO 81-024). ISOLATION VALVE CV-3729 NONCLOSURE WAS CAUSED BY THE AIR OPERATOR PISTON ON CV-3729 BEING STUCK. MAINTENANCE LUBRICATED AND CYCLED THE VALVE WITH SATISFACTORY RESULTS. INSTALLATION OF IN-LINE LUBRICATORS ON THE AIR LINE TO THE AIR OPERATORS ON CV-3729 AND SIMILAR VALVES CV-3704, CV-3705, AND CV-3728 IS UNDER INVESTIGATION.

[9] ARNOLD DOCKET 50-331 LER 83-037
ROD BLOCK MONITOR FAILS TO GIVE ROD BLOCK SIGNAL.
EVENT DATE: 091583 REPORT DATE: 101783 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 186179) DURING SURVEILLANCE TEST PROCEDURE RBM CHANNEL "B" COULD NOT GENERATE A ROD BLOCK FROM INOP CONDITION. AS PER TECH SPEC TABLE 3.2.C A 7-DAY LCO WAS ENTERED. REDUNDANT CHANNEL "A" TESTED SATISFACTORILY. FOLLOWING REPAIR OF THIS CONDITION, SYSTEM TROUBLESHOOTING DISCOVERED WIRING ERRORS AFFECTING THE "B" RBM ON 9/28/83. 5 PREVIOUS REPORTABLE OCCURRENCES INVOLVING RBM: 79-028, 79-031, 79-039, 80-036, 80-044. STP PROBLEM CORRECTED BY COMPONENT REPLACEMENT. WIRING PROBLEM CAUSED BY ROD SELECTION MATRIX PIN CONNECTORS CONTAINING WIRING ERROR INHERENT IN A DESIGN DRAWING SUPPLIED BY GENERAL ELECTRIC. THE ERRORS HAVE BEEN CORRECTED. FAILURE MODE OF WIRING ERROR SUCH THAT ROD BLOCK WOULD ALWAYS BE GENERATED.

[11] ARNOLD DOCKET 50-331 LER 83-041
RCIC FAILS TO MANUALLY TRIP.
EVENT DATE: 102883 REPORT DATE: 112883 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: GENERAL ELECTRIC CO.
 SCHUTTE AND KOERING COMPANY

[12] BEAVER VALLEY 1 DOCKET 50-334 LER 83-028 REV 1
UPDATE ON BORON INJECTION VALVE FAILURE TO OPEN.
EVENT DATE: 092683 REPORT DATE: 111883 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: ALLIS CHALMERS

[13] BEAVER VALLEY 1 DOCKET 50-334 LER 83-030 REV 1
UPDATE ON CHARGING HEADER ISOLATION VALVE FAILURE.
EVENT DATE: 100383 REPORT DATE: 111883 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: ALLIS CHALMERS

(NSIC 187809) AT 0045 HOURS, CHARGING HEADER ISOLATION VALVE (MOV-CH-289) FAILED

TO RE-OPEN AFTER BEING STROKED CLOSED FOR OST 1.11.10. NORMAL CHARGING AND LETDOWN WERE SECURED AND EXCESS LETDOWN WAS PLACED INTO SERVICE. AT 0310 HOURS (MOV-CH-310) WAS CLOSED AND DE-ENERGIZED TO SECURE THE EFFECTED PENETRATION. AT 0410 HOURS, THE VALVE WAS RETURNED TO SERVICE AS PER TECH SPEC 3.1.2.2. THE REDUNDANT BORON INJECTION FLOW PATH FROM THE RWST REMAINED OPERABLE. THE MECHANICAL INTERLOCK (WHICH PREVENTS SIMULTANEOUS ENERGIZATION OF BOTH FORWARD AND REVERSE COILS) ON THE VALVE'S LINESTARTER FAILED DUE TO BINDING. THIS PREVENTED FORWARD CONTACTOR TRAVEL CAUSING THE COIL TO OVERHEAT. THE VALVE WAS RETURNED TO SERVICE AFTER THE LINKAGE WAS OILED AND THE COIL WAS REPLACED. A PROCEDURE IS BEING WRITTEN TO INSPECT LINESTARTERS.

[14] BEAVER VALLEY 1 DOCKET 50-334 LER 83-035
BATTERY CHARGER FUSE BLOWS.
EVENT DATE: 102783 REPORT DATE: 112583 NSSS: WE TYPE: PWR
SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: BATTERIES & CHARGERS
VENDOR: LA MARCHE MFG CO.

(NSIC 187810) AT 0850 HOURS, A LOW VOLTAGE ALARM WAS RECEIVED ON THE NO. 1 DC BUS. INDICATED BATTERY VOLTAGE WAS 122 VDC WHILE THE BATTERY CHARGER OUTPUT VOLTAGE WAS NORMAL, WITH ZERO OUTPUT CURRENT. THE BATTERY AND ASSOCIATED CHARGER WERE DECLARED INOPERABLE (TECH SPEC 3.8.2.3). THE REDUNDANT TRAIN REMAINED OPERABLE. THERE HAS BEEN ONE PREVIOUSLY REPORTED FAILURE OF THE NO. 1 BATTERY CHARGER (LER 83-03/03L). THE NO. 1 BATTERY CHARGER FAILED AS A RESULT OF A BLOWN OUTPUT FUSE. THE FUSE WAS REPLACED AND THE CHARGER WAS RETURNED TO SERVICE AT 0925 HOURS. NORMAL BUS VOLTAGE WAS ACHIEVED AT 0945 HOURS. LAMARCHE CHARGER MODEL A-12B.

[15] BIG ROCK POINT DOCKET 50-155 LER 83-005
CONTAINMENT ISOLATION VALVE NOT PROVEN OPERABLE.
EVENT DATE: 071183 REPORT DATE: 081083 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES

(NSIC 184610) DURING CONTROL ROD DRIVE TESTING, ONE OF TWO CONTAINMENT ISOLATION VALVES (CV 4031) FOR THE CLEAN SUMP WAS NOT PROVEN OPERABLE FOLLOWING MAINTENANCE. THE ERROR WAS DISCOVERED ON THE SAME DAY AFTER COLD SHUTDOWN CONDITIONS HAD BEEN RE-ESTABLISHED. REPORTABILITY BASED ON TECH SPEC 6.9.2.B(3). VERBAL DISCUSSION DURING SHIFT TURNOVER LED TO AN INCORRECT ASSUMPTION THAT A "DIRTY SUMP" ISOLATION VALVE WAS NOT OPERABLE AND NEEDED TO BE SECURED WHEN IN REALITY IT SHOULD HAVE BEEN A "CLEAN SUMP" VALVE. THE DIRTY SUMP HAS A VALVE DESIGNATED CV 4103, WHICH MAY HAVE CAUSED CONFUSION. A TRAINING MEMO HAS BEEN ISSUED TO SHIFT PERSONNEL FOR GUIDANCE ON SHIFT TURNOVER.

[16] BIG ROCK POINT DOCKET 50-155 LER 83-006 REV 1
UPDATE ON SNUBBER FAILURE.
EVENT DATE: 072683 REPORT DATE: 111683 NSSS: GE TYPE: BWR
SYSTEM: OTHER ENGRD SAFETY FEATR SYS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: PACIFIC SCIENTIFIC COMPANY

(NSIC 187469) DURING ROUTINE TESTING OF MECHANICAL SNUBBERS IN THE REACTOR DEPRESSURIZING SYSTEM, SNUBBER PS-116 WAS DEEMED INOPERABLE DUE TO FAILURE TO MEET THE DRAG FORCE CRITERIA. THE UNIT IS ONE OF THIRTEEN UNITS IN THE SYSTEM AND THE IMPACT OF FAILURE ON SYSTEM PERFORMANCE IS NOT READILY DETERMINED. ONE PRIOR FAILURE OF A SIMILAR UNIT OCCURRED PER LER 82-009. REPORTABILITY IS BASED ON TECH SPEC 6.9.2.B(2). THE SNUBBER HAS BEEN REPLACED WITH A QUALIFIED SPARE UNIT. THE UNIT WAS RETURNED TO THE VENDOR AND EVALUATION REVEALED THAT DAMAGE DUE TO IMPROPER INSTALLATION MAY HAVE OCCURRED. THE UNIT HAD BEEN INSTALLED IN 1982. TO PRECLUDE RECURRENCE, THE MAINTENANCE PROCEDURE USED DURING INSTALLATION

AND INSPECTION HAS BEEN REVISED TO INCLUDE APPROPRIATE STEPS SPECIFIED IN THE VENDOR'S INSTALLATION MANUAL.

[17] BIG ROCK POINT DOCKET 50-155 LER 83-013
 LIGHTNING DAMAGES INVERTER.
 EVENT DATE: 092183 REPORT DATE: 102083 NSSS: GE TYPE: BWR
 SYSTEM: OTHER ENGRD SAFETY FEATR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: TOPAZ ELECTRONICS

(NSIC 186257) FOLLOWING A LIGHTNING STRIKE AT THE PLANT SITE, OPERATORS OBSERVED A BLOWN FUSE ON THE STATIC INVERTER EQUIPMENT FOR ONE OF TWO CONTAINMENT VACUUM RELIEF LOOPS. THUS THE VENTILATION SUPPLY LOOP WAS INOPERABLE AND THE FUSE WAS IMMEDIATELY REPLACED. THE REDUNDANT LOOP WAS NOT AFFECTED AND REMAINED OPERABLE. PRIOR FUSE BLOWING REPORTED IN LER 78-40 AND LER 79-15 BUT NOT RELATED TO LIGHTNING. FOLLOWING THE LIGHTNING STRIKE, INVESTIGATION REVEALED DAMAGE TO PLANT TELEPHONE SYSTEMS, SECURITY SYSTEM EQUIPMENT, DOMESTIC WATER CONTROLS, AS WELL AS THE BLOWN FUSE DESCRIBED ABOVE. SAFETY RELATED SYSTEMS IN THE PLANT HAVE NOT BEEN PRONE TO PRIOR LIGHTNING DAMAGE. REPORTABILITY BASED ON TECH SPEC 6.9.2.B(2).

[18] BIG ROCK POINT DOCKET 50-155 LER 83-014
 ONE REACTOR DEPRESSURIZATION LOOP FAILS.
 EVENT DATE: 100483 REPORT DATE: 110183 NSSS: GE TYPE: BWR
 SYSTEM: OTHER ENGRD SAFETY FEATR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: LAMBDA ELECTRONICS

(NSIC 186784) DURING NORMAL POWER OPERATION, ONE OF FOUR REACTOR DEPRESSURIZATION LOOPS WAS INOPERABLE DUE TO AN ELECTRONIC FAILURE. REDUNDANT DEPRESSURIZING LOOPS WERE OPERABLE AND THE DEFECTIVE LOOP WAS RESTORED TO OPERABLE STATUS WITHIN FOUR HOURS. THE DEFECT WAS ALARMED IN THE CONTROL ROOM AT THE TIME OF FAILURE. REPORTABILITY BASED ON TECH SPEC 6.9.2.B(2). FOLLOWING AN AUTOMATIC TEST CIRCUIT ALARM, INVESTIGATION REVEALED A DEFECTIVE 15 VOLT D.C. POWER SUPPLY, PS-3 IN ACTUATION CHANNEL #4. THE POWER SUPPLY WAS REPLACED AND OPERABILITY ESTABLISHED WITHIN THE FOUR HOUR PROVISION OF TECH SPEC 11.3.1.5.1.A. PRIOR POWER SUPPLY FAILURE REPORTED IN LER 77-17 DATED 5/16/77.

[19] BIG ROCK POINT DOCKET 50-155 LER 83-015
 EMERGENCY GENERATOR OUTPUT VOLTAGE FOUND TO BE ZERO.
 EVENT DATE: 110783 REPORT DATE: 112983 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: GENERATORS
 VENDOR: ELECTRIC MACHINERY MFG. CO.

(NSIC 187715) DURING A ROUTINE STARTING TEST OF THE EMERGENCY DIESEL GENERATOR, THE GENERATOR OUTPUT VOLTAGE REMAINED AT ZERO VOLTS. ALL OTHER STATION POWER WAS NORMAL AND NO HAZARD TO THE PUBLIC OCCURRED. THE UNIT WAS REPAIRED AND RESTORED TO SERVICE IN ABOUT 4 HOURS. PRIOR GENERATOR FAILURES REPORTED IN LER 80-36 AND 80-47 FROM OTHER CAUSES. REPORTABILITY BASED ON TECH SPEC 6.9.2B(2). INVESTIGATION OF THE VOLTAGE REGULATOR CONTROL CIRCUITRY REVEALED AN OPEN CIRCUIT IN A VARIABLE RESISTOR. THE WIPER ARM WAS EXERCISED TO CLEAN THE UNIT AND OPERATION WAS RESTORED. AS A PREVENTIVE MEASURE, A NEW RESISTOR WILL BE INSTALLED AND PERIODIC INSPECTION AND/OR CLEANING OF THE VARIABLE RESISTOR WILL BE SCHEDULED TO PRECLUDE RECURRENCE.

[20] BROWNS FERRY 1 DOCKET 50-259 LER 81-037 REV 3
 UPDATE ON PINHOLE IN REACTOR WATER CLEANUP PIPE.
 EVENT DATE: 062981 REPORT DATE: 101483 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

VENDOR: VELAN VALVE CORP.

(NSIC 187466) DURING REFUELING OUTAGE, REACTOR WATER CLEANUP SYSTEM INBOARD PRIMARY CONTAINMENT ISOLATION VALVE 69-1 WAS ULTRASONICALLY INSPECTED ON 6/21/81. AN INDICATION WAS OBSERVED ON THE VESSEL SIDE OF THE VALVE WELD. (TECH SPEC 3.6.G) A SUBSEQUENT RADIOGRAPHY SHOWED NO INDICATIONS. ON 6/24/81 A UT INSPECTION BY A LEVEL II INSPECTOR CONFIRMED AN INDICATION. PREVIOUS SIMILAR EVENT: BFRO-50-259/80004. FOR CAUSE SEE ATTACHED METALLURGICAL REPORT. THE VELAN MODEL 900 LB., 6 INCH. (SS) STAINLESS STEEL GATE VALVE, RATED AT 1146 PSI AT 500F (NORMAL OPERATING PRESSURE 960 PSI) WAS REPLACED. THE INDICATION IS ACCEPTABLE UNDER THE SUMMER 1978 ADDENDA TO ASME SECTION XI CODE. ALL SIMILAR PIPING IS NOW SCHEDULED TO BE INSPECTED PER IE BULLETIN 83-02.

[21] BROWNS FERRY 1 DOCKET 50-259 LER 83-028 REV 1
UPDATE ON FAILURE OF BOTH STACK GAS SAMPLE PUMPS.
EVENT DATE: 060283 REPORT DATE: 111583 NSSS: GE TYPE: BWR
SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: PUMPS
VENDOR: GAST MANUFACTURING CORP.

(NSIC 187770) DURING NORMAL OPERATION OF UNIT 3, BOTH STACK GAS RADIATION MONITORS (RM 90-147, RM 90-148) BECAME INOPERABLE DUE TO SAMPLE PUMP FAILURE. A GRAB SAMPLE PROGRAM FOR THE STACK EFFLUENT (SI 4.8.B.1.A.2) WAS INITIATED AS REQUIRED BY TECH SPEC 3.8.B.8. THE OFFGAS POST-TREATMENT MONITORS (3-RM-90-265/266) WERE OPERABLE AND GRAB SAMPLE ANALYSES INDICATED NO SIGNIFICANT INCREASE IN ACTIVITY. THE GLASS OIL FILTER BOWL ON SAMPLE PUMP "A" WAS BROKEN. THE BROKEN FILTER BOWL WAS REPLACED. INVESTIGATION DETERMINED THAT SAMPLE PUMP "B" FAILED DUE TO BUILDUP OF DIRT AND GRIT IN THE GAST MFG. (MODEL 2065-V2) ROTARY VACUUM PUMP, WHICH CAUSED THE MOTOR TO TRIP OUT. A REBUILT PUMP WAS INSTALLED. THE FAILURE OF BOTH PUMPS "A" AND "B" WAS A RANDOM OCCURRENCE.

[22] BROWNS FERRY 1 DOCKET 50-259 LER 83-034
STANDBY GAS TREATMENT SYSTEM TRAIN INOPERABLE.
EVENT DATE: 061383 REPORT DATE: 071283 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 184087) WHILE PERFORMING S.I. 4.7.B-2 (STANDBY GAS TREATMENT SYSTEM HUMIDITY CONTROL CAPACITY TEST), TRAIN "B" WAS FOUND INOPERABLE DUE TO HEATERS BEING UNAVAILABLE IN AUTOMATIC. (TECH SPEC 3.7.B.3) TRAINS "A" AND "C" WERE DETERMINED TO BE OPERABLE. THE SBTG SYSTEM IS COMMON TO ALL THREE UNITS. NO EVENT OCCURRED WHICH REQUIRED THE SBTG SYSTEM. TECH SPEC 3.7.B.3 PERMITS OPERATION FOR 7 DAYS WITH ONE TRAIN INOPERABLE. TRAIN "B" WAS INOPERABLE FOR 22 HOURS. INCORRECT DAMPER ADJUSTMENT RESULTED IN FLOW SWITCHES NOT BEING ACTUATED. SUPPLEMENTARY FLOW MEASUREMENTS WERE TAKEN, THE DAMPER WAS READJUSTED, AND ASSOCIATED FLOW INSTRUMENTATION WERE REPAIRED AND CALIBRATED. FOR RECURRENCE CONTROL SEE LER 259/83035.

[23] BROWNS FERRY 1 DOCKET 50-259 LER 83-035
TWO STANDBY GAS TREATMENT TRAINS' OPERABILITY QUESTIONED.
EVENT DATE: 061483 REPORT DATE: 071183 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: COMPONENT CODE NOT APPLICABLE
VENDOR: FISCHER & PORTER CO.

(NSIC 184088) WHILE INVESTIGATING LER 259/83034 IT WAS DISCOVERED THAT A AND C STANDBY GAS TREATMENT (SBGT) TRAIN FLOWS WERE ADJUSTED USING FAULTY INSTRUMENT READINGS. THUS OPERABILITY OF BOTH TRAINS WAS IN QUESTION FROM 2400 HOURS ON 6/13 TO 1130 HOURS ON 6/14/83. A 6 HOUR LCO HAD BEEN ENTERED AT 2330 HOURS ON 6/13 DUE TO THE INOPERABILITY OF B TRAIN. SBTG OPERATION WAS NOT REQUIRED BY PLANT CONDITIONS DURING THE EVENT. FT-65-50 (FISHER PORTER MODEL 10B 2494-B D/P

TRANSMITTER) HAD A ZERO DRIFT AND FM-65-71 (A FISHER PORTER MODEL 50ES3000 SQUARE ROOT EXTRACTOR) HAD COMPONENT FAILURE RESULTING IN NONLINEAR OUTPUT. BOTH WERE REPAIRED, CALIBRATED, AND RETURNED TO SERVICE. SBT FLOWS WERE READJUSTED USING TEST INSTRUMENTS. PROCEDURES ARE BEING REVISED TO PRECLUDE THE USE OF FI-65-50 AND FI-65-71 AS SUFFICIENT INDICATORS OF SBT FLOW TO MAKE ANY MANUAL DAMPER (FLOW) ADJUSTMENTS. PROCEDURE REVISIONS WILL HAVE BEEN COMPLETED BY 8/12/83.

[24] BROWNS FERRY 1 DOCKET 50-259 LER 83-064
 STACK GAS SAMPLE PUMPS TRIP ON OVERCURRENT.
 EVENT DATE: 102983 REPORT DATE: 112583 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: MOTORS
 VENDOR: RELIANCE ELECTRIC COMPANY

(NSIC 187772) 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 WINDINGS, BEARINGS, AND CAPACITORS WERE BAD. BOTH PUMPS WERE GOOD. AFTER SECOND EVENT MOTOR A AND FUSES WERE REPLACED AND MOTORS A AND B OVERLOAD HEATER SIZES WERE INCREASED. FOLLOW-UP REPORT WILL BE ISSUED BY 1/15/84 AFTER FUSE AND MOTOR EVALUATION.

[25] BROWNS FERRY 1 DOCKET 50-259 LER 83-063
 STANDBY GAS TREATMENT TRAIN FAILS ACCEPTANCE CRITERIA.
 EVENT DATE: 110283 REPORT DATE: 120183 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: FILTERS
 VENDOR: MSA INTERNATIONAL

(NSIC 187402) DURING REFUELING, WHILE PERFORMING SI 4.7.B-3 THE FLOW DISTRIBUTION THROUGH THE "B" STANDBY GAS TREATMENT (SBGT) TRAIN FAILED ACCEPTANCE CRITERIA (TECH SPEC 4.7.B.1.C), WHICH REQUIRES FLOW DISTRIBUTION TO BE UNIFORM WITHIN 20-PERCENT ACROSS HEPA AND CHARCOAL FILTERS. SBT SYSTEM IS COMMON TO ALL THREE UNITS. "B" TRAIN WAS OUT-OF-SERVICE FOR APPROXIMATELY 12 HOURS. TECH SPEC 3.7.B.3 PERMITS OPERATION FOR SEVEN DAYS WITH ONE SBT TRAIN INOPERABLE. UNEVEN FLOW DISTRIBUTION WAS CAUSED BY AN ACCUMULATION OF SAND (USED IN TORUS OUTAGE) IN THE MOISTURE SEPARATOR. MOISTURE SEPARATOR (MSA TYPE T MODEL 2552) WAS REPAIRED, AND ROUGHING FILTER (MSA DSK-1743-1221) WAS REPLACED. "B" SBT TRAIN WAS SUCCESSFULLY TESTED PER SI 4.7.B.3. SBT SYSTEM IS TESTED AFTER EACH TORUS MODIFICATION OUTAGE TO ENSURE FLOW REQUIREMENTS CAN BE MET.

[26] BROWNS FERRY 1 DOCKET 50-259 LER 83-066
 REFUELING PLATFORM POSITION INTERLOCK FAILS.
 EVENT DATE: 111283 REPORT DATE: 120883 NSSS: GE TYPE: BWR
 SYSTEM: FUEL HANDLING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187773) DURING REFUEL OUTAGE, WHILE PERFORMING SI 4.10.A.1, THE INTERLOCK THAT PREVENTS BRIDGE TRAVEL OVER THE CORE WITH 1 ROD WITHDRAWN AND FUEL GRAPPLE EXTENDED FAILED TO OPERATE. THIS RESULTED IN A LOSS OF ROD BLOCK FUNCTION WITH THE PLATFORM OVER THE CORE (TECH SPEC 3.10.A.1). THERE ARE NO REDUNDANT SYSTEMS. THE LEVER ARM ON LIMIT SWITCH #1 (GE PART # CR 115GW307) WAS FOUND TO BE IMPROPERLY ADJUSTED. THE CAUSE IS UNDETERMINED. THE LEVER ARM WAS ADJUSTED AND SI 4.10.A.1 WAS SUCCESSFULLY COMPLETED. RECURRENCE CONTROL IS UNDER STUDY AND DETAILS WILL BE PROVIDED IN A FOLLOW-UP REPORT BY APRIL 1, 1984.

SCRAM DISCHARGE INSTRUMENT VOLUME (SDIV) CHANNEL B FIRST HAVING BEEN FUNCTIONALLY TESTED (TECH SPEC 4.1.C). RPS CHANNEL A HAD BEEN TRIPPED TO COMPLY WITH TECH SPEC 3.1.A BECAUSE 2-LT-85-45A (SDIV HIGH WATER LEVEL INSTRUMENTATION) WAS DECLARED INOPERABLE. ALTHOUGH NOT FUNCTIONALLY TESTED, SDIV CHANNEL B WAS FULLY OPERABLE. BEST CORRECTIVE ACTION TO MEET TECH SPEC 3.1.A WAS THE TRIPPING OF RPS CHANNEL A. HOWEVER, IN TRIPPING CHANNEL A, THE REQUIREMENT TO FIRST TEST CHANNEL B OF SDIV WAS OVERLOOKED. SDIV CHANNEL B WAS FULLY OPERABLE AS EVIDENCED BY REVIEW OF UNIT SCRAM ON 10/7/83 AND SI 4.1.A-8 PERFORMANCE ON 10/18/83. ALL RESPONSIBLE PERSONNEL HAVE BEEN MADE MORE AWARE OF TECH SPEC CRITERIA FOR REDUNDANT INSTRUMENT CHANNELS.

[31] BROWNS FERRY 2 DOCKET 50-260 LER 83-068
RHR LOOP FLOW RECORDER FAILS.
EVENT DATE: 102183 REPORT DATE: 111883 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187084) DURING NORMAL OPERATION ON UNIT 2, THE OPERATOR OBSERVED RESIDUAL HEAT REMOVAL (RHR) LOOP II FLOW INSTRUMENTATION PEGGED UPSCALE. A 24 HOUR LCO WAS ENTERED (TECH SPEC 3.5.B.4). POWER WAS REMOVED FROM THE FLOW RECORDER (FR-74-64) WHICH HAD SHORTED. THIS RETURNED FI-74-64 TO SERVICE IN LESS THAN 24 HOURS. LOOP I RHR WAS FULLY OPERABLE. FI-74-64 AND FR-74-64 INDICATE AND RECORD RHR LOOP II SYSTEM TOTAL FLOW, RESPECTIVELY. THE GE TYPE 531 RECORDER (FR-74-64) HAD AN INTERNAL SHORT WHICH DROVE FR-74-64 AND FI-74-64 UPSCALE AND THEN BLEW A USE. POWER WAS REMOVED FROM THE RECORDER AND THE FUSE WAS REPLACED RESTORING FI-74-64 TO SERVICE. FR-74-64 WAS THEN REPLACED. THIS IS CONSIDERED A RANDOM EVENT AND NO FURTHER RECURRENCE CONTROL IS REQUIRED.

[32] BROWNS FERRY 2 DOCKET 50-260 LER 83-067
RHR FLOW INSTRUMENTATION READS UPSCALE.
EVENT DATE: 102983 REPORT DATE: 112583 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187403) DURING NORMAL OPERATION ON UNIT 2, THE OPERATOR OBSERVED RHR LOOP II FLOW INSTRUMENTATION READING UPSCALE. A 24 HOUR L.C.O. WAS ENTERED. TECH SPEC 3.5.B.4 REQUIRES 2 RHR LOOPS TO BE FULLY OPERATIONAL. BOTH FI-74-64 AND FR-74-64, WHICH INDICATE AND RECORD RHR LOOP II SYSTEM TOTAL FLOW, RESPECTIVELY, WERE RETURNED TO SERVICE IN LESS THAN 24 HOURS. LOOP I RHR WAS FULLY OPERABLE. THE PROBLEM WAS CAUSED BY A SHORT IN THE G.E. TYPE 531 RECORDER (FR-74-64) WHICH DROVE BOTH INDICATOR AND RECORDER UPSCALE. THIS AFFECTED RHR LOOP II OPERABILITY. THE RECORDER WAS REPAIRED AND THE LOOP WAS RETURNED TO SERVICE IN LESS THAN 24 HOURS. THIS IS CONSIDERED A RANDOM EVENT AND NO FURTHER RECURRENCE CONTROL IS REQUIRED.

[33] BROWNS FERRY 2 DOCKET 50-260 LER 83-066
HYDROGEN ANALYZER SAMPLE LINE BLOCKED TWICE.
EVENT DATE: 103183 REPORT DATE: 112583 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: HAYES REPUBLIC CO.

(NSIC 187722) DURING NORMAL OPERATION ON UNIT 2 THE OPERATOR OBSERVED THE LOW FLOW ALARM IN AN H2 MONITOR B (H2AN-76-104). A 30 DAY LCO WAS ENTERED PER TECH SPEC 3.2.F. THIS OCCURRED TWICE ON 10/31/83 AT 0153 AND 0900. TECH SPEC 3.7.H-1 REQUIRES TWO INDEPENDENT GAS ANALYZERS FOR MONITORING THE DRYWELL AND TORUS TO BE OPERABLE WHEN NOT IN COLD SHUTDOWN. IN BOTH CASES H2 MONITOR A (H2AN-76-94) WAS FULLY OPERABLE. IN BOTH CASES THE LOW FLOW ALARM WAS RECEIVED DUE TO MOISTURE COLLECTING IN THE SAMPLE LINES. IN BOTH CASES THE HAYES REPUBLIC (MODEL

(NSIC 187404) DURING NORMAL OPERATION, WHILE PERFORMING SI 4.7.B-4, THE DOWNSTREAM HEPA FILTERS IN THE "C" STANDBY GAS TREATMENT (SBGT) TRAIN MEASURED 98-PERCENT DOP REMOVAL. TECH SPEC 3.7.B.2 REQUIRES HEPA FILTERS TO BE CAPABLE OF GREATER THAN OR EQUAL TO 99-PERCENT DOP REMOVAL. THE SBGT SYSTEM IS COMMON TO ALL 3 UNITS. THE TRAIN WAS OUT-OF-SERVICE FOR APPROXIMATELY 24 HOURS. REDUNDANT SBGT TRAINS "A" AND "B" WERE OPERABLE. TECH SPEC 3.2.B.3 PERMITS OPERATION FOR SEVEN DAYS WITH ONE SBGT TRAIN INOPERABLE. THE FAILURE OF THE DOWNSTREAM HEPA FILTERS (MSA ASK 1743-1217) WAS CAUSED BY DEGRADATION AND WEAR OF THE FILTERS THROUGH NORMAL USE. THE HEPA FILTERS WERE REPLACED AND THE "C" SBGT TRAIN WAS SATISFACTORILY TESTED AND RETURNED TO SERVICE. THIS WAS A RANDOM EVENT AND NO RECURRENCE CONTROL IS REQUIRED.

(NSIC 187405) DURING NORMAL OPERATION ON UNIT 2, WHILE PERFORMING SI 4.2.B-7 (REACTOR LOW PRESSURE) PRESSURE SWITCH, 2-PS-3-74A SWITCH 1 HAD AN AS-FOUND SETPOINT OF 214.43 PSIG. TECH SPEC TABLE 3.2.B TRIP LEVEL SETTING IS 230 PLUS OR MINUS 15 PSIG. PRESSURE AT THIS VALUE CLOSES THE RECIRCULATION DISCHARGE VALVES. A REDUNDANT SWITCH WAS AVAILABLE AND OPERABLE. PRESSURE SWITCH, 2-PS-3-74 SWITCH 1 CALIBRATION HAD DRIFTED. THE BARKSDALE MODEL B2T-M12SS PRESSURE SWITCH WAS RECALIBRATED. FUNCTIONALLY TESTED, AND RETURNED TO SERVICE.

(NSIC 187406) DURING UNIT 2 SCRAM, THE HPCI SYSTEM WAS INITIATED BUT IMMEDIATELY BECAME INOPERABLE DUE TO SYSTEM ISOLATION CAUSED BY A BLOWN TURBINE EXHAUST RUPTURE DISC. (TECH SPEC 3.5.E.2). TECH SPEC 3.5.E.2 PERMITS OPERATION FOR SEVEN DAYS WITH HPCI INOPERABLE. REDUNDANT SYSTEMS WERE AVAILABLE AND OPERABLE. HPCI WAS INOPERABLE FOR APPROXIMATELY 13 HOURS. THE HPCI WAS MADE INOPERABLE DUE TO A RUPTURED TURBINE EXHAUST RUPTURE DISC, PIKE MODEL 16-CPV-CBT. THE DISC WAS REPLACED AND HPCI WAS TESTED SATISFACTORILY. FURTHER INVESTIGATION WILL BE CONDUCTED TO DETERMINE THE CAUSE OF THE FAILURE AND FOLLOWUP REPORT WRITTEN.

[37] BROWNS FERRY 2 DOCKET 50-260 LER 83-074
HPCI RUPTURE DISC FAILS.
EVENT DATE: 111083 REPORT DATE: 112383 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: FIKE METAL PRODUCTS CORP.

(NSIC 187774) DURING UNIT 2 SCRAM, THE HPCI SYSTEM WAS INITIATED BUT IMMEDIATELY BECAME INOPERABLE DUE TO SYSTEM ISOLATION CAUSED BY A BLOWN TURBINE EXHAUST RUPTURE DISC. (TECH SPEC 3.5.E.2). TECH SPEC 3.5.E.2 PERMITS OPERATION FOR SEVEN DAYS WITH HPCI INOPERABLE. REDUNDANT SYSTEMS WERE AVAILABLE AND OPERABLE. HPCI WAS INOPERABLE FOR APPROXIMATELY 13 HOURS. THE HPCI WAS MADE INOPERABLE DUE TO A RUPTURED TURBINE EXHAUST RUPTURE DISC, FIKE MODEL 16-CPV-CBT. THE DISC WAS REPLACED AND HPCI WAS TESTED SATISFACTORILY. FURTHER INVESTIGATION WILL BE CONDUCTED TO DETERMINE THE CAUSE OF THE FAILURE AND A FOLLOWUP REPORT WILL BE WRITTEN.

[38] BROWNS FERRY 2 DOCKET 50-260 LER 83-073
CORE OPERATING LIMIT EXCEEDED.
EVENT DATE: 111283 REPORT DATE: 120883 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187880) DURING STARTUP FOLLOWING REACTOR SCRAM, R FACTOR (PERCENT POWER/CORE MAXIMUM FRACTION LIMITING POWER DENSITY) WAS .967 WHICH WAS LESS THAN R SETPOINT OF 1.0. TECH SPEC 2.1.A.1.A AND C REQUIRES R TO BE GREATER THAN R SETPOINT. R FACTOR WAS OUT-OF-LIMITS FOR 57 MINUTES. THE APRM SCRAM VALUE (CALCULATED) WAS NOT EXCEEDED. THE 120-PERCENT SCRAM CLAMP WAS OPERABLE. THIS EVENT WAS CAUSED BY A XENON TRANSIENT DUE TO A REACTOR SCRAM AND THE PULLING OF RODS TO THE PRESCRAM PATTERN. RODS WERE INSERTED TO BRING R BACK INTO LIMITS. TECH SPEC REVISIONS HAVE BEEN SUBMITTED FOR UNIT 2 (SIMILAR TO PRESENT UNIT 1 TECH SPEC) TO ALLOW SIX HOURS FOR CORRECTING R.

[39] BROWNS FERRY 2 DOCKET 50-260 LER 83-075
CORE OPERATING LIMIT EXCEEDED.
EVENT DATE: 111683 REPORT DATE: 121383 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187830) DURING STARTUP FOLLOWING REACTOR SCRAM, R FACTOR (PERCENT POWER/CORE MAXIMUM FRACTION LIMITING POWER DENSITY) WAS .959 WHICH WAS LESS THAN R SETPOINT OF 1.0. TECH SPEC 2.1.A.1.A AND C REQUIRE R TO BE GREATER THAN R SETPOINT. R FACTOR WAS OUT-OF-LIMITS FOR 15 MINUTES. THE APRM SCRAM VALUE (CALCULATED) WAS NOT EXCEEDED. THE 120-PERCENT SCRAM CLAMP WAS OPERABLE. THIS EVENT WAS CAUSED BY A XENON TRANSIENT DUE TO A REACTOR SCRAM AND THE PULLING OF RODS TO THE PRESCRAM PATTERN. RODS WERE INSERTED TO BRING R BACK INTO LIMITS. TECH SPEC REVISIONS HAVE BEEN SUBMITTED FOR UNIT 2 (SIMILAR TO PRESENT UNIT 1 TECH SPECS) TO ALLOW SIX HOURS FOR CORRECTING R.

[40] BROWNS FERRY 3 DOCKET 50-296 LER 83-018 REV 1
UPDATE ON FAILURE OF SCRAM DISCHARGE VOLUME LEVEL SWITCH.
EVENT DATE: 022883 REPORT DATE: 120883 NSSS: GE TYPE: BWR
SYSTEM: OTHR INST SYS' NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ROBERTSHAW CONTROLS COMPANY

(NSIC 187844) DURING NORMAL OPERATION, WHILE PERFORMING SI 4.1.A-8 ON UNIT 3, SCRAM DISCHARGE VOLUME (SDV) "NOT DRAINED" SWITCH, 3-LS-85-45F (3-GAL) FAILED TO OPERATE. IE BULLETIN NO. 80-14 DEGRADATION OF BWR SCRAM DISCHARGE VOLUME CAPABILITY, REQUIRES THE INOPERABILITY OF SDV SWITCHES TO BE REPORTED TO NRC. REDUNDANT SWITCHES AT OTHER LEVELS WERE AVAILABLE AND OPERABLE. THE ROBERTSHAW MODEL SL-305-EI-X LEVEL SWITCH WILL BE REPLACED DURING THE NEXT OUTAGE. THE CAUSE OF THE FAILURE WILL NOT BE DETERMINED BECAUSE THE SWITCH WILL BE REPLACED WITH A FLUID COMPONENTS, INC., LEVEL CONTROLLER (ECN P0392) DURING THE UNIT 3 CYCLE 5 OUTAGE.

(NSIC 184225) DURING AN ONGOING UNIT REFUELING OUTAGE IT WAS DISCOVERED THAT IRM A WAS SHOWING INSTRUMENT UPSCALE INDICATION. AT THE TIME OF THIS DISCOVERY IRM C WAS ALREADY INOPERABLE, THEREBY RESULTING IN LESS THAN MINIMUM REQUIRED OPERABLE IRM CHANNELS. IRM A UPSCALE INDICATIONS RESULTED FROM MOISTURE ACCUMULATION IN THE MONITOR DETECTOR CABLE UNDERVESSEL CONNECTOR WHICH CAUSED THE CONNECTOR TO BECOME DEFECTIVE. THE CONNECTOR WAS REPLACED AND IRM A, PART NO. 194X672G8, WAS FUNCTIONALLY TESTED AND RETURNED TO SERVICE. IRM C WILL BE REPAIRED AND RETURNED TO SERVICE FOLLOWING THE RECEIPT OF NEEDED REPLACEMENT PARTS.

[45] BRUNSWICK 1 DOCKET 50-325 LER 83-028
CORE SPRAY PUMP TIME DELAY RELAYS' SETPOINTS DRIFT.
EVENT DATE: 070983 REPORT DATE: 080883 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: AGASTAT RELAY CO.

(NSIC 184623) DURING THE PERFORMANCE OF DIESEL GENERATOR ACTUAL LOADING TEST, PT-12.1.1, IT WAS DISCOVERED THAT ECCS ACTUATION INSTRUMENT TIME DELAY RELAY OF 1A CORE SPRAY PUMP 1-E21-K16A, ACTUATED AT 13.92 SECONDS VERSUS THE SPECIFIED ACTUATION TIME OF 14-15 SECONDS. AT THE TIME OF THIS EVENT UNIT NO. 1 WAS IN A REFUELING OUTAGE AND UNIT NO. 2 WAS IN POWER OPERATION. TECH SPECS 3.3.3, 3.5.3.1, 6.9.1.9A. THIS EVENT OCCURRED BECAUSE K16A, MODEL NO. 70120PC, AND THE PERMISSIVE RELAYS TO IT, STR/1A-1 AND 1A-2, BOTH MODEL NO. 7014PD, WERE ACTUATING AT THE LOWER END OF THEIR ALLOWABLE SETPOINT TOLERANCES, ATTRIBUTED TO INSTRUMENT SETPOINT DRIFT. THE RELAYS WERE CALIBRATED AND K16A WAS LEFT ACTUATING AT 14.95 SECONDS. THIS IS CONSIDERED AN ISOLATED EVENT; THEREFORE, FURTHER ACTION IS NOT CONSIDERED NECESSARY.

[46] BRUNSWICK 1 DOCKET 50-325 LER 83-035 REV 1
UPDATE ON FAILURE OF MAIN STEAM LINE RADIATION MONITOR.
EVENT DATE: 080283 REPORT DATE: 111183 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187525) DURING A UNIT REACTOR STARTUP, PERFORMANCE OF HIGH STEAM LINE RADIATION CHANNEL FUNCTIONAL TEST, PT-01.1.12PC, REVEALED THAT MAIN STEAM LINE RADIATION MONITOR 1-D12-RM-K603D WAS ACTUATING AT 4.58 (VERSUS THE SPECIFIED REQUIREMENT OF $< OR = 3.5$) X FULL POWER BACKGROUND. THE EVENT IS ATTRIBUTED TO PROBLEMS WITH THE MONITOR INSTRUMENT DRAWER. THE K603D INSTRUMENT DRAWER WAS REPLACED AND CALIBRATED, AND K603D, MODEL NO. 238X660G3, WAS RETURNED TO SERVICE. THE ORIGINAL K603D INSTRUMENT DRAWER WAS SUBSEQUENTLY USED AS A SOURCE OF NEEDED SPARE PARTS TO REPAIR OTHER MONITOR INSTRUMENT DRAWERS; THEREFORE, IT IS IMPOSSIBLE TO DETERMINE THE CAUSE OF THE EVENT AND FURTHER INVESTIGATIVE ACTION IS NOT PLANNED.

[47] BRUNSWICK 1 DOCKET 50-325 FEB 83-041 REV 1
UPDATE ON CONTROL ROD DRIVE COUPLING FAILURE.
EVENT DATE: 082083 REPORT DATE: 120783 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL ROD DRIVE MECHANISMS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187853) WHILE ATTEMPTING TO RECOUPLE THE DRIVE MECHANISM OF CONTROL ROD 38-19, FOLLOWING CORRECTIVE MAINTENANCE ON THE MECHANISM HOUSING FLANGE, IT WAS DETERMINED THAT THE ROD WOULD NOT RECOUPLE TO ITS DRIVE MECHANISM. PER TECH SPECS, CONTROL ROD 38-19 WAS THEN FULLY INSERTED AND ITS DIRECTIONAL CONTROL VALVES WERE ELECTRICALLY DISARMED. AT THE TIME OF THIS EVENT, THE UNIT WAS IN COLD SHUTDOWN. TECH SPECS 3.1.3.6, 6.9.1.9B. THE ROD WOULD NOT RECOUPLE DUE TO THE D RING LOCK PLUG'S FAILURE TO RETURN TO PROPER POSITION, WHICH IS FELT TO BE CAUSED BY CRUD BUILDUP OR MECHANICAL JAMMING. IN ACCORDANCE WITH SP-83-079, THE

"D RING LOCK PLUG ASSEMBLY" WAS EXERCISED AND FREED. A REBUILT CRDM WAS INSTALLED, THE ROD WAS RECOUPLED, AND THE CRD WAS TESTED AND DECLARED OPERATIONAL. IN REGARD TO THIS EVENT, NO FURTHER ACTION IS PLANNED.

[48] BRUNSWICK 1 DOCKET 50-325 LER 83-047
CONTROL ROD DRIVE ACCUMULATOR PRESSURE LOW.
EVENT DATE: 092583 REPORT DATE: 101883 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVES
VENDOR: GENERAL ELECTRIC CO.

(NSIC 186859) DURING UNIT POWER OPERATION, THE CONTROL ROD DRIVE (CRD) ACCUMULATOR LOW PRESSURE/HIGH WATER LEVEL ALARM ANNUNCIATION FOR CONTROL ROD 06-23 OCCURRED. AN INITIAL CHECK OF THE ROD'S HYDRAULIC CONTROL UNIT (HCU) REVEALED AN ACCUMULATOR PRESSURE OF 960 PSIG; HOWEVER, DURING AN ATTEMPT TO RECHARGE THE ACCUMULATOR PRESSURE TO NORMAL, THE PRESSURE DECREASED TO LESS THAN 850 PSIG. THE ACCUMULATOR WAS THEN DECLARED INOPERABLE PER TECH SPECS. TECH SPECS 3.1.3.5, 6.9.1.9B. THE LOW PRESSURE RESULTED FROM A VALVE STEM PACKING LEAK ON THE ACCUMULATOR N2 CHARGING INLET VALVE, V11, MODEL NO. PL-2714, CAUSED BY DETERIORATION OF THE TEFLON PACKING MATERIAL. THE VALVE PACKING-BONNET ASSEMBLY WAS REPLACED WITH A VENDOR APPROVED, ETHYLENE PROPYLENE-TYPE PACKING-BONNET ASSEMBLY, AND THE ACCUMULATOR PRESSURE WAS RECHARGED TO NORMAL.

[49] BRUNSWICK 1 DOCKET 50-325 LER 83-043
CONTROL ROD DRIVE ACCUMULATOR PRESSURE LOW.
EVENT DATE: 100283 REPORT DATE: 101883 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: PIPES, FITTINGS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 186858) DURING UNIT POWER OPERATION, A CONTROL ROD DRIVE (CRD) ACCUMULATOR LOW PRESSURE/HIGH WATER LEVEL ALARM ANNUNCIATION WAS RECEIVED FOR CONTROL ROD 46-39. A CHECK OF THE ACCUMULATOR PRESSURE GAUGE, 1-C11-PI-131-4639, REVEALED A PRESSURE OF 760 PSIG. THE AFFECTED ACCUMULATOR WAS THEN DECLARED INOPERABLE PER TECH SPECS. TECH SPECS 3.1.3.5, 6.9.1.9B. THE EVENT RESULTED FROM A NITROGEN LEAK AT THE ACCUMULATOR PRESSURE TAP BLOCK WHERE THE PI-131-4639 GAUGE PIPE NIPPLE IS THREADED INTO THE BLOCK. THE PIPE NIPPLE WAS TIGHTENED INTO THE BLOCK TO ELIMINATE THE LEAKAGE AND THE ACCUMULATOR WAS RECHARGED AND RETURNED TO SERVICE. NO FURTHER ACTION IS PLANNED REGARDING THIS EVENT.

[50] BRUNSWICK 1 DOCKET 50-325 LER 83-048
ERRONEOUS SUPPRESSION POOL LEVEL INDICATION.
EVENT DATE: 100583 REPORT DATE: 101983 NSSS: GE TYPE: BWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BAILEY INSTRUMENT CO., INC.

(NSIC 186860) DURING UNIT POWER OPERATION, WHILE PERFORMING THE OPERABILITY TEST OF THE SUPPRESSION POOL LEVEL INDICATORS, PT-08.1.6, IT WAS DISCOVERED THAT RTGB SUPPRESSION POOL LEVEL INDICATOR 1-CAC-LR-2602 WAS SHOWING AN INDICATION WHICH WAS 1 1/2" LOWER THAN ACTUAL LEVEL. TECH SPECS 3.3.5.3, 6.9.1.9B. THE EVENT IS ATTRIBUTED TO A LOOSE NEGATIVE INPUT LEAD AT THE LR-2602 TERMINAL BLOCK WHICH CAUSED AN ERRONEOUS INPUT SIGNAL TO THE INSTRUMENT. THE LEAD WAS SECURELY CONNECTED TO THE LR-2602 TERMINAL BLOCK, THE PT WAS SATISFACTORILY COMPLETED, AND INSTRUMENT, MODEL NO. SR1110, WAS RETURNED TO SERVICE. NO FURTHER ACTION IS PLANNED REGARDING THIS EVENT.

[51] BRUNSWICK 1 DOCKET 50-325 LER 83-051
TWO SOURCE RANGE MONITORS INOPERABLE.
EVENT DATE: 111083 REPORT DATE: 120983 NSSS: GE TYPE: BWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187796) DURING UNIT SHUTDOWN OPERATIONS, WHILE PERFORMING CORRECTIVE MAINTENANCE TO REPAIR THE DETECTOR DRIVE TUBE OF SOURCE RANGE MONITOR SRM C, A SPURIOUS "UPSCALE/INOPERATIVE" ALARM ANNUNCIATION OCCURRED FOR SRM A. THIS EVENT LEFT LESS THAN THE MINIMUM REQUIRED NUMBER OF OPERABLE SOURCE RANGE MONITORS (SRM). TECH SPECS 3.3.5.4, 6.9.1.9B. INTERMITTENT, UNDETERMINED COMPONENT FAILURE IN THE PREREGULATOR MODULE (PRM) OF SRM A CAUSED THE MONITOR ANNUNCIATOR TO ALARM. THE PRM, PART NO. 194X38GG1, WAS REPLACED AND SRM A WAS RETURNED TO SERVICE. THE DETECTOR DRIVE TUBE OF SRM C WAS REPAIRED, ITS FLEX CABLE WAS REPLACED, AND THE MONITOR WAS RETURNED TO SERVICE. NO FURTHER ACTION REGARDING THE FAILURE OF SRM A IS PLANNED.

[52] BRUNSWICK 2 DOCKET 50-324 LER 82-024 REV 1
UPDATE ON DESIGN ERROR IN CONTROL ROOM EMERGENCY VENTILATION CONTROLS.
EVENT DATE: 020582 REPORT DATE: 111483 NSSS: GE TYPE: BWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187759) WHILE REVIEWING LOGIC PRINTS FOR THE CONTROL BUILDING EMERGENCY VENTILATION SYSTEM, IT WAS DETERMINED THE SYSTEM TRAINS WILL NOT ISOLATE UPON THE RECEIPT OF A CHLORINE ISOLATION SIGNAL IF THE SYSTEM CONTROL SWITCH IS IN THE "ON" POSITION. DUE TO PROBLEMS EXPERIENCED WITH THE HIGH RADIATION INITIATION FUNCTION FOR THE EMERGENCY VENTILATION TRAINS, THE BRUNSWICK STATION HAD BEEN RUNNING A TRAIN WITH THE SWITCH IN THE "ON" POSITION FROM JANUARY 25, 1982, TO FEBRUARY 4, 1982. TECH SPEC 6.9.1.81. DUE TO A DESIGN DEFICIENCY WHEN THE SYSTEM IS RUN IN THE "ON" POSITION, THE CHLORINE CONTACTS ARE BYPASSED IN THE CIRCUIT. PLANT MOD 81-032 IS BEING REVISED TO REARRANGE THE CHLORINE CONTACTS SO THAT WHEN A CHLORINE ISOLATION SIGNAL IS RECEIVED WHILE IN THE "PREFERRED", "STANDBY", OR "ON" POSITION, THE SYSTEM WILL ISOLATE. INSTALLATION OF PLANT MOD 81-032 WILL RESTORE THE SYSTEM TO THE ORIGINAL DESIGN INTENT, AND IS EXPECTED TO BE COMPLETE PRIOR TO DEC. 31, 1983.

[53] BRUNSWICK 2 DOCKET 50-324 LER 83-016
PARTIAL CONTAINMENT ISOLATION OCCURS.
EVENT DATE: 032383 REPORT DATE: 042083 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 182885) DURING UNIT POWER OPERATION, A REACTOR BUILDING EXHAUST VENTILATION HIGH-HIGH ALARM OCCURRED CONCURRENT WITH A GROUP 6 PCIS SIGNAL, WHICH CLOSSES CAC SYSTEM DRYWELL VENT/PURGE, INERTING, AND CONTAINMENT MONITORING INSTRUMENTATION ISOLATION VALVES. TECH SPECS 3.3.2, 3.3.5.2, 3.3.5.3, 3.4.3.1, 3.6.6.2, 3.6.6.4, 6.9.1.9B. THIS EVENT OCCURRED DUE TO THE FAILURE OF RELAY K2 IN D12-K609A, WHICH IS THE INDICATION AND TRIP UNIT THAT RECEIVES ITS INPUT FROM REACTOR BUILDING EXHAUST RADIATION MONITOR AND SIGNAL CONVERTER D12-RM-N010A. K2, MODEL NO. G11, WAS REPLACED AND THE PCIS SIGNAL WAS RESET. AS THIS IS AN ISOLATED REPORTABLE EVENT, NO FURTHER ACTION REGARDING IT IS PLANNED.

[54] BRUNSWICK 2 DOCKET 50-324 LER 83-086
MAIN STEAM LINE RADIATION MONITOR DRIFTS.
EVENT DATE: 091683 REPORT DATE: 100683 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 186176) SURVEILLANCE DURING UNIT POWER OPERATION REVEALED MAIN STEAM LINE RADIATION MONITOR 2-D12-LRM-K603D WAS SHOWING AN INDICATION WHICH WAS LESS THAN WAS INDICATED BY REDUNDANT INSTRUMENTATION. PERFORMANCE OF HIGH STEAM LINE RADIATION CHANNEL FUNCTIONAL TEST, PT-1.1.12PC, DONE AS A RESULT OF THE SURVEILLANCE DISCOVERY, REVEALED THAT K603D WAS ACTUATING AT 3.75 (VERSUS THE SPECIFIED REQUIREMENT OF LESS THAN OR EQUAL TO 3.5) TIMES FULL POWER BACKGROUND. TECH SPECS 3.3.1, 3.3.2, 6.9.1.9B. K603D WAS FOUND ACTUATING OUT OF SPECIFICATIONS DUE TO INSTRUMENT DRIFT. K603D, MODEL NO. 238X660G3, WAS CALIBRATED AND RETURNED TO SERVICE. AS A RESULT OF THIS EVENT, BY NOVEMBER 11, 1983, THE FUNCTIONAL AND THE ALIGNMENT AND FUNCTIONAL TESTS OF THESE INSTRUMENTS WILL BE COMBINED INTO A SINGLE TEST DONE WEEKLY IN ORDER TO BETTER REVEAL ANY INSTRUMENT DRIFT PROBLEMS WITH THESE INSTRUMENTS.

[55] BRUNSWICK 2 DOCKET 50-324 LER 83-086 REV 1
UPDATE ON SETPOINT DRIFT OF MAIN STEAM LINE RADIATION MONITOR.
EVENT DATE: 091683 REPORT DATE: 102083 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187523) SURVEILLANCE DURING UNIT POWER OPERATION REVEALED MAIN STEAM LINE RADIATION MONITOR 2-D12-LRM-K603D WAS SHOWING AN INDICATION WHICH WAS LESS THAN WAS INDICATED BY REDUNDANT INSTRUMENTATION. PERFORMANCE OF HIGH STEAM LINE RADIATION CHANNEL FUNCTIONAL TEST, PT-1.1.12PC, DONE AS A RESULT OF THE SURVEILLANCE DISCOVERY, REVEALED THAT K603D WAS ACTUATING AT 3.75 (VERSUS THE SPECIFIED REQUIREMENT OF LESS THAN OR EQUAL TO 3.5) FULL POWER BACKGROUND. TECH SPEC 3.3.1, 3.3.2, 6.9.1.9B. K603D WAS FOUND ACTUATING OUT OF SPECIFICATIONS DUE TO INSTRUMENT DRIFT. K603D, MODEL NO. 238X660G3, WAS CALIBRATED AND RETURNED TO SERVICE. AS A RESULT OF THIS EVENT, BY DECEMBER 31, 1983, THE FUNCTIONAL AND THE ALIGNMENT AND FUNCTIONAL TESTS OF THESE INSTRUMENTS WILL BE COMBINED INTO A SINGLE TEST DONE WEEKLY IN ORDER TO BETTER REVEAL ANY INSTRUMENT DRIFT PROBLEMS WITH THESE INSTRUMENTS.

[56] BRUNSWICK 2 DOCKET 50-324 LER 83-088
RHR HEAT EXCHANGER VALVE FAILS TO OPEN.
EVENT DATE: 092783 REPORT DATE: 102583 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 186857) DURING UNIT POWER OPERATION, IT WAS DISCOVERED THAT THE B RESIDUAL HEAT REMOVAL (RHR) SUBSYSTEM HEAT EXCHANGER OUTLET ISOLATION VALVE 2-E11-F003B WOULD NOT OPEN USING THE VALVE MOTOR OPERATOR. THE VALVE WAS DECLARED INOPERABLE PER TECH SPECS AND WAS THEN MANUALLY OPENED. THE AUXILIARY CONTACT OF THE VALVE MOTOR CLOSING CIRCUITRY CONTACTOR 42/C WAS MECHANICALLY STUCK OPEN, PREVENTING THE VALVE MOTOR OPENING CIRCUITRY CONTACTOR 42/O FROM ENGAGING TO OPEN THE VALVE. THE AUXILIARY CONTACT, PART NO. CR205X, WAS REPLACED AND F003B WAS SATISFACTORILY CYCLED USING THE VALVE MOTOR. INVESTIGATIVE EFFORTS WERE INCONCLUSIVE IN DETERMINING THE CAUSE OF THIS EVENT; THEREFORE, NO FURTHER ACTION IS PLANNED.

[57] BRUNSWICK 2 DOCKET 50-324 LER 83-093
CONTROL ROOM POST ACCIDENT RECORDER/INDICATOR OPERATES ERRATICALLY.
EVENT DATE: 102483 REPORT DATE: 111783 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: LEEDS & NORTHRUP CO.

(NSIC 187795) DURING UNIT POWER OPERATION, CONTROL ROOM POSTACCIDENT MONITORING RECORDER/INDICATOR 2-CAC-AR-1263 WAS OBSERVED EXHIBITING ERRATIC INDICATIONS OF DRYWELL OXYGEN CONCENTRATION. AT THE TIME OF THIS DISCOVERY, THE REDUNDANT

CONTROL ROOM INSTRUMENT, 2-CAC-AR-1259, WAS EXHIBITING A NORMALLY EXPECTED INDICATION OF DRYWELL OXYGEN CONCENTRATION. TECH SPECS 3.3.5.3, 6.9.1.9B. EXCESSIVE BUILDUP OF FOREIGN MATERIAL ON THE AR-1263 INSTRUMENT SLIDE WIRE AND WEAR OF THE SLIDE WIRE CONTACTS COMBINED TO CAUSE THE OBSERVED INDICATIONS. THE SLIDE WIRE WAS CLEANED AND THE CONTACTS WERE REPLACED TO RETURN AR-1263, MODEL NO. SPEEDOMAX M, TO SERVICE. NO FURTHER ACTION SPECIFICALLY REGARDING THIS EVENT IS PLANNED.

[58] BRUNSWICK 2 DOCKET 50-324 LER 83-091
RCIC INSTRUMENT ISOLATION VALVES FAIL TO OPEN.
EVENT DATE: 102683 REPORT DATE: 112183 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: YORK ELECTRIC PANEL CONTROL CORP.

(NSIC 187552) DURING UNIT POWER OPERATION AND WHILE PERFORMING THE OPERABILITY CYCLING TEST OF PRIMARY CONTAINMENT ISOLATION SYSTEM (PCIS) INSTRUMENT ISOLATION VALVES, PT-2.2.1A, ISOLATION VALVE E51-F043C, LOCATED AT RIPX-61F, WOULD NOT REOPEN. THIS VALVE ISOLATES RCIC SYSTEM STEAM LINE FLOW HIGH INSTRUMENT E51-DPIS-N017 AND RCIC SYSTEM STEAM SUPPLY PRESSURE LOW INSTRUMENT E51-PS-N019A. PER TECH SPECS THE RCIC SYSTEM WAS DECLARED INOPERABLE. TECH SPECS 3.3.2, 3.6.3, 3.7.4, 6.9.1.9B. F043C WOULD NOT OPEN DUE TO A BROKEN BAKELITE NIPPLE IN THE VALVE CONTROL SWITCH, MODEL NO. EF4, WHICH PREVENTED THE SWITCH ACTUATION PLUNGER FROM RESETTING ITS ELECTRICAL CONTACTS. THE SWITCH MODULE BU7173 WAS REPLACED AND F043C WAS CYCLED AND RETURNED TO SERVICE. PLANT ENGINEERING HAS BEEN REQUESTED TO STUDY AND EVALUATE THIS TYPE APPLICATION OF THE MODEL EF4 CONTROL SWITCH.

[59] BRUNSWICK 2 DOCKET 50-324 LER 83-095
DEFICIENCIES IN NUMEROUS FIRE BARRIER PENETRATIONS.
EVENT DATE: 110283 REPORT DATE: 111683 NSSS: GE TYPE: BWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN

(NSIC 187092) WHILE PERFORMING THE TECH SPEC REQUIRED VISUAL INSPECTION OF FIRE BARRIER PENETRATIONS, IT WAS IDENTIFIED THAT SOME PENETRATIONS ONLY CONTAINED LINK-SEALS, A PENETRATION SEAL ASSEMBLY MANUFACTURED BY TIMBERLINE. AN ENGINEERING EVALUATION OF THESE SEALS DETERMINED THAT THEY DO NOT MEET THE THREE-HOUR FIRE BARRIER CRITERIA OF APPENDIX A TO BRANCH TECHNICAL POSITION 9.5-1. TECH SPECS 3.7.8, 6.9.1.8I. THE CAUSE OF THIS EVENT IS STILL UNDER INVESTIGATION. THE LICENSEE IS CURRENTLY WORKING WITH THE A/E, UNITED ENGINEERS & CONSTRUCTORS (UE&C), TO DETERMINE THE CAUSE OF THIS APPARENT DESIGN DEFICIENCY. FIRE WATCHES HAVE BEEN ESTABLISHED PER TECH SPECS FOR INOPERABLE FIRE BARRIERS.

[60] CALVERT CLIFFS 1 DOCKET 50-317 LER 82-028 REV 1
UPDATE ON PARTIAL LOSS OF SHUTDOWN COOLING.
EVENT DATE: 060482 REPORT DATE: 060983 NSSS: CE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: GENERATORS
VENDOR: EXIDE INDUSTRIAL DIV

(NSIC 184740) DURING MODE 6 OPERATION AT 1656 WHILE PERFORMING SURVEILLANCE TESTING, THE REDUNDANT SHUTDOWN COOLING LOOP AND THE OPERABLE BORATION FLOW PATH WERE LOST (TECH SPEC 3.9.8.2 & 3.1.2.1). NUMBER 11 4 KV BUS WAS INADVERTENTLY DEENERGIZED AT 1656, CAUSING A LOSS OF POWER TO #11 LPSI PUMP. SINCE #12 LPSI PUMP WAS RUNNING AT THE TIME, SHUTDOWN COOLING FLOW WAS NOT LOST. THE BORATION FLOW PATH FROM THE RWT WAS ALSO LOST. POWER WAS RESTORED TO #11 BUS AT 1658. SIMILAR EVENTS: NONE. TESTING AND RESEARCH HAS SHOWN THAT THE VITAL INSTRUMENT BUS FUSES WERE IMPROPER. THE PROPER FUSES WERE INSTALLED IN BOTH UNITS' VITAL BUSES UNDER FACILITY CHANGE 83-1001. THE CURRENT LIMITING FEATURE OF INVERTERS

11, 12, 21, AND 22 HAS BEEN REMOVED UNDER THIS CHANGE ALSO. REPLACEMENT OF ALL INVERTERS TO STATE-OF-THE-ART DESIGN IS BEING CONSIDERED.

[61] CALVERT CLIFFS 1 DOCKET 50-317 LER 82-056 REV 1
 UPDATE ON RADIATION MONITORING SYSTEM (RMS) SAMPLE PUMP FAILURE.
 EVENT DATE: 090782 REPORT DATE: 060283 NSSS: CE TYPE: PWR
 SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: PUMPS
 VENDOR: CONDE PUMP COMPANY

(NSIC 184747) AT 0810, DURING NORMAL OPERATION THE CONTAINMENT PARTICULATE AND GASEOUS RMS SAMPLE PUMP TRIPPED AND WOULD NOT RESTART (TECH SPEC 3.4.6.1). THE SAMPLE PUMP WAS RESTARTED AND RETURNED TO SERVICE AT 0830. THE CONTAINMENT PUMP LEVEL ALARM REMAINED OPERABLE DURING THE EVENT. SIMILAR EVENTS: 50-371/79-52, 80-46; 50-318/79-22, 81-15. THE CONTAINMENT PARTICULATE AND GASEOUS RMS SAMPLE PUMP TRIPPED DUE TO FAILURE OF THE SHAFT COUPLING. THE FAILURE OF THE COUPLING WAS CAUSED BY EXCESSIVE WEAR CREATED BY THE CORROSION OF THE PUMP VANES. THE COUPLING WAS REPLACED AND THE PUMP RETURNED TO SERVICE.

[62] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-052
 SILVER CONCENTRATION IN OYSTERS EXCEEDS LIMIT.
 EVENT DATE: 081083 REPORT DATE: 100583 NSSS: CE TYPE: PWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187481) NATURAL TENDENCY OF OYSTERS TO CONCENTRATE SILVERS. OYSTER SAMPLES COLLECTED DURING AUGUST, 1983 FROM THE CAMP CANOY LOCATION AND ANALYZED FOR ETS TABLE 3.2-1, SHOWED AG-110M TO BE 118 PLUS OR MINUS 8 PCI/KG (WET). BACKGROUND SAMPLES DURING THIS PERIOD SHOWED AG-110M TO BE 11.8 PCI/KG (WET) (TECH SPEC 5.6.2.B). THESE CONCENTRATIONS CALCULATE TO SMALL FRACTIONS OF THE DOSES ALLOWED BY 40 CFR PART 190. SIMILAR EVENT: 50-317/83-48/4X. THE HIGHER THAN BACKGROUND ACTIVITY WAS CAUSED BY THE NATURAL TENDENCY OF OYSTERS TO BIOCONCENTRATE ENVIRONMENTAL SILVER. ALL RELEASES IN 1982 AND 1983 HAVE BEEN WITHIN THE ALLOWABLE LIMITS IN THE TECH SPEC.

[63] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-049
 AUXILIARY FEEDWATER PUMP DECLARED INOPERABLE.
 EVENT DATE: 081883 REPORT DATE: 091683 NSSS: CE TYPE: PWR
 SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: PUMPS
 VENDOR: BYRON JACKSON PUMPS, INC.

(NSIC 186169) AT 1830, DURING NORMAL OPERATION, WHILE PERFORMING POST MAINTENANCE TESTING ON THE FLOW PATH FROM 12 CONDENSATE STORAGE TANK, 11 AUX FEEDWATER PUMP WAS FOUND TO BE INOPERABLE (TECH SPEC 3.7.1.2). ON 8-20 AT 1610 REPAIRS TO 11 AUX FEED PUMP WERE COMPLETED AND IT WAS RETURNED TO SERVICE. DURING THIS EVENT 12 AUX FEED PUMP REMAINED OPERABLE. SIMILAR EVENTS: NONE. INSPECTION OF THE PUMP INTERNALS REVEALED THAT THE "STAGE PIECE-BALANCE" AND THE "SHAFT PIECE-BALANCE" WERE FROZEN IN PLACE. BOTH PARTS WERE REPLACED AND THE PUMP RETURNED TO SERVICE. AN INVESTIGATION IS CONTINUING TO DETERMINE THE CAUSE OF FAILURE.

[64] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-047
 CONTROL ROOM AIR CONDITIONER FAILS TO START.
 EVENT DATE: 082283 REPORT DATE: 092283 NSSS: CE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: HEAT EXCHANGERS
 VENDOR: BORG-WARNER CORP.

(NSIC 186106) 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. NUMBER 11 CRACK REMAINED OPERABLE THROUGHOUT THE EVENT. SIMILAR EVENTS: NONE. MAINTENANCE PERSONNEL INSPECTED AIR CONDITIONING UNIT AND RESET HIGH PRESSURE CONTROL. NO ABNORMALITY WAS OBSERVED. THE UNIT WAS RESTARTED AND OPERATED NORMALLY. THIS EVENT IS STILL BEING INVESTIGATED.

[65] CALVERT CLIFFS 1 DOCKET 50-317 LER 83-050
HYDROGEN ANALYZER FOUND INOPERABLE.
EVENT DATE: 091283 REPORT DATE: 101283 NSSS: CE TYPE: PWR
SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MATHESON GAS PRODUCTS

(NSIC 186170) AT 1350 DURING NORMAL OPERATION, 12 HYDROGEN ANALYZER WAS FOUND TO BE INOPERABLE (TECH SPEC 3.6.5.1). THE ANALYZER WAS REPAIRED AND RETURNED TO SERVICE AT 1400 ON 18 SEPTEMBER. DURING THIS TIME 11 HYDROGEN ANALYZER REMAINED OPERABLE. SIMILAR EVENTS: NONE. THE CAUSE OF THIS EVENT WAS AN OUT OF ADJUSTMENT REAGENT GAS FLOW CONTROLLER (MATHESON MODEL FM 1050 IV). THE CONTROLLER WAS READJUSTED AND RETESTED SATISFACTORILY. SURVEILLANCE PROCEDURES WILL BE REVISED TO TREND ADJUSTMENTS TO PREVENT RECURRENCE. NO ADDITIONAL ACTION IS REQUIRED.

[66] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-040
REACTOR SCRAMMED TWICE FOLLOWING RAPID CLOSURE OF TURBINE GOVERNOR VALVES.
EVENT DATE: 080983 REPORT DATE: 090883 NSSS: CE TYPE: PWR
SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: OTHER COMPONENTS

(NSIC 185525) 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". A COMPONENT FAILURE IN THE AUTOMATIC CONTROL CIRCUITRY OF THE MAIN TURBINE ELECTRO-HYDRAULIC CONTROL SYSTEM IS SUSPECTED TO HAVE CAUSED THE VALVE CLOSURES. EXTENSIVE TROUBLESHOOTING TO DETERMINE THE EXACT FAILED COMPONENT IS CONTINUING. AN UPDATE REPORT WILL BE SUBMITTED DESCRIBING THE DETAILS OF THE INVESTIGATION.

[67] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-044
MOTOR DRIVEN AUX FEEDWATER FLOW INDICATOR SET POINT DRIFTS.
EVENT DATE: 082383 REPORT DATE: 092283 NSSS: CE TYPE: PWR
SYSTEM: CONDENSATE & FEEDWTR SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FOXBORO CO., THE

(NSIC 186110) IN MODE 2 DURING A PLANT STARTUP IT WAS ESTABLISHED THAT THE MOTOR DRIVEN AUXILIARY FEEDWATER (AFW) FLOW INDICATION TO 22 S/G WAS INOPERABLE (TECH SPEC 3.3.3.6). WHILE ACTUAL AFW FLOW WAS MAINTAINED AT SETPOINT, FLOW INDICATION IN THE CONTROL ROOM READ APPROXIMATELY 70 GPM LOW. THE CALIBRATION PROBLEM CAUSING THE ERROR WAS FOUND AND CORRECTED 6 HOURS AFTER DECLARING THE INDICATION INOPERABLE. 22 S/G FLOW INDICATION FOR THE STEAM DRIVEN AFW TRAIN REMAINED OPERABLE. SIMILAR EVENTS: NONE. TROUBLESHOOTING REVEALED THAT THE FLOW INDICATOR CONTROLLER'S (2-FIC-4535A) ZERO REFERENCE HAD SHIFTED LOW BY 90 GPM. RECALIBRATED 2-FIC-4535A'S ZERO REFERENCE, TESTED AND RETURNED TO SERVICE. AN 18 MONTH SURVEILLANCE TEST CALIBRATES 2-FIC-4535A. NO FURTHER CORRECTIVE OR PREVENTIVE ACTIONS ARE DEEMED NECESSARY.

[68] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-048
 HYDROGEN RECOMBINERS INOPERABLE.
 EVENT DATE: 090183 REPORT DATE: 092283 NSSS: CE TYPE: PWR
 SYSTEM: OTHER AUX SYSTEMS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: BOURNS CO.

(NSIC 186171) DURING SURVEILLANCE TESTING, 21 HYDROGEN RECOMBINER WAS FOUND TO BE INOPERABLE (TECH SPEC 3.6.5.2). 21 HYDROGEN RECOMBINER WAS REPAIRED AND RETURNED TO SERVICE. DURING THIS EVENT, 22 HYDROGEN RECOMBINER REMAINED OPERABLE. SIMILAR EVENTS: NONE. INVESTIGATION FOUND A LOOSE LEAD IN THE HYDROGEN RECOMBINER HEATER CONTROL POTENTIOMETER (BOURNS #3650). THE SUSPECTED CAUSE IS A LOOSENED HEX NUT, FROM NORMAL USE, THAT ALLOWED THE TERMINALS ON THE BACK OF THE POT TO BE TWISTED AND PULLED. THE POT WAS REPLACED WITH A SPARE. ALL SIMILAR POTS WILL BE CHECKED FOR TIGHTNESS. NO FURTHER ACTION IS DEEMED NECESSARY.

[69] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-049
 CHARGING LINE HAS A PIN-HOLE LEAK.
 EVENT DATE: 090983 REPORT DATE: 100783 NSSS: CE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISON SYS COMPONENT: PIPES, FITTINGS
 VENDOR: SANDVIK STEEL INC.

(NSIC 186172) AT 0225 DURING A ROUTINE INSPECTION OF A PIPING PENETRATION ROOM, A PIN-HOLE LEAK WAS DISCOVERED IN A REACTOR COOLANT CHARGING LINE WELD. CHARGING WAS REALIGNED TO THE AUXILIARY HIGH PRESSURE SAFETY INJECTION HEADER AND THE LEAK WAS WELD REPAIRED. NORMAL CHARGING LINEUP WAS RESTORED AT 1800. SIMILAR EVENTS: LER 50-318/81-35. THE WELD FAILURE OCCURRED AT A REDUCING INSERT ON A TEE IN THE DISCHARGE HEADER. A REPAIR WELD WAS COMPLETED USING CODE PROCEDURES. VIBRATION OF THE LINE APPEARS TO HAVE BEEN THE CAUSE OF FAILURE. AN ENGINEERING EVALUATION OF THIS PIPING WILL BE COMPLETED TO DETERMINE IF SYSTEM DESIGN AT THIS LOCATION IS SUFFICIENT. A FOLLOW-UP REPORT WILL BE SUBMITTED.

[70] CALVERT CLIFFS 2 DOCKET 50-318 LER 83-061
 LOW PRESSURE SAFETY INJECTION PUMP FAILS TO RESTART.
 EVENT DATE: 110783 REPORT DATE: 112583 NSSS: CE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187521) DURING PERFORMANCE OF THE MONTHLY SURVEILLANCE TEST OF THE ESPAS LOGIC, 22 LPSI PUMP COULD NOT BE RESTARTED AFTER BEING STOPPED ON A RAS SIGNAL (TECH SPEC 3.5.2). THE BREAKER FOR 22 LPSI PUMP WAS REPAIRED AND RETURNED TO SERVICE ON 11-7-83 AT 1500. LPSI PUMP 21 REMAINED OPERABLE THROUGHOUT THE EVENT. SIMILAR EVENTS: NONE. FOUND TRIP LATCH WIPE OUT OF ADJUSTMENT, CAUSING BREAKER TO TRIP FREE. ADJUSTED TRIP ADJUSTING NUT TO ALLOW SUFFICIENT WIPE AND BREAKER FUNCTIONED PROPERLY. THIS IS COVERED IN THE PREVENTIVE MAINTENANCE PROGRAM. NO FURTHER ACTION IS REQUIRED.

[71] CONNECTICUT YANKEE DOCKET 50-213 LER 83-020
 LOSS OF CONTAINMENT CONTROL AIR.
 EVENT DATE: 110183 REPORT DATE: 113083 NSSS: WE TYPE: PWR
 SYSTEM: COMPRESSED AIR SYSTEMS & CONT COMPONENT: FILTERS
 VENDOR: WILKERSON CORP.

(NSIC 187491) DURING NORMAL OPERATION FOLLOWING ROUTINE PREVENTIVE MAINTENANCE OF THE CONTAINMENT CONTROL AIR SYSTEM, THE PLANT EXPERIENCED A LOSS OF CONTAINMENT CONTROL AIR AT 1609. THIS RESULTED IN A TEMPORARY (LESS THAN 1 HOUR) LOSS OF CONTROL OF THE PRESSURIZER SPRAY VALVES AND PRESSURIZER POWER OPERATED RELIEF VALVES (PORVS), A CONDITION PERMITTED BY TECH SPECS 3.3.C.6. A LEAKING FILTER WAS ISOLATED FROM THE SYSTEM AND THE BYPASS VALVE OPENED WHICH ISOLATED THE AIR

LEAK AND RESTORED CONTROL AIR AT 1645. MAINTENANCE INSTALLED AN INCORRECT 'O' RING ON A CONTAINMENT CONTROL AIR FILTER CANISTER IN AN ATTEMPT TO 'MAKE IT WORK'. IN SO DOING THE FILTER CANISTER WAS IMPROPERLY INSTALLED WHICH LED TO THE FILTER/SYSTEM FAILURE. THE CORRECT 'O' RING WAS SUBSEQUENTLY INSTALLED AND THE FILTER RETURNED TO SERVICE. THE MECHANICS WERE REINSTRUCTED IN THE IMPORTANCE OF PROPER MAINTENANCE PRACTICES.

[72] CONNECTICUT YANKEE DOCKET 50-213 LER 83-021
LOSS OF CONTAINMENT CONTROL AIR.
EVENT DATE: 112883 REPORT DATE: 113083 NSSS: WE TYPE: PWR
SYSTEM: COMPRESSED AIR SYSTEMS & CONT COMPONENT: FILTERS
VENDOR: WILKERSON CORP.

(NSIC 187470) DURING NORMAL OPERATION THE PLANT EXPERIENCED A LOSS OF CONTAINMENT CONTROL AIR AT 0445. THIS RESULTED IN A TEMPORARY (LESS THAN 1 HOUR) LOSS OF CONTROL OF THE PRESSURIZER SPRAY VALVES AND PRESSURIZER POWER OPERATED RELIEF VALVES (PORVS), A CONDITION PERMITTED BY TECH SPEC 3.3.C.6. A BROKEN AIR FILTER WAS ISOLATED AND BYPASSED WHICH RESTORED CONTROL AIR SYSTEM PRESSURE. THE MECHANICAL FAILURE OF THE FILTER CANISTER WAS DUE TO WORN THREADS ON THE CAP AFTER EXTENDED USAGE. THE ENTIRE FILTER CANISTER WAS REPLACED WITH A DIFFERENT STYLE IN WHICH THE STEM DOES NOT THREAD INTO THE ALUMINUM CAP BUT RATHER PENETRATES THE CAP AND IS ATTACHED WITH AN EXTERNAL NUT.

[73] COOK 1 DOCKET 50-315 LER 83-106
STEAM GENERATOR SNUBBER FAILS.
EVENT DATE: 080583 REPORT DATE: 111583 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
VENDOR: MCDOWELL-WELLMAN ENGINEERING CO.

(NSIC 187542) DURING A REFUELING OUTAGE, SURVEILLANCE TESTING OF STEAM GENERATOR SNUBBER 25.12620.007-7 (TECH SPEC TABLE 3.7-4, NO. 81) REVEALED AN INABILITY TO LOCKUP DURING NORMAL AND RESTRAINED OPERATING MODE TESTING. THIS CONDITION WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.8. THE ACTION REQUIREMENTS WERE MET. NO PREVIOUS OCCURRENCES. DUE TO AN OVERSIGHT, IT WAS NOT REALIZED UNTIL A REVIEW OF CORRESPONDENCE ON 10/25/83 THAT A WRITTEN REPORT WAS REQUIRED. STEAM GENERATOR SNUBBER (TECH SPEC, SNUBBER NO. 81) WAS FOUND TO BE INOPERABLE. THE SNUBBER FAILED TO LOCKUP DURING TESTING. THE PISTON SEALS WERE WORN. ALL SEALS AND O-RINGS WERE REPLACED, THE SNUBBER INTERNALS CLEANED, AND HYDRAULIC FLUID REPLACED. THE SNUBBER RETESTED SATISFACTORILY AND WILL BE TESTED NEXT REFUELING OUTAGE.

[74] COOK 1 DOCKET 50-315 LER 83-108
STEAM GENERATOR PRESSURE TRANSMITTER REMOVED FROM SERVICE.
EVENT DATE: 101883 REPORT DATE: 111583 NSSS: WE TYPE: PWR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: VALVES
VENDOR: HANCOCK CO.

(NSIC 187543) DURING POST REFUELING STARTUP, 1-1 STEAM GENERATOR CHANNEL II PRESSURE TRANSMITTER WAS REMOVED FROM SERVICE TO ALLOW FURMANITE INJECTION OF THE INSTRUMENT ROOT VALVE AND BLOW DOWN OF THE SENSING LINE TO ASSURE PROPER OPERATION OF THE INSTRUMENT. THIS CONDITION WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.2.1. THE ACTION REQUIREMENTS WERE MET. THE CHANNEL WAS RETURNED TO SERVICE IN 3 HOURS AND 40 MINUTES. THE INSTRUMENT WAS REMOVED FROM SERVICE PER AN APPROVED REPAIR PROCEDURE. PACKING LEAKS CANNOT BE TOTALLY PREVENTED.

[75] COOK 1 DOCKET 50-315 LER 83-115
 SEVENTEEN FIRE DOORS MADE INOPERABLE FOR MAINTENANCE.
 EVENT DATE: 101983 REPORT DATE: 120783 NSSS: WE TYPE: PWR
 SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: OTHER COMPONENTS

(NSIC 187786) SEVENTEEN SAFETY RELATED FIRE DOORS WERE INTENTIONALLY MADE INOPERABLE TO PERFORM CORRECTIVE MAINTENANCE ON THE DOOR FRAMES. THE DOORS' LATCHING SYSTEM WAS RENDERED INOPERABLE OR THE LEAF WAS REMOVED FROM THE FRAME 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 DOORS OPERABLE. DURING A REVIEW OF THIS WORK ON 11/8/83, IT WAS DETERMINED THAT THIS WORK CONSTITUTED REPORTABLE EVENTS. 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.

[76] COOK 1 DOCKET 50-315 LER 83-110
 FIRE SUPPRESSION SYSTEM WATER VALVE FAILS.
 EVENT DATE: 102083 REPORT DATE: 111883 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 VENDOR: ITT GRINNELL

(NSIC 187544) DURING POST REFUELING START-UP, FIRE SUPPRESSION WATER SYSTEM TO THE DRUMMING CASK HANDLING AREA WAS ISOLATED TO FACILITATE REPAIRS OF THE PRIMING VALVE ON THE CASK HANDLING AREA DELUGE VALVE. THIS CONDITION IS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.9.2. THE FIRE SUPPRESSION SYSTEM WAS OUT OF SERVICE FOR A TOTAL OF THREE HOURS AND THIRTY-SIX MINUTES. THE 1/2" DIAPHRAGM STYLE VALVE WAS FOUND TO HAVE A SHEARED COMPRESSOR PIN (PART #13 DWG. #SD-C-106268). THE DIAPHRAGM COMPRESSOR PIN WAS REPLACED. THE CAUSE OF THE CONDITION COULD NOT BE CONCLUSIVELY DETERMINED.

[77] COOK 1 DOCKET 50-315 LER 83-111
 STEAM GENERATOR PRESSURE TRANSMITTER REMOVED FROM SERVICE.
 EVENT DATE: 102483 REPORT DATE: 112283 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: FOXBORO CO., THE

(NSIC 187545) DURING POST REFUELING STARTUP, 1-4 STEAM GENERATOR CHANNEL IV PRESSURE TRANSMITTER (MPP-242) WAS REMOVED FROM SERVICE TO ALLOW FOR REPAIR OF A STEAM LEAK. THIS CONDITION WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.3.2.1. THE ACTION REQUIREMENTS WERE MET. THE CHANNEL WAS RETURNED TO SERVICE IN 48 MINUTES. INVESTIGATION FOUND THE STEAM LEAK BETWEEN THE TRANSMITTER AND THE TRANSMITTER ISOLATION VALVE. LEAK WAS REPAIRED BY REPLACEMENT OF THE TUBING BETWEEN TRANSMITTER AND TRANSMITTER ISOLATION VALVE. TRANSMITTER WAS VERIFIED TO OPERATE CORRECTLY AND RETURNED TO SERVICE.

[78] COOK 1 DOCKET 50-315 LER 83-116
 AUXILIARY FEEDPUMP FIRE DOOR COMES OFF ITS RAIL.
 EVENT DATE: 111383 REPORT DATE: 121383 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 187787) OPERATOR ON TOUR ATTEMPTED TO ENTER THE AUXILIARY FEEDPUMP ROOM WHEN THE SLIDING DOOR CAME OFF THE RAIL. THE OPERATORS PUT THE DOOR BACK ON THE TRACK. A FIRE WATCH WAS POSTED FOR THE HALF HOUR THE DOOR WAS INOPERABLE. THIS IS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.10. THIS IS THE FIRST OCCURRENCE FOR DOOR #292. THE ROLLERS ON THE SLIDING DOOR ARE NOTCHED AND THE

TRACK IS RIBBED. ONE OF THE ROLLERS WAS RIDING ON TOP OF THE RIB AND OUT OF THE NOTCH WHEN THE OPERATOR ATTEMPTED TO OPEN THE DOOR. THE OTHER ROLLER FELL OUT OF THE TRACK WHEN AN ATTEMPT WAS MADE TO FIX THE DOOR. DOOR WAS PLACED IN THE TRACK AND HAS HAD NO FURTHER PROBLEMS. A RETAINER WILL BE INSTALLED TO PREVENT RECURRENCE.

[79] COOK 1 DOCKET 50-315 LER 83-117
 FEEDWATER FLOW CHANNEL SETPOINT DRIFTS.
 EVENT DATE: 111583 REPORT DATE: 121483 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: FOXBORO CO., THE

(NSIC 187788) 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 NON-CONSERVATIVE 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 THE 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.

[80] COOK 1 DOCKET 50-315 LER 83-113
 TWO DELTA TEMPERATURE BISTABLES FAIL.
 EVENT DATE: 111783 REPORT DATE: 120183 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: FOXBORO CO., THE

(NSIC 187546) AT 0910 HOURS DURING PLANNED SURVEILLANCE TESTING, LOOP 1 OVERPOWER DELTA TEMPERATURE ROD STOP AND REACTOR TRIP BISTABLE FAILED TO TRIP. AT 1150 HOURS, LOOP 2 OVERTEMPERATURE DELTA TEMPERATURE MODULE FAILED HIGH. THESE EVENTS COMBINED WERE LESS CONSERVATIVE THAN THE LEAST CONSERVATIVE REQUIREMENT OF TECH SPEC 3.3.1.1, TABLE 3.3-1. THE ACTION REQUIREMENTS WERE MET. THE LOOP 1 BISTABLE, OVERPOWER DELTA TEMPERATURE ROD STOP AND REACTOR TRIP WAS REPLACED, CALIBRATED, AND RETURNED TO SERVICE AT 1226 HOURS. AT THIS TIME THE UNIT WAS PLACED IN A CONDITION THAT WAS WITHIN THE REQUIREMENTS OF ACTION STATEMENT #6 OF TECH SPEC 3.3.1.1 TABLE 3.3-1. THE MODULE FOR LOOP 2 OVERTEMPERATURE DELTA TEMPERATURE WAS ALSO REPLACED, CALIBRATED AND RETURNED TO SERVICE AT 1901 HOURS.

[81] COOK 1 DOCKET 50-315 LER 83-118
 SWITCHGEAR ROOM FIRE DOOR FAILS TO LATCH.
 EVENT DATE: 112183 REPORT DATE: 121483 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 187790) DURING NORMAL OPERATION, A FIRE DOOR IN THE 4KV SWITCHGEAR ROOM, DOOR #462, WOULD NOT LATCH PROPERLY. THIS CONDITION WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.10. THE ACTION REQUIREMENTS WERE MET. FIRE WATCHES WERE POSTED UNTIL THE DOOR WAS REPAIRED. THE REPAIRS WERE COMPLETED AND THE DOOR WAS TESTED AND RETURNED TO SERVICE. THIS WAS THE FIRST OCCURRENCE OF THIS TYPE FOR DOOR #462. THE LATCH PLATE WAS FOUND TO BE SLIGHTLY MISALIGNED. THE LATCH PLATE WAS REALIGNED AND THE DOOR CLOSER ADJUSTED. THE REALIGNMENT OF THE LATCH PLATE SHOULD PREVENT FAILURE OF A SIMILAR NATURE.

[82] COOK 2 DOCKET 50-316 LER 81-034 REV 1
 UPDATE ON STEAM GENERATOR BLOWDOWN RADIATION MONITOR INOPERABLE.
 EVENT DATE: 071581 REPORT DATE: 082581 NSSS: WE TYPE: PWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

[85] COOK 2 DOCKET 50-316 LER 83-103
LONG RESPONSE TIME OF LETDOWN ISOLATION VALVE.
EVENT DATE: 102483 REPORT DATE: 112283 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
VENDOR: COPES-VULCAN, INC.

(NSIC 187418) DURING A SURVEILLANCE TEST WHILE IN MODE 5, THE LETDOWN ISOLATION VALVE OQCR-301 WOULD NOT CLOSE WITHIN THE SPECIFIED TIME. THE INITIAL TEST TIME WAS 17.09 SECONDS. ON REPEATED CYCLES THE CLOSING TIME WAS 3 SECONDS. ALTHOUGH THE VALVE IS NOT REQUIRED TO BE OPERABLE IN MODE 5, IT MAY HAVE BEEN UNABLE TO MEET THE CLOSING TIME REQUIREMENT PRIOR TO ENTRY INTO MODE 5, WHICH IS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.6.3.1. IT IS BELIEVED THAT DUE TO A MINOR PACKING LEAK, BORON SOLIDIFICATION OCCURRED IN THE STUFFING BOX, THEREBY NOT ALLOWING THE VALVE TO SHUT IN THE SPECIFIED TIME. THE BORIC ACID WAS REMOVED AND THE PACKING ADJUSTED. THE VALVE WAS TESTED WITH SATISFACTORY RESULTS.

[86] COOK 2 DOCKET 50-316 LER 83-104
FIRE DOOR FAILS TO LATCH.
EVENT DATE: 110483 REPORT DATE: 112283 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 187419) DURING POST REFUELING STARTUP, FIRE DOOR #388 TO QUADRANT 2 OF THE REACTOR CABLE TUNNEL WAS FOUND TO BE INTERMITTENTLY UNABLE TO LATCH. THIS CONSTITUTED AN INOPERABLE PENETRATION FIRE BARRIER. THIS CONDITION IS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.7.10. ACTION REQUIREMENTS WERE MET. SIMILAR OCCURRENCES WERE REPORTED AS R.O.'S 316/82-065, 82-111 AND 83-006. THE DOOR SPINDLE WAS FOUND BENT, APPARENTLY DUE TO A BLOW TO THE KNOB. THE EXACT CAUSE COULD NOT BE DETERMINED. THE SPINDLE WAS REPLACED AND THE DOOR WAS TESTED AND RETURNED TO SERVICE.

[87] COOK 2 DOCKET# 50-316 LER 83-105
TWO ICE CONDENSER INTERMEDIATE DOORS FOUND INOPERABLE.
EVENT DATE: 110583 REPORT DATE: 120183 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: OTHER COMPONENTS
VENDOR: DAYCO SHEET METAL

(NSIC 187547) DURING A ROUTINE TOUR, TWO ICE CONDENSER INTERMEDIATE DECK DOORS WERE FOUND TO BE INOPERABLE. THIS CONDITION WAS NONCONSERVATIVE WITH RESPECT TO TECH SPEC 3.6.5.3. ACTION REQUIREMENTS WERE MET. THE DOORS WERE RETURNED TO SERVICE IN 17 HOURS AND 30 MINUTES. NO PREVIOUS OCCURRENCE REPORTED. BRACING INSTALLED AS PART OF A CURRENT DESIGN CHANGE WAS OBSTRUCTING 2 INTERMEDIATE DECK DOORS. THE BRACING HAS BEEN MODIFIED AND REINSTALLED. OPERABILITY WAS VERIFIED. CONSTRUCTION PERSONNEL HAVE BEEN INSTRUCTED AS TO THE IMPORTANCE OF THE INTERMEDIATE DECK DOORS AND THEIR OPERABILITY.

[88] COOK 2 DOCKET 50-316 LER 83-106
ANALOG ROD POSITION INDICATOR FAILS LOW TWICE.
EVENT DATE: 110583 REPORT DATE: 120183 NSSS: WE TYPE: PWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187548) ON TWO OCCASIONS DURING THE SURVEILLANCE TESTING OF THE ANALOG ROD POSITION INDICATION IT WAS FOUND THAT THE CHANNEL FOR ROD B-6 CONTROL BANK B WAS PEGGED LOW WITH CONTROL BANK B WITHDRAWN TO 228 STEPS. THE CHANNEL WAS DECLARED INOPERABLE. THESE EVENTS WERE NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.1.3.3. THE ACTION REQUIREMENTS WERE MET. INVESTIGATION FOUND IN BOTH INSTANCES THE FEMALE PINS LOCATED AT THE REACTOR HEAD DISCONNECT BOARD FOR ROD B-6 WERE PULLED BACK FROM THE MALE PINS AT THE CONNECTOR. DURING THE SECOND REPAIR, THE CABLE WAS REPOSITIONED TO ELIMINATE STRAIN ON THE CONNECTOR. THE CHANNEL FOR ROD B-6 WAS VERIFIED TO OPERATE CORRECTLY AND RETURNED TO SERVICE.

[89] COOK 2 DOCKET 50-316 LER 83-109
MISCELLANEOUS LOOSE DEBRIS LEFT INSIDE CONTAINMENT.
EVENT DATE: 110683 REPORT DATE: 120283 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187550) MISCELLANEOUS ITEMS (LADDER, ANTI-C RECEPTACLE, TRASH RECEPTACLE, STANCHION) WERE DISCOVERED NEAR THE PERSONNEL AIRLOCK IN UPPER CONTAINMENT. THE ITEMS HAD BEEN COLLECTED FOR REMOVAL AND PLACED NEAR THE AIR LOCK BUT WERE NOT REMOVED FROM THE CONTAINMENT PRIOR TO ENTRY INTO MODE 4 AFTER REFUELING. THIS WAS NON-CONSERVATIVE WITH RESPECT TO TECH SPEC 3.5.2. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE 50/316 83-041. THE CONTAINMENT INSPECTION TOUR PROCEDURE LACKED A DEFINITIVE SIGN-OFF TO VERIFY 'LOOSE DEBRIS' HAD BEEN REMOVED FROM THE UPPER VOLUME. SUCH A SIGNOFF EXISTED FOR THE LOWER VOLUME. THE ITEMS WERE IMMEDIATELY REMOVED AFTER DISCOVERY WHICH OCCURRED 56 HRS. 13 MIN. AFTER MODE CHANGE. THE PROCEDURE HAS BEEN REVISED TO INCLUDE 'LOOSE DEBRIS' SIGNOFF FOR THE UPPER VOLUME.

[90] COOK 2 DOCKET 50-316 LER 83-112
DIESEL GENERATOR FAILS TO START.
EVENT DATE: 111683 REPORT DATE: 121483 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FISHER CONTROLS CO.

(NSIC 187792) DURING OPERABILITY TESTING, FOLLOWING MAINTENANCE ON THE AB DIESEL GENERATOR, AN INCOMPLETE START WAS RECEIVED. THIS EVENT IS BEING REPORTED BY REQUIREMENTS OF TECH SPEC 4.8.1.1.3. INVESTIGATION FOUND THAT THE MECHANICAL ZERO ON THE VOLTAGE TO PRESSURE TRANSDUCER, IN THE TACHOMETER CIRCUITRY HAD DRIFTED. THE MECHANICAL ZERO WAS READJUSTED, AB DIESEL GENERATOR WAS SUCCESSFULLY STARTED AND DECLARED OPERABLE. TO PREVENT RECURRENCE OF THIS EVENT THE CALIBRATION FREQUENCY HAS BEEN INCREASED ON THE VOLTAGE TO PRESSURE TRANSDUCER.

[91] COOK 2 DOCKET 50-316 LER 83-108
HIGH CONCENTRATION OF HYDROGEN AND OXYGEN IN THE WASTE GAS HOLDUP SYSTEM.
EVENT DATE: 111883 REPORT DATE: 120283 NSSS: WE TYPE: PWR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187549) DURING STARTUP OF UNIT 2 ON 11-03-83, WHILE VENTING THE VOLUME CONTROL TANK TO THE WASTE GAS HOLDUP SYSTEM (#3 GAS DECAY TANK) THE CONCENTRATION FOR BOTH OXYGEN AND HYDROGEN WERE ANALYZED AND FOUND TO EXCEED THE 4% LIMIT OF TECH SPEC 3.11.2.5. WHILE INVESTIGATING THE EVENT OF 11-03-83 ON 11-18-83, IT WAS DISCOVERED THAT ADDITIONS TO THE #3 GAS DECAY TANK HAD NOT BEEN SUSPENDED AS REQUIRED BY ACTION ITEM B UNTIL APPROXIMATELY SIXTEEN HOURS AFTER THE LIMITS HAD BEEN EXCEEDED. THE VOLUME CONTROL TANK (VCT) WAS VENTED TO THE VENT HEADER PER PROCEDURE TO ESTABLISH A HYDROGEN ATMOSPHERE. THE VCT GAS SPACE AT THIS TIME WAS OXYGENATED CAUSING THE WASTE GAS HOLDUP SYSTEM TO EXCEED THE TECH SPEC LIMIT OF 4% FOR APPROXIMATELY 35 HOURS. THE #3 GDT WAS PRESSURIZED WITH NITROGEN AND RELEASED.

[92] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-002 REV 1
UPDATE ON INADEQUATE SEISMIC RESTRAINTS.
EVENT DATE: 010682 REPORT DATE: 071383 NSSS: BW TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS

(NSIC 184734) AFTER REMOVAL OF MUP-1B PUMP CASING BY MP-126, IT WAS DISCOVERED THAT THE PUMP CASING WAS A SEISMIC ANCHOR. THIS CREATED AN EVENT CONTRARY TO TECH SPEC 6.9.1.9(C). AFTER GILBERT ASSOCIATES, INC. ENGINEERING ANALYSIS WAS PERFORMED, RESTRAINTS WERE ADDED TO THE DISCHARGE AND RECIRCULATION PIPING OF

MUP-1B. THE CAUSE OF THIS EVENT IS ATTRIBUTED TO A FAILURE OF PROCEDURE MP-126 TO IDENTIFY REQUIRED SEISMIC EVALUATION. MAINTENANCE PROCEDURES WERE REVIEWED TO IDENTIFY ANY ADDITIONAL PROCEDURAL INADEQUACIES. THE APPLICABLE MAINTENANCE PROCEDURES WERE REVISED TO REQUIRE A SEISMIC EVALUATION WHEN PORTIONS OF A SYSTEM WERE REMOVED FOR EXTENDED PERIODS OF TIME.

[93] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-003 REV 1
 UPDATE ON RCS PRESSURE BOUNDARY LEAK.
 EVENT DATE: 012882 REPORT DATE: 072683 NSSS: BW TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
 VENDOR: VELAN ENGINEERING COMPANIES

(NSIC 184735) AT 1430, DURING NORMAL OPERATION, RCS LEAKAGE CALCULATIONS SHOWED UNIDENTIFIED LEAKAGE AT GREATER THAN 1.0 GPM. THE PLANT WAS MANUALLY SHUT DOWN TO MODE 3. AT 1830 ON JANUARY 29, 1982, WHILE PERFORMING A VISUAL INSPECTION TO IDENTIFY LEAKAGE SOURCE, AN RCS PRESSURE BOUNDARY LEAK WAS DISCOVERED IN THE VALVE BODY OF MUV-43. THESE EVENTS WERE CONTRARY TO TECH SPEC 3.4.6.2. THE PLANT WAS COOLED DOWN TO MODE 5. THIS IS THE FIRST OCCURRENCE CONCERNING MUV-43 AND THE SECOND REPORT UNDER THIS SPECIFICATION. THE CAUSE OF THIS EVENT IS ATTRIBUTED TO THERMALLY INDUCED CYCLIC FATIGUE. MUV-43 WAS REMOVED FOR FAILURE ANALYSIS. A NEW VALVE WILL BE INSTALLED IN AN IMPROVED LOCATION. ALL FOUR EJECTION LINES WERE VISUALLY INSPECTED AND NDE'D. A DETAILED REPORT DESCRIBING THE INVESTIGATIONS AND REPAIRS WAS SUBMITTED ON APRIL 30, 1982.

[94] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-004 REV 1
 UPDATE ON REACTOR COOLANT PUMP LEAKAGE.
 EVENT DATE: 012982 REPORT DATE: 072683 NSSS: BW TYPE: PWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PIPES, FITTINGS

(NSIC 184736) AT 1100, WHILE PERFORMING A VISUAL INSPECTION OF RCP-A SEAL PACKAGE, PRESSURE BOUNDARY LEAKAGE WAS DISCOVERED FROM A CRACK IN THE WELD BETWEEN THE THIRD STAGE CAVITY AND A VENT PIPE ON THE SEAL. THIS CREATED AN EVENT CONTRARY TO TECH SPEC 3.4.6.2(A). THE PLANT WAS IN MODE 3 AT THE TIME OF DISCOVERY. THE PLANT WAS COOLED DOWN AND MODE 5 WAS ENTERED AT 0255 ON JANUARY 30, 1982. THIS IS THE FIRST OCCURRENCE CONCERNING RCP-A AND THE THIRD EVENT REPORTED UNDER THIS SPECIFICATION. THE CRACK IN THE SEAL WAS CAUSED BY AN INSTALLATION ERROR. APPARENTLY, THE SEAL HAD BEEN DAMAGED DURING INSTALLATION. THE PLANT WAS COOLED DOWN TO MODE 5 AND THE SEAL PACKAGE REPLACED WITH A REBUILT SPARE SEAL PACKAGE. THE PROCEDURES CONTROLLING INSTALLATION OF THE SEAL PACKAGES WERE REVISED TO STRESS THE IMPORTANCE OF PROPERLY HANDLING THE PACKAGE DURING INSTALLATION.

[95] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-013 REV 1
 UPDATE ON LEAKAGE FROM MAKEUP SYSTEM.
 EVENT DATE: 022882 REPORT DATE: 070683 NSSS: BW TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PIPES, FITTINGS

(NSIC 184737) AT 1800 DURING ROUTINE INSPECTION, A LEAK WAS DISCOVERED ON THE PRESSURE SIDE OF MUV-292 IN THE "HEAT AFFECTED AREA" OF THE WELD. THIS CREATED AN EVENT CONTRARY TO TECH SPEC 3.1.2.4.1. MUP-1A WAS SECURED AND MUP-1C WAS STARTED. MAINTENANCE WAS INITIATED AND OPERABILITY WAS RESTORED AT 1200 ON 3/1/82. THIS IS THE FIRST REPORTABLE OCCURRENCE FOR THIS EVENT AND THIS IS THE FIRST REPORT UNDER THIS SPECIFICATION. ENGINEERING EVALUATION CONFIRMED THE CAUSE OF THIS FAILURE TO BE VIBRATION. VIBRATIONS WERE FOUND TO BE CAUSED BY FLUID TURBULENCE AT THE RECIRC. LINE ORIFICE & HYDROGEN BUBBLES RESULTING FROM FLUID PRESSURE OSCILLATIONS. CURRENT INDICATIONS ARE THAT THE INITIAL SHORT TERM CORRECTIVE ACTION TAKEN HAS CORRECTED THE PROBLEM. THIS REVISION DOCUMENTS RESULTS OF ENG. EVALUATION.

[96] CRYSTAL RIVER 3 DOCKET 50-302 LER 82-037 REV 1
 UPDATE ON LEAKAGE FROM MAKEUP SYSTEM.
 EVENT DATE: 051082 REPORT DATE: 070683 NSSS: BW TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PIPES, FITTINGS

(NSIC 184738) AT 1300 ON 5-10-82 AND 1604 ON 5-21-82 DURING ROUTINE INSPECTION, A LEAK WAS DISCOVERED AT THE WELD PENETRATION ON MUV-292. AT 0337 ON 5-31-82 A LEAK WAS ALSO DISCOVERED AT THE WELD PENETRATION ON MUV-283. THESE EVENTS ARE CONTRARY TO TECH SPEC 3.1.2.4.1. IN EACH INSTANCE THE PUMP WAS SECURED AND MAINTENANCE WAS INITIATED. OPERABILITY WAS RESTORED AT 0530 ON 5-11-82, 1035 ON 5-22-82 AND AT 0116 ON 6-1-82, RESPECTIVELY. THIS IS THE SECOND, THIRD AND FOURTH OCCURRENCE FOR THIS EVENT AND THE SECOND REPORT UNDER THIS SPEC. ENGINEERING EVALUATION CONFIRMED THE CAUSE OF THESE FAILURES TO BE VIBRATION. VIBRATIONS WERE FOUND TO BE CAUSED BY FLUID TURBULENCE AT THE RECIRC. LINE ORIFICE & HYDROGEN BUBBLES RESULTING FROM FLUID PRESSURE OSCILLATIONS. CURRENT INDICATIONS ARE THAT THE INITIAL SHORT TERM CORRECTIVE ACTION TAKEN HAS CORRECTED THE PROBLEM. THIS REVISION DOCUMENTS RESULTS OF ENG. EVALUATION.

[97] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-039
 SEVERAL PROCESS INSTRUMENTS OUT OF CALIBRATION.
 EVENT DATE: 091383 REPORT DATE: 101383 NSSS: BW TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: BAILEY METER COMPANY

(NSIC 186265) ON SEPTEMBER 13, 1983, PRELIMINARY FINDINGS OF AN ENGINEERING EVALUATION CONCLUDED THAT THERE WERE APPROXIMATELY A DOZEN PROCESS INSTRUMENTS INOPERABLE PER TECH SPEC 3.3. THESE INSTRUMENTS WERE DISCOVERED TO BE OUT OF CALIBRATION DURING MODE 4 SURVEILLANCE TESTING AND ARE BEING REPORTED AS SUGGESTED BY REGULATORY GUIDE 1.16. THE CAUSE IS STILL UNDER INVESTIGATION. THE INSTRUMENTS WERE RECALIBRATED WITHIN ALLOWABLE LIMITS WITH THE EXCEPTION OF A TRANSMITTER WHICH WAS REPLACED.

[98] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-045 REV 1
 UPDATE TO WIND DIRECTION INDICATORS FAIL.
 EVENT DATE: 101683 REPORT DATE: 120183 NSSS: BW TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: CLIMET INSTRUMENTS CO.

(NSIC 187846) ON OCTOBER 16, 1983, DURING ROUTINE PLANT OPERATION, IT WAS DISCOVERED THAT THE 175' WIND DIRECTION INSTRUMENTATION WAS INOPERABLE. ON OCTOBER 28, 1983, THE 33' WIND DIRECTION INSTRUMENTATION WAS DISCOVERED INOPERABLE. ON NOVEMBER 2, 1983, THE 33' WIND DIRECTION INSTRUMENTATION WAS DISCOVERED INOPERABLE. ON NOVEMBER 4, 1983, THE 175' WIND DIRECTION INSTRUMENTATION WAS OUT OF TOLERANCE. ON NOVEMBER 8, 1983, THE 175' WIND SPEED INSTRUMENTATION WAS INOPERABLE. BACKUP DATA WAS AVAILABLE THROUGH A PRE-ESTABLISHED CHANNEL FROM THE NATIONAL WEATHER SERVICE. THE APPARENT CAUSES FOR THE INSTRUMENTATION FAILURES ARE SEVERE WEATHER DAMAGE AND COMPONENT FAILURE. ALL INSTRUMENTATION WAS REPAIRED AND RETURNED TO SERVICE BY NOVEMBER 9, 1983. THIS REVISION DOCUMENTS ADDITIONAL FAILURES DURING THE SAME TIME PERIOD.

[99] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-044 REV 1
 UPDATE ON RB VENTILATION SYSTEM INOPERABLE.
 EVENT DATE: 101883 REPORT DATE: 111083 NSSS: BW TYPE: PWR
 SYSTEM: AIR COND, HEAT, COOL, VENT SYSTEM COMPONENT: VALVE OPERATORS
 VENDOR: JOHNSON CONTROLS INC.

(NSIC 187845) AT 1330 ON OCT. 18, 1983, WHILE SWITCHING FROM AIR HANDLING FANS AHF-14B&D TO AHF-14A&C DUE TO LOW FLOW, AHF-14A&C WOULD NOT START. THE AUXILIARY

BUILDING VENTILATION EXHAUST SYSTEM WAS NOT OPERABLE AS REQUIRED BY TECH SPEC 3.7.8.1. ATTEMPTS TO RESTART AHF-14B&D WERE UNSUCCESSFUL, LEAVING BOTH PAIRS OF EXHAUST FANS INOPERABLE. PROBABLE CONSEQUENCES COULD POSSIBLY RESULT IN DISCHARGE OF UNMONITORED RELEASE FROM AUX. BLDG. A DIRECT RESULT OF THE FAN INOPERABILITY WAS FAILURE TO PERFORM PRIMARY COOLANT SAMPLE ISOTOPIC ANALYSIS FOR IODINE AS REQUIRED BY TECH SPEC 3.4.8. THE CAUSE IS ATTRIBUTED TO THE DAMPER SOLENOID VALVE ON AHF-14A&C FAILING, CAUSING THE DAMPER TO REMAIN CLOSED, PREVENTING THE FAN FROM STARTING. FAILURE OF AHF-14B&D WAS APPARENTLY DUE TO METAL FATIGUE. THE DC COIL IN THE SOLENOID VALVE WAS REPLACED AND DECLARED OPERABLE ON OCT. 18, 1983 AT 1534. AHF-14D MOTOR WAS REPAIRED AND DECLARED OPERABLE ON OCT 22, 1983 AT 2157.

[100] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-047
SEISMIC RECORDING CASSETTES FAIL TO FUNCTION.
EVENT DATE: 102183 REPORT DATE: 112183 NSSS: BW TYPE: PWR
SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: KINEMATICS, INC.

(NSIC 187416) ON OCTOBER 21, 1983, TWO SEISMIC MONITORING INSTRUMENTATION CHANNELS WERE ASSUMED TO HAVE BEEN INOPERABLE FOR AT LEAST 30 DAYS. A SPECIAL REPORT WAS SUBMITTED ON OCTOBER 31, 1983 PER TECH SPECS 3.3.3.3 AND 6.9.2. ON OCTOBER 27, 1983, THESE CHANNELS WERE SHOWN TO BE OPERABLE. THIS IS THE THIRD EVENT REPORTED UNDER TECH SPEC 3.3.3.3. THE CAUSE WAS AN INADEQUATE PROCEDURE, ALLOWING THE MAGNETIC DATA RECORDING CASSETTES TO BE USED PAST THEIR NATURAL END-OF-LIFE. APPROPRIATE PROCEDURES ARE BEING DEVISED.

[101] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-048
TWO MAKEUP PUMPS REMOVED FROM SERVICE.
EVENT DATE: 102683 REPORT DATE: 112583 NSSS: BW TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: VELAN VALVE CORP.

(NSIC 187537) AT 1715 ON OCT. 26, 1983, MAKEUP PUMP 1C (MUP-1C) WAS TAKEN OUT OF SERVICE TO REPAIR A WELD LEAK ON MUV-283 (RECIRC. VENT VALVE). MUP-1A WAS SHUTDOWN FOR MAINTENANCE ON 11/7/83, THEREFORE, ONLY ONE MAKEUP PUMP WAS AVAILABLE, CONTRARY TO THE REQUIREMENTS OF TECH SPEC 3.1.2.4.1. ECCS TRAIN 'B' WAS DECLARED INOPERABLE (TECH SPEC 3.5.2) AS HIGH PRESSURE INJECTION, MUP-1C, WAS OUT OF SERVICE. ES TRAIN 'A' WAS AVAILABLE HAD HPI BEEN NEEDED. THIS IS THE 3RD REPORT UNDER TECH SPEC 3.1.2.4.1 AND THE 24TH REPORT UNDER TECH SPEC 3.5.2. MUV-283 (RECIRCULATION VENT VALVE) HAD CRACKED WELD. THE VALVE WAS REPLACED AND SATISFACTORILY TESTED. MUP-1C WAS RETURNED TO SERVICE AT 2046 ON OCT. 27, 1983, AFTER COMPLETING SURVEILLANCE PROCEDURE SP-340, ECCS PUMP OPERABILITY. AN ENGINEERING EVALUATION IS IN PROGRESS TO DETERMINE IF A MODIFICATION TO THE MAKEUP SYSTEM IS NEEDED.

[102] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-051
EMERGENCY DIESEL GENERATOR FAILS.
EVENT DATE: 110783 REPORT DATE: 121283 NSSS: BW TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUETION

(NSIC 187417) ON NOVEMBER 7, 1983, AT 0650, WHILE VERIFYING EMERGENCY DIESEL GENERATOR OPERABILITY, EMERGENCY DIESEL GENERATOR "B" (EDG-B) TRIPPED AFTER APPROXIMATELY 10 MINUTES OF OPERATION. EDG-B WAS DECLARED INOPERABLE (TECH SPEC 3.8.1.1) AND MAINTENANCE WAS INITIATED. EDG-A WAS STARTED TO VERIFY ITS OPERABILITY. THIS IS THE FIRST OCCURRENCE OF THIS TYPE OF FAILURE AND THE THIRTY-FOURTH REPORT UNDER THIS SPECIFICATION. EDG-B WAS INOPERABLE DUE TO WORN INSULATION ON A SECTION OF WIRE LEADING TO A SELECTOR SWITCH. THIS RESULTED IN LOSS OF CONTROL POWER ON EDG-B. THE WIRING WAS REPLACED AND EDG-B WAS OPERABLE

AT 0605 ON NOVEMBER 8, 1983. ALL CONNECTIONS AND FITTINGS WERE VERIFIED TIGHT. NO OTHER DEGRADED WIRING WAS FOUND.

[103] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-059
 POSTACCIDENT MONITORING RECORDER FAILS.
 EVENT DATE: 112583 REPORT DATE: 122783 NSSS: BW TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: LEEDS & NORTHRUP CO.

(NSIC 187847) DURING THE PERIOD BETWEEN NOVEMBER 25, 1983 AND DECEMBER 8, 1983, A MULTIPOINT RECORDER FOR THE POST-ACCIDENT MONITORING SYSTEM WAS INOPERABLE ON FOUR OCCASIONS. ATTACHMENT 1 REPRESENTS THE DETAILS OF THE OCCURRENCES. THERE WERE REDUNDANT INDICATORS AND/OR RECORDERS AVAILABLE DURING THE TIME RECORDERS WERE INOPERABLE. THIS IS THE FOURTEENTH REPORT UNDER TECH SPEC 3.3.3.6. A SUMMARY OF THE ABOVE EVENTS AND THEIR APPARENT CAUSES ARE PRESENTED IN ATTACHMENT 1. THE IMMEDIATE CORRECTIVE ACTION FOR EACH FAILURE IS INCLUDED IN ATTACHMENT 1. THE LONG TERM CORRECTIVE ACTION IS TO PLACE THE INSTRUMENTATION INVOLVED ON A PREVENTIVE MAINTENANCE PROGRAM TO PREVENT RECURRENCE.

[104] CRYSTAL RIVER 3 DOCKET 50-302 LER 83-060
 DECAY HEAT COOLER TEMPERATURE INDICATOR INOPERABLE.
 EVENT DATE: 112983 REPORT DATE: 122983 NSSS: BW TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: BAILEY METER COMPANY

(NSIC 187848) AT 1525 ON NOVEMBER 29, 1983, IT WAS DISCOVERED THAT THE DECAY HEAT COOLER "B" DISCHARGE TEMPERATURE INDICATOR, DH-2-T12, WAS INDICATING MID-SCALE, 150 DEGREES, AND NOT THE ACTUAL TEMPERATURE OF 71 DEGREES, INDICATED BY THE PLANT COMPUTER. THE METER WAS REMOVED, CHECKED, CLEANED AND RETURNED TO SERVICE AT 1800 ON NOVEMBER 29, 1983. ONLY THE TEMPERATURE INDICATION WAS LOST. THIS IS THE SECOND EVENT OF THIS TYPE AND THE TWENTY-FIFTH REPORT UNDER TECH SPEC 3.5.2. THE CAUSE OF THIS EVENT IS UNDETERMINED AT THIS TIME. THE METER WAS CHECKED, CLEANED AND RETURNED TO SERVICE. FPC WILL CONTINUE TO MONITOR THIS COMPONENT TO DETERMINE IF FURTHER CORRECTIVE ACTION IS WARRANTED.

[105] DAVIS-BESSE 1 DOCKET 50-346 LER 83-030
 VIOLATION OF FIRE BARRIER AND NEG. PRESSURE BOUNDARY IN SHIELD BUILDING.
 EVENT DATE: 061483 REPORT DATE: 071383 NSSS: BW TYPE: PWR
 SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 184625) (NP-33-83-39) AT 1500 HOURS ON 6/14/83, FLOOR PLUGS BETWEEN ELEVATIONS 555' AND 565' AND ELEVATION 8 565' AND 585' WERE REMOVED TO FACILITATE CHANGING OF #1 EMERGENCY CORE COOLING SYSTEM COIL ASSEMBLY. AT 0845 HOURS ON 6/15/83, IT WAS DISCOVERED THAT THE FLOOR PLUGS WERE A PART OF THE NEGATIVE PRESSURE BOUNDARY AND FIRE BARRIERS, PLACING THE UNIT IN VIOLATION OF TECH SPECS 3.6.5.2 AND 3.7.10. BOTH EMERGENCY VENTILATION SYSTEM TRAINS WERE OPERABLE AND WOULD HAVE PROVIDED A NEGATIVE PRESSURE IN THE AREA. THE CAUSE WAS PERSONNEL ERROR. ALSO PROCEDURES DID NOT SPECIFICALLY ADDRESS FLOOR PLUG REMOVAL. AT 0910 HOURS ON 6/15/83, A FIRE WATCH WAS ESTABLISHED SATISFYING ITEM 2 OF TECH SPEC 3.7.10. AT 0940 HOURS ON 6/15/83, THE FLOOR PLUGS WERE REINSTALLED REMOVING THE UNIT FROM THE ACTION STATEMENT OF TECH SPEC 3.6.5.2. MAINTENANCE INSTRUCTION M-118 WAS WRITTEN SPECIFICALLY ADDRESSING FLOOR PLUG REMOVAL AND REPLACEMENT.

[106] DAVIS-BESSE 1 DOCKET 50-346 LER 83-045
 ESSENTIAL BUS DEENERGIZED DURING TESTING.
 EVENT DATE: 082783 REPORT DATE: 092383 NSSS: BW TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 186198) (NP-33-83-57) ON 8/27/83 AT 0955 HOURS, WHILE HOOKING UP LEADS FOR SURVEILLANCE TEST 5030.09, "REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME TEST", AN I&C TECHNICIAN SHORTED TEST LEADS TOGETHER CAUSING AN ESSENTIAL BUS FUSE TO BLOW, DE-ENERGIZING Y1 BUS. THIS MADE NI-2 INOPERABLE, PLACING THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.9.12. NI-1 WAS OPERABLE THROUGHOUT THIS OCCURRENCE. DUE TO THE CLOSE CONFINEMENT OF THE TERMINAL BOARD LOCATIONS, THE I&C TECHNICIAN INADVERTENTLY SHORTED THE TEST LEADS TOGETHER. NI-2 WAS DECLARED OPERABLE AT 1250 HOURS ON 8/27/83. DESIGN MODIFICATIONS HAVE ALREADY BEEN MADE TO THESE TERMINALS TO PRECLUDE RECURRENCE. A PROCEDURE MODIFICATION WILL BE MADE TO MAKE I&C TECHNICIANS MORE CONSCIOUS OF THE POTENTIAL OF SHORTING OUT ESSENTIAL BUSES.

[107] DAVIS-BESSE 1 DOCKET 50-346 LER 83-058
 FIRE BARRIER SEAL MISSING.
 EVENT DATE: 102183 REPORT DATE: 111883 NSSS: BW TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187424) (NP-33-83-79) ON 10/21/83 AT 1300 HOURS, A QUALITY CONTROL INSPECTOR NOTICED A PIPE (3/4" STATION AIR SYSTEM) PASSING THROUGH A FIRE BARRIER WALL ABOVE DOOR 309 THAT WAS NOT TEMPORARILY OR PERMANENTLY SEALED AROUND THE PIPE WITH FIRE RETARDANT MATERIAL. THIS PLACED THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.7.10. FIRE DETECTION AND SUPPRESSION SYSTEMS ARE LOCATED ON BOTH SIDES OF DOOR 309. THE CAUSE OF THIS OCCURRENCE WAS PERSONNEL ERROR IN THAT WHEN THE PIPE WAS RUN DURING INITIAL PLANT CONSTRUCTION, A PERMANENT OR TEMPORARY SEAL WAS NOT ACCOMPLISHED AROUND THE PIPE. THE FIREWALL WAS IMMEDIATELY SEALED WITH KAOWOOL, WHICH REMOVED THE UNIT FROM THE ACTION STATEMENT. THE PENETRATION WILL BE PERMANENTLY SEALED UNDER MAINTENANCE WORK ORDER 1-83-5443-00.

[108] DAVIS-BESSE 1 DOCKET 50-346 LER 83-059
 ONE AUXILIARY FEEDWATER TRAIN DECLARED INOPERABLE.
 EVENT DATE: 110383 REPORT DATE: 120183 NSSS: BW TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVES

(NSIC 187562) (NP-33-83-82) ON 11/3/83 AT 0006 HOURS, POSITION INDICATION FOR AUXILIARY FEEDWATER (AFW) PUMP 2 STEAM ISOLATION VALVE MS107A WAS LOST IN THE CONTROL ROOM. AFW TRAIN 2 WAS THEREBY DECLARED INOPERABLE, PLACING THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.7.1.2. AFW TRAIN 1 WAS OPERABLE AT ALL TIMES DURING THIS OCCURRENCE. THE CAUSE OF THIS OCCURRENCE WAS A COMPONENT FAILURE ATTRIBUTED TO THE BLOWN CONTROL POWER FUSE IN THE CONTROL CIRCUITRY OF VALVE MS107A. ON 11/3/83 AT 0042 HOURS, THE BLOWN FUSE WAS REPLACED UNDER MAINTENANCE WORK ORDER 83-1027. THIS RESTORED THE POSITION INDICATION OF MS107A. AFW TRAIN 2 WAS DECLARED OPERABLE, REMOVING THE UNIT FROM THE ACTION STATEMENT.

[109] DAVIS-BESSE 1 DOCKET 50-346 LER 83-060
 CONTAINMENT ISOLATION VALVES FAIL TO OPERATE.
 EVENT DATE: 110483 REPORT DATE: 120183 NSSS: BW TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS

(NSIC 187563) (NP-33-83-84) ON 11/4/83 AT 1040 HOURS, HYDROGEN DILUTION TRAIN 1 CONTAINMENT ISOLATION VALVE CV5090 FAILED TO OPEN ELECTRICALLY. SINCE THE UNIT WAS ALREADY IN THE ACTION STATEMENT OF TECH SPEC 3.6.4.3 DUE TO TRAIN 2 BEING OUT OF SERVICE, THE UNIT ENTERED THE ACTION OF TECH SPEC 3.0.3. ON 11/4/83 AT 1040 HOURS AND ON 11/10/83 AT 0230 HOURS, CONTAINMENT VACUUM BREAKER ISOLATION VALVES

CV5071 AND CV5070, RESPECTIVELY, FAILED, PLACING THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.6.3.1. THE CAUSE OF FAILURE OF CV5090 WAS A FAILURE OF THE TORQUE SWITCH. THE TORQUE SWITCH WAS REPLACED, AND THE VALVE TESTED PER ST 5064.01. CV5090 WAS RETURNED TO SERVICE AT 1435 HOURS ON 11/4/83, REMOVING THE UNIT FROM THE ACTION STATEMENT OF TECH SPEC 3.0.3. CV5071 FAILED DUE TO AN IMPROPERLY INSTALLED GEAR LIMIT SWITCH. CV5070 FAILED DUE TO A FAULTY CONTROL SWITCH.

[110] DAVIS-BESSE 1 DOCKET 50-346 LER 83-061
ONE CHANNEL OF VITAL INSTRUMENT POWER OUT OF SERVICE.
EVENT DATE: 110983 REPORT DATE: 120883 NSSS: BW TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

(NSIC 187812) (NP-33083087) ON 11/9/83 AT 2150 HOURS, 120V AC ESSENTIAL INSTRUMENTATION PANEL Y2 WAS DEENERGIZED. THIS PLACED THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.8.2.1. AT 2300 HOURS ON 11/9/83, Y2 WAS TRANSFERRED TO ITS ALTERNATE POWER SUPPLY. THE REDUNDANT CHANNELS OF INSTRUMENTATION WERE AVAILABLE DURING THIS POWER LOSS TO CHANNEL 2 EQUIPMENT. THE LOSS OF Y2 WAS CAUSED BY A BLOWN MAIN FUSE IN ITS NORMAL POWER SUPPLY INVERTER YV2. A COMPLETE CHECK OF THE INVERTER PER ITS TECHNICAL MANUAL RECOMMENDATION WAS CONDUCTED, AND ALL BRANCH CIRCUIT FUSES WERE CHECKED. NO PROBLEMS WERE FOUND. THE FUSE WAS REPLACED AND Y2 TRANSFERRED BACK TO ITS NORMAL POWER SUPPLY AT 0210 HOURS ON 11/10/83.

[111] DAVIS-BESSE 1 DOCKET 50-346 LER 83-069
INADEQUATE FIRE DOORS.
EVENT DATE: 113083 REPORT DATE: 122983 NSSS: BW TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187862) (NP-33-83-96) ON 11/30/83, NUCLEAR FACILITY ENGINEERING DEPARTMENT RECEIVED NONCONFORMANCE REPORT (NCR) 83-118, WHICH IDENTIFIED THE FOLLOWING FIRE BARRIER DOORS AS HAVING NON-UL LISTED HARDWARE ATTACHMENTS AFFIXED TO THESE DOORS: DOORS 320, 321, 322, 323, 427, 428, 215, 601, AND 603. THESE ATTACHMENTS COMPROMISE THE AFFIXED UL LABELS AND PLACES THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.7.10 FOR THE PREVIOUSLY CITED NONFUNCTIONAL FIRE BARRIER DOORS. THE CAUSE WAS A DESIGN/FABRICATION ERROR. MODIFICATIONS THAT WERE REQUIRED TO UPGRADE SECURITY REQUIREMENTS TO INTERNAL DOORS AT DAVIS-BESSE DOWNGRADED THE FIRE PROTECTION REQUIREMENTS OF THE SAME DOORS. A FIREWATCH WAS ESTABLISHED FOR EACH OF THE DOORS. FACILITY ENGINEERING PERSONNEL ARE CURRENTLY REVIEWING THE OPTIONS AVAILABLE AS CORRECTIVE ACTION.

[112] DIABLO CANYON 1 DOCKET 50-275 LER 83-020
GASEOUS RADWASTE ACTIVITY MONITOR FAILS.
EVENT DATE: 072383 REPORT DATE: 101283 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 186337) PRIOR TO FUEL LOAD, GASEOUS RADWASTE SYSTEM NOBLE GAS ACTIVITY MONITOR (RM-22) FAILED IN SERVICE. SINCE THE GASEOUS WASTE TREATMENT SYSTEM WAS NOT IN SERVICE, AND NO GASEOUS RADWASTE DISCHARGES WERE MADE, IT WAS NOT NECESSARY TO PERFORM THE REQUIREMENTS OF THE ACTION STATEMENTS OF TECH SPEC 3.3.3.10. REPORTABLE PER TECH SPEC SECTION 6.9.1.13.B. GAS MONITOR DETECTOR TUBE FAILED DUE TO NATURAL END-OF-LIFE. A NEW DETECTOR TUBE WAS INSTALLED AND THE MONITOR WAS TESTED PRIOR TO RETURNING THE MONITOR TO SERVICE.

[113] DIABLO CANYON 1 DOCKET 50-275 LER 83-024
 ALL MAIN CONTROL ROOM ANNUNCIATORS INOPERABLE.
 EVENT DATE: 100783 REPORT DATE: 110783 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: ANNUNCIATOR MODULES
 VENDOR: ROCHESTER INSTRUMENT SYSTEMS, INC.

(NSIC 187412) PRIOR TO FUEL LOAD, POWER TO ALL MAIN CONTROL ROOM ANNUNCIATORS, WAS LOST DURING CONSTRUCTION ACTIVITY IN THE ANNUNCIATOR CABINETS. AS A RESULT, ALARM STATUS FOR VARIOUS RADIATION MONITORS, SEISMIC MONITORING, AND FIRE DETECTION INSTRUMENTATION WAS LOST FOR A PERIOD OF APPROXIMATELY 5 MINUTES. ALL APPLICABLE TECH SPEC ACTION STATEMENTS WERE SATISFIED AS LISTED IN SUPPLEMENTAL INFORMATION. A SIMILAR EVENT WAS REPORTED IN LER 83-010. REPORTABLE PER TECH SPEC SECTION 6.9.1.13B. CONSTRUCTION ELECTRICIAN INADVERTENTLY GROUNDED THE HOT WIRE, SHORT-CIRCUITING THE PANEL. POWER WAS RESTORED AND THE ANNUNCIATOR RETURNED TO SERVICE. PERSONNEL INVOLVED IN ANNUNCIATOR CABINET WORK WILL RECEIVE TRAINING IN THE IMPORTANCE OF PREVENTING RECURRENCE OF THIS EVENT.

[114] DIABLO CANYON 1 DOCKET 50 275 LER 83-025
 SG BLOWDOWN TANK VENT RADIATION MONITOR FAILS.
 EVENT DATE: 102183 REPORT DATE: 112183 NSSS: WE TYPE: PWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: SCIENCE APPLICATIONS, INC.

(NSIC 187528) BEFORE FUEL LOAD, THE STEAM GENERATOR BLOWDOWN TANK VENT GROSS ACTIVITY MONITOR (RM-27) FAILED DOWNSCALE WHILE IN SERVICE. THE ACTIONS REQUIRED IN TECH SPEC 3.3.3.10 WERE TAKEN. NO RADIOACTIVE EFFLUENTS WERE RELEASED SINCE NO FUEL HAD BEEN IN THE CORE. REPORTABLE UNDER TECH SPEC SECTION 6.9.1.13.B. RM-27 FAILED AS THE RESULT OF A RANDOM FAILURE OF THE U-2 BISTABLE MULTIVIBRATOR. THE BISTABLE WAS REPLACED, A FUNCTIONAL TEST WAS PERFORMED, AND THE UNIT WAS RETURNED TO SERVICE.

[115] DIABLO CANYON 1 DOCKET 50-275 LER 83-030
 ACCELOGRAPHS NOT TESTED.
 EVENT DATE: 111683 REPORT DATE: 121683 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: KENEMATICS

(NSIC 187835) IN MODE 5, IT WAS DISCOVERED THAT TECH SPEC SURVEILLANCE REQUIREMENT 4.3.3.3.1, CHANNEL FUNCTIONAL TEST OF THE TRIAXIAL TIME-HISTORY ACCELOGRAPHS, WHICH WAS DUE ON NOV. 16, 1983, HAD NOT BEEN PERFORMED. THE ACCELOGRAPHS ARE FOR RECORDING PURPOSES ONLY. REPORTABLE PER TECH SPEC SECTION 6.9.1.13.B. PERSONNEL RESPONSIBLE FOR SCHEDULING THE SURVEILLANCE TEST OVERLOOKED THIS PARTICULAR TEST. IMMEDIATELY UPON ITS DISCOVERY, THE PRELIMINARY SURVEILLANCE TEST REQUIREMENTS WERE UNDERTAKEN. ON DEC. 3, 1983, THE SYSTEM WAS RETURNED TO OPERABLE STATUS. THE RESPONSIBLE PERSONNEL HAVE BEEN COUNSELED ON THE IMPORTANCE OF MAINTAINING COMPLIANCE WITH THE TECH SPECS.

[116] DIABLO CANYON 1 DOCKET 50-275 LER 83-034
 WIRING ERRORS IN RHR CONTROL CIRCUITRY.
 EVENT DATE: 120683 REPORT DATE: 122083 NSSS: WE TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187836) WHILE IN MODE 5, SEVERAL WIRING TERMINATIONS WERE DISCOVERED WHICH WERE INCONSISTENT WITH CIRCUIT SCHEMATICS AFFECTING CONTROL POWER TRANSFER RELAYS FOR THE RHR PUMP CONTROL CIRCUITS. THIS EVENT IS REPORTABLE PER PART 2.H OF THE DIABLO CANYON UNIT 1 OPERATING LICENSE. THIS IS AN INTERIM REPORT. THE MODIFICATION TO THE RHR CONTROL POWER TRANSFER RELAY WAS NOT FULLY IMPLEMENTED AND THE POST INSTALLATION TEST PROCEDURE WAS NOT ADEQUATE TO CHECK THAT THE

MODIFICATION WAS INSTALLED CORRECTLY. THE CIRCUIT INCONSISTENCY IS BEING CORRECTED. A FINAL REPORT WILL BE SUBMITTED BY 02/18/84.

[117] DRESDEN 2 DOCKET 50-237 LER 83-016E
CONTAMINATED WATER FLUSHED TO STORM SEWER.
EVENT DATE: 020783 REPORT DATE: 030983 NSSS: GE TYPE: BWR
SYSTEM: CONDENSATE & FEEDWTR SYS & CONT COMPONENT: HEAT EXCHANGERS

(NSIC 187677) OPERATOR ERROR. DURING A DRAIN AND REFILL OF THE 2/3A HEATING BOILER TO REDUCE THE LEVEL OF RADIOACTIVE CONTAMINATION THAT HAD CONCENTRATED IN THE A HEATING BOILER, THE CONTAMINATED WATER WAS INADVERTENTLY DISCHARGED TO THE STORM SEWER SYSTEM. ADMINISTRATIVE LIMIT FOR RADIOACTIVE CONTAMINATION IN HEATING BOILERS IS 10,000 PCI/1. THE CONTAMINATION LEVEL AT THE TIME OF DRAINING WAS 4.6 X 10(4) PCI/1. DURING THE HEATING BOILER FLUSH, APPROXIMATELY 700 GALLONS OF WATER WAS DRAINED TO A FLOOR DRAIN WHICH DRAINS TO A STORM SEWER WHICH IN TURN, DRAINS TO THE RIVER DISCHARGE CANAL. THE OPERATOR WHO WAS DRAINING THE 2/3A HEATING BOILER DID NOT REALIZE THAT THE FLOOR DRAIN BEING USED DID NOT GO TO THE RADWASTE SYSTEM. THE FLOOR DRAIN VALVES HAVE BEEN LOCKED AND CLOSED TO PREVENT INADVERTENT USE. NEW PROCEDURES FOR DRAINING AND BLOWING DOWN CLEAN AND RADIOACTIVELY CONTAMINATED HEATING BOILERS HAVE BEEN WRITTEN AND APPROVED. (DOP 5700-8 AND DOP 5700-9).

[118] DRESDEN 2 DOCKET 50-237 LER 83-052 REV 1
UPDATE ON SHUTDOWN COOLING VALVE OPERATOR FAILURE.
EVENT DATE: 062183 REPORT DATE: 111783 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: MOTORS
VENDOR: LIMITORQUE CORP.

(NSIC 187497) WHILE PREPARING TO PUT SHUTDOWN COOLING IN SERVICE FOLLOWING UNIT SCRAM, SHUTDOWN COOLING RETURN VALVE MO 2-1001-5A FAILED TO OPEN. (TECH SPEC 3.7.1). SAFETY SIGNIFICANCE WAS MINIMAL SINCE THE VALVE FAILED IN THE CLOSED POSITION MAINTAINING PRIMARY ISOLATION INTEGRITY. PREVIOUS OCCURRENCE OF A SIMILAR EVENT REPORTED BY R.O. 82-30, DOCKET 50-237. CAUSE OF THE EVENT WAS A PACKING LEAK ON LPCI RETURN VALVE 2-1501-22A, WHICH DRIPPED WATER ON 2-1001-5A MOTOR HOUSING, CAUSING A SHORT CIRCUIT AND BURNING OUT THE MOTOR. THE PACKING LEAK WAS REPAIRED (WR 28767), THE MOTOR FOR THE 2-1001-5A WAS REPLACED (WR 28715), AND THE VALVE WAS CYCLED FROM THE CONTROL ROOM. IN ADDITION, A DRIP GUARD HAS BEEN INSTALLED ON 2-1001-5A MOTOR HOUSING TO PREVENT RECURRENCE.

[119] DRESDEN 2 DOCKET 50-237 LER 83-065 REV 1
UPDATE ON CLOSED DISCHARGE VOLUME VENT VALVE.
EVENT DATE: 091783 REPORT DATE: 111083 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: VALVES
VENDOR: CRANE COMPANY

(NSIC 187827) DURING NORMAL UNIT OPERATIONS, SCRAM DISCHARGE VOLUME VENT VALVE 2-0399-534 WAS FOUND LOCKED CLOSED INSTEAD OF LOCKED OPEN WHILE PERFORMING LOCKED VALVE CHECKLIST DOP-040-M3. SAFETY HAZARD WAS MINIMAL SINCE LEVEL INSTRUMENTS AND THE OPPOSITE HEADER VENT WERE AVAILABLE. THE LAST SIMILAR OCCURRENCE WAS REPORTED ON DOCKET 50-237 UNDER R.O. 82-43. THE VALVE WAS POSSIBLY LEFT CLOSED AFTER USING AIR TO REMOVE ANY WATER FROM THE SCRAM DISCHARGE VOLUME. NO PROCEDURE EXISTED TO COVER THIS OPERATION. AFTER DISCOVERING THE ERROR, ALL THE STATION LOCKED VALVES WERE CHECKED. DOS 300-7 WILL BE REVISED TO INCLUDE USE OF AIR TO REMOVE WATER AT POWER. DOP-040-M3 WILL CONTINUE TO BE PERFORMED QUARTERLY.

[120] DRESDEN 2 DOCKET 50-237 LER 83-079
 HALF SCRAM OCCURS DURING MSIV TESTING.
 EVENT DATE: 101883 REPORT DATE: 112883 NSSS: GE TYPE: BWR
 SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: NAMCO CONTROLS

(NSIC 187499) WHILE IN THE RUN MODE WHILE TESTING THE 1B AND 2B MSIV'S PER DOS 250-1, (10 PERCENT CLOSURE TEST) A HALF SCRAM WAS RECEIVED. RELAY 590-102H WAS FOUND DROPPED OUT. MSIV CLOSURE WOULD STILL PROVIDE THE PROPER SCRAM SIGNAL. THE LAST OCCURRENCE OF THIS TYPE WAS REPORTED UNDER R.O. 83-65 ON DOCKET 50-237. THE CAUSE OF RELAY 590-102H BEING DROPPED OUT WAS A MISALIGNMENT OF THE PLATE WHICH OPERATES THE ACTUATING ARM FOR LIMIT SWITCH 1B ON MSIV 203-1D. THE ACTUATING PLATE WAS READJUSTED AND THE PROBLEM RESOLVED. MSIV SURVEILLANCE TESTING WILL CONTINUE AS REQUIRED BY TECH SPECS.

[121] DRESDEN 2 DOCKET 50-237 LER 83-072
 VACUUM BREAKER FAILS TO OPEN.
 EVENT DATE: 110583 REPORT DATE: 120283 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVE OPERATORS
 VENDOR: VERSA PRODUCTS

(NSIC 187498) AS THE REACTOR BUILDING TO TORUS VACUUM BREAKER SURVEILLANCE DIS 1600-3 WAS BEING PERFORMED DURING NORMAL UNIT OPERATIONS, REACTOR BUILDING TO TORUS VACUUM BREAKER VALVE 1601-20B FAILED TO OPEN. THE 1601-20A VALVE WAS PROVEN OPERABLE. THE 1601-20B VALVE WAS LOCKED CLOSED PER TECH SPEC 3.7.A.3.B. MINIMAL SAFETY SIGNIFICANCE SINCE THE REDUNDANT VALVE WAS OPERABLE. SIMILAR OCCURRENCE REPORTED ON DOCKET 50-249 BY R.O. 81-035. THE CAUSE WAS FOUND TO BE A FAILED VERSA SOLENOID (VGS-4522). THE SOLENOID WAS REPLACED AND THE VACUUM BREAKER WAS PROVEN OPERABLE. PROBABLE CAUSE FOR THE SOLENOID TO FAIL IS ATTRIBUTED TO DIRT CONTAMINATION ON MOVABLE PARTS.

[122] DRESDEN 2 DOCKET 50-237 LER 83-076
 FEEDWATER CHECK VALVE LEAKS.
 EVENT DATE: 111983 REPORT DATE: 121383 NSSS: GE TYPE: BWR
 SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: VALVES
 VENDOR: CRANE COMPANY

(NSIC 187766) 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. THE EVENT WAS OF MINIMAL SAFETY SIGNIFICANCE SINCE 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.

[123] DRESDEN 2 DOCKET 50-237 LER 83-078
 LPCI VALVE FAILS TO OPEN.
 EVENT DATE: 112183 REPORT DATE: 121383 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVE OPERATORS
 VENDOR: LIMITORQUE CORP.

(NSIC 187828) DURING NORMAL PLANT OPERATION WHILE PREPARING TO LOWER SUPPRESSION POOL LEVEL, THE LOW PRESSURE COOLANT INJECTION (LPCI) 1501-3A VALVE FAILED TO OPEN REMOTELY UPON STARTING OF THE "A" SERVICE WATER (CCSW) SYSTEM (TECH SPEC 5.5.B.2.B). THE EVENT WAS OF MINIMAL SAFETY SIGNIFICANCE SINCE 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 LOOSENING OF THE LIMITORQUE OPERATOR THRUST WASHER LOCKNUT ON THE BELLEVILLE SPRING ASSEMBLY. THE THRUST WASHER LOCKNUT WAS ADJUSTED TO MAINTAIN THE PROPER TORQUE SETTING ON THE BELLEVILLE SPRINGS. DOS 1500-3 WAS PERFORMED TO VERIFY PROPER SYSTEM OPERATION.

[124] DRESDEN 3 DOCKET 50-249 LER 83-003 REV 2
 UPDATE ON LEAK IN REACTOR CLEANUP PIPING.
 EVENT DATE: 010583 REPORT DATE: 111583 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL CLEANUP SYS & CONT COMPONENT: PIPES, FITTINGS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187502) DURING NORMAL UNIT OPERATION, AFTER STARTING REACTOR WATER CLEANUP SYSTEM, A PIN-HOLE LEAK WAS FOUND ON THE CONNECTING PIPE WELD BETWEEN 3-1201-10 INCH A AND 3-1292-2 INCH A LINE. THE LINE IS LOCATED OUTSIDE OF PRIMARY CONTAINMENT AND ALL THE LEAKAGE WAS CONTAINED IN REACTOR BUILDING FLOOR DRAIN SYSTEM. A SIMILAR EVENT WAS REPORTED BY R.O. 82-58/03L-0 ON DOCKET 50-237. THE FAILED PIPING WAS METALLURGICALLY AND METALLOGRAPHICALLY EXAMINED. THE CAUSE OF THE FAILURE WAS DETERMINED TO BE IGSCC. PERMANENT REPAIRS WILL BE MADE DURING THE PRESENT REFUELING OUTAGE. THE AFFECTED LINE WILL BE REMOVED FROM THE SYSTEM, CAPPED, AND BLINDFLANGED AT THE END CONNECTIONS TO THE MAIN PROCESS LINES AS APPROPRIATE.

[125] DRESDEN 3 DOCKET 50-249 LER 83-032
 LPCI VALVE INADVERTENTLY CLOSED DURING RADIATION MONITOR TEST.
 EVENT DATE: 092183 REPORT DATE: 101883 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186258) WHILE THE INSTRUMENT TECHNICIAN WAS INSTALLING A TERMINAL JUMPER TO PERFORM THE REACTOR BUILDING VENTILATION-REFUELING FLOOR RADIATION MONITOR FUNCTIONAL TEST, THE LPCI 1501-11B VALVE CLOSED. THE EVENT WAS OF MINIMAL SAFETY SIGNIFICANCE SINCE "B" LPCI LOOP MINIMUM FLOW REQUIREMENTS COULD HAVE BEEN ACHIEVED THROUGH THE CONTAINMENT COOLING HEAT EXCHANGER. THIS IS A FIRST OCCURRENCE OF THIS TYPE. THE EVENT WAS CAUSED BY THE TECHNICIAN INADVERTENTLY PLACING THE TERMINAL JUMPER ON THE 903-3 PANEL. WHEN THE TECHNICIAN PLACED THE JUMPER ON TERMINAL BB 65, THE OTHER END OF THE JUMPER CONTACTED WITH TERMINAL BB 67 INITIATING A CLOSE SIGNAL TO THE 1501-11B VALVE. THE TECHNICIAN INVOLVED HAS BEEN ALERTED TO THE IMPORTANCE OF STRICTLY ADHERING TO STATION PROCEDURE.

[126] DRESDEN 3 DOCKET 50-249 LER 83-033
 REACTOR BUILDING VENTILATION ISOLATION VALVE FAILS TO CLOSE.
 EVENT DATE: 092683 REPORT DATE: 102583 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
 VENDOR: VERSA PRODUCTS

(NSIC 186787) DURING NORMAL OPERATION WHILE PERFORMING DTS 1600-22, SECONDARY CONTAINMENT LEAK RATE TEST, THE REACTOR BUILDING VENTILATION INLET ISOLATION VALVE AO 3A-5741 WOULD NOT CLOSE ON AUTO OR MANUAL SIGNAL AS REQUIRED BY THE SURVEILLANCE. REDUNDANT VALVE AO 3B-5741 WAS OPERABLE AND CLOSED. SIMILAR EVENT WAS REPORTED BY RO 80-49/03L, DOCKET 50-237. THE FOUR WAY DIRECTIONAL SOLENOID VALVE FOR VALVE AO 3A-5741 STUCK IN THE OPEN POSITION. DIRT WHICH HAD ACCUMULATED IN THE VALVE INTERNALS CAUSED "O" RING WEAR. THE SOLENOID VALVE AND COIL WERE REPLACED. THIS ASSEMBLY AND AO 3A-5741 WERE TESTED FOR PROPER OPERATION PRIOR TO RETURNING TO SERVICE. WORK REQUESTS WILL BE ISSUED TO REBUILD THE REMAINING 3 VERSA VALVES ON BOTH UNITS.

[127] DRESDEN 3 DOCKET 50-249 LER 83-035
 RECIRCULATION PUMP DRAIN LINE LEAKS.
 EVENT DATE: 100483 REPORT DATE: 101383 NSSS: GE TYPE: BWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PIPES, FITTINGS

(NSIC 186136) DURING UNIT 3 DRYWELL INSPECTION, WATER WAS OBSERVED LEAKING FROM THE "A" RECIRC PUMP BOWL DRAIN. DURING NORMAL UNIT OPERATION PRIOR TO SHUTDOWN FOR REFUELING NO SIGNIFICANT INCREASE WAS NOTED IN DRYWELL LEAKAGE. ALL LEAKAGE WAS CONTAINED WITHIN THE DRYWELL. FLOOR AND EQUIPMENT DRAIN LEAKAGE WAS WITHIN TECH SPEC LIMITS. THE LAST SIMILAR OCCURRENCE WAS REPORTED IN RO 82-19 ON DOCKET #050-249. THE CAUSE WAS A 2 INCH CRACK ON A TEE. THE AFFECTED PIPING WILL BE CUT OUT. UNDER THE REPAIR PROGRAM THE ISOLATION VALVES AND THE TEE WILL BE REMOVED AND REPLACED BY NEW ISOLATION VALVES AND A STRAIGHT PIPE NIPPLE. THE FAILED COMPONENTS WILL BE EXAMINED ON SITE TO DETERMINE THE MODE OF FAILURE. A SUPPLEMENTAL REPORT WILL BE ISSUED FOLLOWING THE EXAMINATION.

[128] DRESDEN 3 DOCKET 50-249 LER 83-038
 SET POINT DRIFT OF HPCI AREA TEMPERATURE SWITCH.
 EVENT DATE: 102083 REPORT DATE: 111083 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: UNITED ELECTRIC CONTROLS COMPANY

(NSIC 187391) WHILE PERFORMING REFUEL SURVEILLANCES DIS 2300-7, CALIBRATION CHECK OF HPCI TEMPERATURE SWITCHES, TS3-23-71A TRIPPED AT 203.9F (TECH SPEC TABLE 3.2.1). SAFETY SIGNIFICANCE WAS MINIMAL SINCE REMAINING TEMPERATURE SWITCHES WERE WITHIN TECH SPEC LIMITS AND THE UNIT WAS SHUT DOWN. PREVIOUS OCCURRENCE REPORTED BY R.O. 83-09/03L-0 ON DOCKET #050-237. THE CAUSE OF THE EVENT WAS DUE TO SWITCH SET POINT DRIFT (MODEL 76B, TYPE F7). THE SETPOINT WAS ADJUSTED PER DIS 2300-7 AND REPEATABILITY VERIFIED. HPCI AREA TEMPERATURE SWITCHES WILL CONTINUE TO BE CALIBRATED DURING EACH REFUELING OUTAGE.

[129] DRESDEN 3 DOCKET 50 249 LER 83-040
 EMERGENCY DIESEL GENERATOR FEED BREAKER FAILS TO CLOSE.
 EVENT DATE: 102883 REPORT DATE: 111883 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187503) WHILE PERFORMING DIESEL GENERATOR SURVEILLANCE DOS 6600-1 TO PROVE OPERABILITY AFTER BEING OUT OF SERVICE, THE UNIT 3 DIESEL GENERATOR DID NOT CLOSE ONTO 4KV BUS 34-1. THE FEED BREAKER REMAINED IN THE TRIPPED CONDITION. THE EVENT IS OF MINIMAL SIGNIFICANCE SINCE THE MODE SWITCH WAS IN REFUEL AND THE 2/3 DIESEL GENERATOR WAS OPERABLE. NO SIMILAR PREVIOUS OCCURRENCE REPORTED. THE CAUSE OF THE EVENT WAS DIRT BUILD-UP ON THE 52H CONTACT ON BUS 34-1. THE CONTACT WAS BURNISHED, SUCCESSFULLY TESTED WITH AN OHM METER AND PUT BACK INTO SERVICE. DIESEL GENERATOR SURVEILLANCE DOS 6600-1 WILL CONTINUE TO BE PERFORMED MONTHLY.

[130] DRESDEN 3 DOCKET 50-249 LER 83-041
 AUTO BLOWDOWN LOGIC TIME DELAY RELAY HAS LONG RESPONSE TIME.
 EVENT DATE: 110883 REPORT DATE: 120583 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187526) DURING REFUEL OUTAGE, WHILE PERFORMING AUTO BLOWDOWN LOGIC TEST DIS 250-4, TIME DELAY RELAY 287-105A TRIPPED AT 127.6 SECONDS WHICH IS GREATER THAN THE TECH SPEC LIMIT OF EQUAL TO OR LESS THAN 120 SECONDS. SAFETY SIGNIFICANCE WAS MINIMAL SINCE TIMER 105B WAS OPERATIONAL AND WOULD HAVE ACTUATED ELECTROMATIC RELIEF VALVES IF NEEDED. PREVIOUS SIMILAR OCCURRENCE REPORTED BY DVR 12-3-82-21. THE CAUSE WAS ATTRIBUTED TO INSTRUMENT SETPOINT DRIFT. THE RELAY WAS ADJUSTED

TO TRIP IN 105 PLUS OR MINUS 10 SECONDS AS REQUIRED BY DIS 250-4. THE TIMER WAS THEN TESTED TO VERIFY CORRECT OPERATION. REMAINING THREE RELAYS WERE VERIFIED TO BE WITHIN TECH SPEC LIMITS.

[131] FARLEY 1 DOCKET 50-348 LER 83-063
CHLORINE DETECTOR BREAKS DETECTOR TAPE.
EVENT DATE: 092183 REPORT DATE: 102183 NSSS: WE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 186465) AT 1050 ON 9/21/83, THE B TRAIN CHLORINE DETECTOR WAS DECLARED INOPERABLE DUE TO A BROKEN DETECTOR TAPE. TECH SPEC 3.3.3.6, IN PART, REQUIRES THIS DETECTOR TO BE OPERABLE. TECH SPEC 3.3.3.6 ACTION STATEMENT REQUIREMENTS WERE MET. A SIMILAR EVENT WAS REPORTED IN LER 83-050/03L-0. AN INVESTIGATION REVEALED NO CAUSE FOR THE TAPE FAILURE. THE TAPE CASSETTE WAS REPLACED AND THE B TRAIN CHLORINE DETECTOR WAS DECLARED OPERABLE AT 1132 ON 9/21/83. SHOULD A SIMILAR EVENT OCCUR IN THE FUTURE THE AFFECTED TAPE CASSETTE WILL BE RETAINED FOR INVESTIGATION.

[132] FARLEY 1 DOCKET 50-348 LER 83-074
TWO RTD'S HAVE ERRONEOUS INDICATIONS.
EVENT DATE: 101883 REPORT DATE: 111783 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187564) AT 0825 ON 10/18/83, THE INSTRUMENTATION CHANNELS ASSOCIATED WITH RTDS TE-412A (LOOP 1 HOT LEG) AND TE-412D (LOOP 1 COLD LEG) WERE DECLARED INOPERABLE DUE TO ERRONEOUS INDICATION. TECH SPEC 3.3.1, IN PART, REQUIRES THESE CHANNELS TO BE OPERABLE. TECH SPEC 3.3.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY FAILURE OF AN AMPLIFIER CARD. THE CARD WAS REPLACED AND FOLLOWING SATISFACTORY PERFORMANCE OF FNP-1-STP-201.18 (REACTOR COOLANT SYSTEM TE-412A AND TE-412D LOOP CALIBRATION AND FUNCTIONAL TEST), THE TE-412A AND TE-412D INSTRUMENTATION CHANNELS WERE DECLARED OPERABLE AT 1635 ON 10/18/83.

[133] FARLEY 1 DOCKET 50-348 LER 83-076
CONTROL ROOM EMERGENCY CLEANUP TRAIN INOPERABLE.
EVENT DATE: 102283 REPORT DATE: 112183 NSSS: WE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: VALVES

(NSIC 187425) AT 0200 ON 10/22/83, DURING PERFORMANCE OF FNP-0-STP-26.0 (CONTROL ROOM TRAIN A (B) VENTILATION OPERABILITY TEST), AND AT 0520 ON 10/23/83, THE B TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM WAS DECLARED INOPERABLE DUE TO THE B 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 UNIT 1 AND UNIT 2. SIMILAR OCCURRENCES WERE REPORTED IN LICENSEE EVENT REPORTS LER 83-059/03L-0 AND LER 83-071/03L-0. THESE EVENTS WERE CAUSED BY THE SOLENOID VALVE LINKAGE ON THE EVAPORATOR LINE BEING OUT OF ADJUSTMENT. FOLLOWING THE FIRST EVENT, THE COMPRESSOR WAS RESTARTED SUCCESSFULLY AND THE B TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM WAS DECLARED OPERABLE AT 0245 ON 10/22/83. FOLLOWING THE SECOND EVENT, THE LINKAGE WAS ADJUSTED AND THE B TRAIN CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM WAS DECLARED OPERABLE AT 0830 ON 10/23/83. ON 11/2/83, UPON RECEIPT OF A REPLACEMENT, THE SOLENOID VALVE WAS REPLACED TO PREVENT RECURRENCE.

[134] FARLEY 1 DOCKET 50-348 LER 83-077
TWO CHLORINE DETECTORS HAVE BROKEN DETECTOR TAPES.
EVENT DATE: 110483 REPORT DATE: 120583 NSSS: WE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187813) AT 0212 ON 11/4/83 AND 0718 ON 11/10/83, THE B TRAIN AND A TRAIN CHLORINE DETECTORS, RESPECTIVELY, WERE DECLARED INOPERABLE DUE TO BROKEN DETECTOR TAPES. TECH SPEC 3.3.3.6, IN PART, REQUIRES THESE DETECTORS TO BE OPERABLE. TECH SPEC 3.3.3.6 ACTION STATEMENT REQUIREMENTS WERE MET. THIS LER IS APPLICABLE TO BOTH UNIT 1 AND UNIT 2. SIMILAR OCCURRENCES WERE REPORTED IN LER 83-050/03L-0 AND LER 83-063/03L-0. THE TAPE CASSETTES WERE REPLACED AND THE B TRAIN AND A TRAIN CHLORINE DETECTORS WERE DECLARED OPERABLE AT 0230 ON 11/4/83 AND 0734 ON 11/10/83, RESPECTIVELY. THESE EVENTS PROBABLY WERE CAUSED BY INTERFERENCE FROM THE TAPE MOTION INDICATORS. THESE INDICATORS SERVED NO ESSENTIAL FUNCTION. BASED ON VENDOR RECOMMENDATIONS, THESE INDICATORS HAVE BEEN REMOVED IN ACCORDANCE WITH PLANT PROCEDURES.

[135] FARLEY 2 DOCKET 50-364 LER 83-039 REV 1
 UPDATE ON MSIV'S FAILED TO CLOSE UNDER NO FLOW CONDITIONS.
 EVENT DATE: 091783 REPORT DATE: 101983 NSSS: WE TYPE: PWR
 SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVES
 VENDOR: ATWOOD & MORRILL CO., INC.

(NSIC 187745) AT 1635 ON 9/17/83, WHILE SECURING STEAM TO THE UNIT 2 TURBINE BUILDING AS PART OF A NORMAL SHUTDOWN, MAIN STEAM ISOLATION VALVES Q2N11V001B (LOOP 2 UPSTREAM), Q2N11V001C (LOOP 3 UPSTREAM) AND Q2N11V002B (LOOP 2 DOWNSTREAM) INITIALLY FAILED TO CLOSE UNDER NO FLOW CONDITIONS. THIS EVENT OCCURRED DURING MODE 3. MSIV'S Q2N11V001B AND Q2N11V001C WERE SUBSEQUENTLY CLOSED. MSIV Q2N11V002B REMAINED PARTIALLY OPEN AND WAS DECLARED INOPERABLE. TECH SPEC 3.7.1.5, IN PART, REQUIRES THESE VALVES TO BE OPERABLE. TECH SPEC 3.0.3 AND TECH SPEC 3.7.1.5 ACTION STATEMENT REQUIREMENTS WERE MET. TWO APPARENTLY UNRELATED CAUSES FOR THESE FAILURES HAVE BEEN IDENTIFIED. MSIV'S Q2N11V001B AND Q2N11V001C MAY HAVE INITIALLY FAILED TO CLOSE DUE TO BINDING IN THE VALVE PACKING. MSIV Q2N11V002B FAILED TO CLOSE FULLY DUE TO SEPARATION OF THE VALVE DISC FROM THE DISC ARM.

[136] FARLEY 2 DOCKET 50-364 LER 83-000S
 TWO RCS PRESSURE TRANSIENTS OCCUR.
 EVENT DATE: 101583 REPORT DATE: 111483 NSSS: WE TYPE: PWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVES

(NSIC 187476) ISOLATION OF INSTRUMENT AIR TO PIPING PENETRATION ROOM. THE RCS WAS WATER SOLID (I.E. NO PRESSURIZER STEAM BUBBLE), IN PREPARATION FOR STARTUP FOLLOWING THE CYCLE II-III REFUELING OUTAGE. INSTRUMENT AIR TO THE PIPING PENETRATION ROOM AND THE CONTAINMENT WAS INADVERTENTLY ISOLATED CAUSING THE LETDOWN LINE TO ISOLATE AND THE CHARGING LINE TO OPEN FULLY WITH ONE CHARGING PUMP IN OPERATION. THIS RESULTED IN AN RCS PRESSURE EXCURSION TO SLIGHTLY MORE THAN 700 PSIG (AT AN RCS TEMPERATURE OF BETWEEN 170 F AND 175 F) CAUSING THE A TRAIN RHR PUMP SUCTION RELIEF VALVE TO LIFT. THE B TRAIN RHR SUCTION VALVES HAD BEEN CLOSED TO ALLOW REPAIR OF THE B RHR PUMP MOTOR. THE A TRAIN RHR SUCTION RELIEF DID NOT LIMIT THE TRANSIENT AS DESIGNED AND THE CHARGING PUMP WAS SECURED ALLOWING THE PRESSURE TO BE RESTORED. SINCE CHARGING HAD BEEN SECURED FOR THE PREVIOUS OCCURRENCE, THE REACTOR COOLANT PUMPS HAD ALSO BEEN SECURED. IT WAS ANTICIPATED THAT A SECOND RCS PRESSURE EXCURSION WOULD OCCUR WHEN RESTARTING THE FIRST RCP. PLANT CONDITIONS WERE ESTABLISHED TO MINIMIZE THIS TRANSIENT AND THE 2B RCP WAS RESTARTED AT 1816 ON 10-15-83. THE TRANSIENT CAUSED THE A TRAIN RHR RELIEF TO LIFT WITH THE PRESSURE EXCURSION BEING LIMITED TO 480 PSIG. RCS PRESSURE WAS RESTORED TO 400 PSIG AND NO FURTHER PRESSURE TRANSIENTS OCCURRED. THE INADVERTENT ISOLATION OF INSTRUMENT AIR WAS CAUSED BY AN ERROR IN JOB PLANNING. THE JOB WAS REPLANNED AND SUCCESSFULLY EXECUTED.

[137] FARLEY 2 DOCKET 50-364 LER 83-050
 RCS AVERAGE TEMPERATURE DROPS BELOW LIMIT.
 EVENT DATE: 102483 REPORT DATE: 112183 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187565) AT 0825 (UNIT IN MODE 2 AT 1% REACTOR POWER) AND 2050 (UNIT IN MODE 1 AT 13% REACTOR POWER) ON 10/24/83, DURING ROUTINE STARTUP OPERATION, RCS T-AVG DROPPED TO 540 F AND 539 F, RESPECTIVELY. TECH SPEC 3.1.1.4 REQUIRES RCS T-AVG TO BE GREATER THAN OR EQUAL TO 541 F. TECH SPEC 3.1.1.4 ACTION STATEMENT REQUIREMENTS WERE MET. THESE EVENTS WERE CAUSED BY PERSONNEL ERROR. THE FIRST EVENT OCCURRED WHEN THE OPERATOR PLACED THE STEAM DUMP CONTROLLER IN AUTOMATIC WITHOUT FIRST CHECKING THE CONTROLLER SETPOINT. THE SETPOINT WAS LOW CAUSING THE STEAM DUMPS TO OPEN FULLY RESULTING IN A DECREASE IN T-AVG. THE STEAM DUMPS WERE CLOSED AND RCS T-AVG WAS RESTORED TO GREATER THAN 541 F AT 0826 ON 10/24/83. THE SECOND EVENT OCCURRED WHEN LOAD WAS INCREASED WITHOUT WITHDRAWING CONTROL RODS, CAUSING A DECREASE IN T-AVG. THE LOAD INCREASE WAS SECURED AND CONTROL RODS WERE WITHDRAWN TO RESTORE RCS T-AVG TO GREATER THAN 541 F AT 2052 ON 10/24/83. THE INDIVIDUALS INVOLVED IN BOTH EVENTS HAVE BEEN COUNSELED.

[138] FARLEY 2 DOCKET 50-364 LER 83-052
 TWO STEAM FLOW TRANSMITTERS INOPERABLE.
 EVENT DATE: 102583 REPORT DATE: 112883 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 187566) AT 1545 ON 10/25/83 DURING POWER ASCENSION FOLLOWING REFUELING, THE INSTRUMENTATION CHANNELS ASSOCIATED WITH FLOW TRANSMITTERS FT-475 (LOOP 1 STEAM FLOW) AND FT-485 (LOOP 2 STEAM FLOW) WERE DECLARED INOPERABLE DUE TO ERRONEOUS INDICATION. TECH SPECS 3.3.1 AND 3.3.2, IN PART, REQUIRE THESE CHANNELS TO BE OPERABLE. TECH SPEC ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY PERSONNEL ERROR AND PROCEDURAL INADEQUACY. THE TRANSMITTER POWER SUPPLY LINKS WERE LEFT OPEN FOLLOWING TESTING AND MODIFICATION EFFORTS DURING THE CYCLE II-III REFUELING OUTAGE. THE POWER SUPPLY LINKS WERE CLOSED AND FOLLOWING VERIFICATION OF PROPER INDICATION DURING PERFORMANCE OF FNP-2-STP-1.0 (OPERATIONS DAILY AND SHIFT SURVEILLANCE REQUIREMENTS), THE FT-475 AND FT-485 INSTRUMENTATION CHANNELS WERE DECLARED OPERABLE AT 1715 ON 10/25/83. THIS INCIDENT WAS DISCUSSED WITH PERSONNEL PERFORMING WORK ON THESE TRANSMITTERS AND PROCEDURE MODIFICATIONS HAVE BEEN MADE TO PREVENT RECURRENCE.

[139] FARLEY 2 DOCKET 50-364 LER 83-053
 IRM REACTOR TRIP SETPOINT INCORRECT.
 EVENT DATE: 102583 REPORT DATE: 112883 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187567) AT 1307 ON 10/25/83, IT WAS DETERMINED THAT THE HIGH FLUX TRIP SETPOINT ASSOCIATED WITH INTERMEDIATE RANGE DETECTOR (IRM) N-36 WAS SET AT 32.4% OF RATED THERMAL POWER. TECH SPEC 2.2.1, IN PART, REQUIRES THIS SETPOINT TO BE LESS THAN OR EQUAL TO 30% OF RATED THERMAL POWER. TECH SPEC 2.2.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY PROCEDURAL INADEQUACY. DURING THE CYCLE II-III REFUELING (1) A LOW LEAKAGE CORE LOADING PATTERN WAS UTILIZED FOR THE FIRST TIME AND (2) INTERMEDIATE RANGE NUCLEAR INSTRUMENT DETECTORS WERE REPLACED. AS A RESULT, INTERMEDIATE RANGE ROD STOP SETPOINTS WERE TOO CONSERVATIVE TO PERMIT NORMAL OVERLAP BETWEEN THE INTERMEDIATE RANGE AND THE POWER RANGE.

[140] FARLEY 2 DOCKET 50-364 LER 83-055
 BOTH POST ACCIDENT HYDROGEN ANALYZERS REMOVED FROM SERVICE.
 EVENT DATE: 102983 REPORT DATE: 112883 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: DELPHI INDUSTRIES

(NSIC 187289) AT 2125 ON 10/29/83, WITH THE B TRAIN POST ACCIDENT HYDROGEN ANALYZER REMOVED FROM SERVICE FOR PERFORMANCE OF FNP-2-STP-220.9 (POST ACCIDENT HYDROGEN ANALYZER 2A, 2B CALIBRATION AND FUNCTIONAL TEST Q2E23AIT-2703 A&B), THE A TRAIN ANALYZER MODE SELECTOR SWITCH WAS INADVERTENTLY OPERATED CAUSING THE A TRAIN ANALYZER TO BECOME INOPERABLE. TECH SPEC 3.6.4.1 REQUIRES TWO INDEPENDENT CONTAINMENT HYDROGEN ANALYZERS TO BE OPERABLE. TECH SPEC 3.0.3 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY PERSONNEL ERROR. I&C PERSONNEL OPERATED THE A TRAIN ANALYZER MODE SELECTOR SWITCH INSTEAD OF THE B TRAIN SWITCH. THE A TRAIN POST ACCIDENT HYDROGEN ANALYZER WAS RETURNED TO SERVICE AT 2135 ON 10/29/83. THE PERSONNEL INVOLVED HAVE BEEN COUNSELED. THIS INCIDENT HAS BEEN DISCUSSED WITH OTHER I&C PERSONNEL WHO PERFORM SIMILAR DUTIES.

[141] FARLEY 2 DOCKET 50-364 LER 83-058
 BREAKERS FOR AUXILIARY FEEDWATER CHECK VALVES NOT LOCKED OPEN.
 EVENT DATE: 110783 REPORT DATE: 120783 NSSS: WE TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: T X T

(NSIC 187746) AT 0400 ON 11/7/83, WHILE PERFORMING A WEEKLY LOCKED VALVE AUDIT, IT WAS DETERMINED THAT THE MOTOR OPERATOR POWER SUPPLY BREAKERS FOR AUXILIARY FEEDWATER STOP CHECK VALVES 3350A, 3350B, AND 3350C WERE OPEN BUT NOT LOCKED OPEN. TECH SPEC 4.7.1.2.2.A.3, IN PART, REQUIRES THESE BREAKERS TO BE LOCKED OPEN. TECH SPEC 4.7.1.2.2.A.3 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY PERSONNEL ERROR. ON 11/2/83, WHILE IN MODE 5, A SYSTEMS OPERATOR WAS INSTRUCTED TO OPEN THE POWER SUPPLY BREAKERS FOR AUXILIARY FEEDWATER STOP CHECK VALVES 3350A, 3350B, AND 3350C IN ORDER TO CLEAR AN ADMINISTRATIVE LCO (THE POWER SUPPLY BREAKERS FOR THESE VALVES ARE NOT REQUIRED TO BE OPENED UNTIL MODE 4) PRIOR TO GOING INTO MODE 4. THE OPERATOR OPENED THE BREAKERS AND REPORTED THIS TO THE CONTROL ROOM. THE BREAKER OPEN STATUS LIGHTS WERE THEN VERIFIED IN THE CONTROL ROOM AS A PART OF THE VALVE POSITION VERIFICATION PROCESS. CONTROL ROOM PERSONNEL ASSUMED THAT THE BREAKERS WERE LOCKED WHEN OPENED. UPON DISCOVERY, THE BREAKERS WERE IMMEDIATELY LOCKED. THE PERSONNEL INVOLVED HAVE BEEN COUNSELED.

[142] FARLEY 2 DOCKET 50-364 LER 83-059
 CORE AXIAL FLUX DIFFERENCE OUT OF TOLERANCE.
 EVENT DATE: 111683 REPORT DATE: 121383 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187863) AT 0045 ON 11/16/83, THE CORE AXIAL FLUX DIFFERENCE WAS DETERMINED TO BE OUTSIDE OF ITS TARGET BAND BY 0.5%. TECH SPEC 3.2.1 REQUIRES THE AFD TO BE INSIDE THIS TARGET BAND. TECH SPEC 3.2.1 ACTION STATEMENT REQUIREMENTS WERE MET. THIS EVENT WAS CAUSED BY PERSONNEL ERROR. EARLIER, THE PLANT OPERATOR HAD INITIATED, BUT FAILED TO SECURE IN A TIMELY MANNER, A BORON THERMAL REGENERATION SYSTEM (BTRS) DILUTION. THIS CAUSED REACTOR POWER TO START TO INCREASE. THE DILUTION WAS SECURED AND THE CONTROL RODS WERE INSERTED TO REDUCE POWER LEVEL. THE CONTROL ROD INSERTION CAUSED THE CORE AFD TO EXCEED THE TARGET BAND. A BORATION WAS INITIATED TO ALLOW CONTROL ROD WITHDRAWAL. THE CONTROL RODS WERE WITHDRAWN, RESTORING THE CORE AFD TO WITHIN THE TARGET BAND, AT 0047 ON 11/16/83. THE PERSONNEL INVOLVED HAVE BEEN COUNSELED CONCERNING THIS EVENT.

[143] FITZPATRICK DOCKET 50-333 LER 83-053
 RHR COOLING LINE SNUBBER ANCHOR BOLTS LOOSE.
 EVENT DATE: 060483 REPORT DATE: 111883 NSSS: GE TYPE: BWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS

(NSIC 187557) DURING A ROUTINE SNUBBER INSPECTION AT THE BEGINNING OF A REFUELING OUTAGE, THE BASEPLATE OF A SNUBBER SUPPORT ON THE TORUS COOLING LINE AT THE A RHR SYSTEM WAS FOUND WITH CONCRETE ANCHOR BOLTS PULLED FROM THE CONCRETE EMBEDMENT. THIS SNUBBER IS REQUIRED OPERABLE DURING PLANT OPERATION BY TECH SPEC SECTION 3.6.1. REPAIRS TO THIS SUPPORT PFSK-1952 WERE COMPLETED PRIOR TO STARTUP. A REDUNDANT RHR SYSTEM WAS AVAILABLE. THE APPARENT CAUSE OF THE FAILED SHOCK SUPPRESSOR WAS WATER HAMMER ALTHOUGH NO SPECIFIC EVENT WAS IDENTIFIED AS CAUSING THE DAMAGE. THE PIPING SYSTEM CONTAINING THE SNUBBER WAS INSPECTED. AN ADJACENT SUPPORT WAS FOUND WITH MINOR DAMAGE. ALL DISCREPANCIES WERE REPAIRED PRIOR TO PLANT STARTUP. LICENSED OPERATORS HAVE REVIEWED THIS REPORT AND HAVE BEEN CAUTIONED ABOUT WATER HAMMER EVENTS.

[144] FITZPATRICK DOCKET 50-333 LER 83-021 REV 1
 UPDATE ON FAILURE TO TEST SCRAM DISCHARGE VOLUME LEVEL INSTRUMENTS.
 EVENT DATE: 060583 REPORT DATE: 071483 NSSS: GE TYPE: BWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 184583) "UPDATE REPORT--PREVIOUS REPORT DATE 06-18-83". DURING MANAGEMENT REVIEW OF INSTRUMENT SURVEILLANCE PROCEDURE 5-ISP-66-1 "SCRAM DISCHARGE VOLUME HIGH LEVEL INSTRUMENT CALIBRATION", IT WAS FOUND THE ROD BLOCK CALIBRATION SECTION HAD NOT BEEN PERFORMED WITHIN 7 DAYS OF THE PLANNED REACTOR SHUTDOWN ON 6/3/83 AS REQUIRED BY TECH SPEC TABLE 4.2.3 (NOTE 2). INADEQUATE PROCEDURE CONTROL TO IMPLEMENT THE TECH SPEC WAS THE CAUSE. CORRECTIVE ACTION--IMMEDIATELY PERFORMED THE REQUIRED SURVEILLANCE (CALIBRATION WAS SATISFACTORY). LONG TERM ACTION WAS TO PREPARE A REVISION TO PROCEDURE F-OP-65 "STARTUP AND SHUTDOWN PROCEDURE" PROVIDING A CHECKOFF SHEET FOR SHUTDOWN PREREQUISITES AND REINSTRUCT PERSONNEL.

[145] FITZPATRICK DOCKET 50-333 LER 83-033
 LOW SUPPRESSION POOL LEVEL AND FAILED LEVEL INDICATOR.
 EVENT DATE: 090583 REPORT DATE: 100583 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 186865) DURING STARTUP AND ASCENSION TO POWER ON 9/5/83 AND 9/7/83 WHILE INERTING THE DRYWELL, INSTRUMENT LEVEL COMPARISON CHECKS INDICATED TORUS LEVEL WAS BELOW THE LIMIT OF TECH SPEC SECTION 3.7.A.1 A AND B REQUIREMENT OF LESS THAN OR EQUAL TO 1.5 INCHES OF WATER DIFFERENTIAL BETWEEN MAXIMUM AND MINIMUM VENT DOWNCOMER SUBMERGENCE. CAUSE WAS A WATER BLOCK IN THE DRY LEG (LOW SENSOR SIDE) OF THE LEVEL TRANSMITTER.

[146] FITZPATRICK DOCKET 50-333 LER 83-034
 AVERAGE POWER RANGE MONITOR TRIP SETPOINT DRIFTS.
 EVENT DATE: 090683 REPORT DATE: 092383 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186180) WHILE PERFORMING INSTRUMENT SURVEILLANCE PROCEDURE ON "C" AVERAGE POWER RANGE MONITOR (APRM), THE DOWNSCALE TRIP LEVEL SETTING WAS FOUND AT 2.25%. THIS EXCEEDED THE TECH SPEC TABLE 3.1-1 REQUIREMENT OF GREATER THAN OR EQUAL TO 2.5%. REDUNDANT COMPONENTS WERE OPERABLE. THE CAUSE OF "C" AVERAGE POWER RANGE MONITOR SETPOINT CHANGE WAS ATTRIBUTED TO INSTRUMENT DRIFT. "C" AVERAGE POWER RANGE MONITOR WAS IMMEDIATELY ADJUSTED TO WITHIN THE TOLERANCE OF TECH SPEC 3.1-1

AND PLACED IN INCREASED SURVEILLANCE TEST FREQUENCY FOR TREND OBSERVATION. THERE WERE TWO OPERABLE CHANNELS REMAINING AS SPECIFIED IN TECH SPEC TABLE 3.1-1.

[147] FITZPATRICK DOCKET 50-333 LER 83-035
 MAIN STEAM LINE FLOW SWITCH FAILS.
 EVENT DATE: 090983 REPORT DATE: 101383 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 186866) DURING NORMAL OPERATION, WHILE CONDUCTING SURVEILLANCE TESTING ON THE MAIN STEAM LINE HIGH FLOW SWITCHES, 02-DPIS-116D DID NOT TRIP THE PRIMARY CONTAINMENT ISOLATION SYSTEM LOGIC ON A SIMULATED LESS THAN OR EQUAL TO 108 PSID SIGNAL AS REQUIRED BY TECH SPEC TABLE 3.2-1.1. THE 'B2' TRIP CHANNEL WAS PLACED IN A TRIPPED CONDITION WHILE AN INVESTIGATION AND REPAIRS WERE MADE. MALFUNCTION OF THE TRIP WAS TRACED TO A FAILED MICROSWITCH IN THE INSTRUMENT. THE MICROSWITCH WAS REPLACED AND THE UNIT TESTED SATISFACTORILY. NO FURTHER CORRECTIVE ACTION IS REQUIRED.

[148] FITZPATRICK DOCKET 50-333 LER 83-031
 SETPOINT DRIFT OF 5 SAFETY/RELIEF VALVES.
 EVENT DATE: 091283 REPORT DATE: 101983 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR VES. & APPURTENANCES COMPONENT: VALVES
 VENDOR: TARGET ROCK CORP.

(NSIC 186864) DURING A SCHEDULED REFUEL OUTAGE, FIVE TARGET ROCK SAFETY/RELIEF PILOT VALVE ASSEMBLIES, REMOVED FOR TESTING AND MODIFICATION, WERE TESTED IN THE "AS FOUND" CONDITION TO MEET THE REQUIREMENTS OF TECH SPECS 2.2.B AND 4.6.E.1. OF THE FIVE VALVES TESTED, TWO HAD SETPOINT VALUES WHICH WERE LOWER THAN ALLOWABLE TOLERANCE (3% AND 2.9% VS. 1%), TWO VALVES HAD LIFT SETPOINTS ABOVE ALLOWABLE TOLERANCES (3% AND 3.6% VS 1%) AND ONE VALVE DID NOT LIFT AT THE MAXIMUM TEST PRESSURE APPLIED (5% ABOVE NAMEPLATE RATING). THE VALVES WERE DISASSEMBLED, INSPECTED, AND REFURBISHED AT WYLE LABORATORIES BY THE VENDOR WITH SPECIAL ATTENTION TO CLEARANCE MEASUREMENTS. IN ADDITION, THE INTERIM TWO-STAGE DESIGN TOPWORKS OF 4 OF 6 VALVES WERE MODIFIED TO THE GENERIC DESIGN. UPON COMPLETION OF MODIFICATION AND REPAIR, THE VALVES WERE AGAIN SETPOINT TESTED.

[149] FITZPATRICK DOCKET 50-333 LER 83-036
 INADVERTENT ECCS ACTUATION OCCURS.
 EVENT DATE: 091483 REPORT DATE: 101483 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186181) DURING NORMAL OPERATION, WHILE PERFORMING INSTRUMENT SURVEILLANCE TESTING ON HIGH DRYWELL PRESSURE SWITCHES, AS REQUIRED BY TECH SPEC TABLE 4.2-2, ECCS ACTUATION OCCURRED RESULTING IN THE STARTING OF "A" AND "B" CORE SPRAY PUMPS, HPCI, STANDBY GAS TREATMENT SYSTEM AND "A" "B" "C" "D" EMERGENCY DIESEL GENERATORS. IMMEDIATE ACTION WAS RECOGNITION BY TESTING AND OPERATION PERSONNEL THAT THE ACTUATION HAD BEEN CAUSED BY THE TRIPPING OF THE SWITCH UNDER TEST. THE CAUSE OF THE ACTUATION WAS DUE TO UNKNOWINGLY TESTING THE "A" SIDE HIGH DRYWELL PRESSURE SWITCH WHILE A PRIMARY RELAY, THE "B" SIDE, WAS IN THE TRIPPED CONDITION. THE CAUSE OF THE "B" SIDE RELAY IN THE TRIPPED CONDITION WAS TRACED TO PRESSURE SWITCH 10-PS-101D HAVING A SETPOINT MORE CONSERVATIVE THEN THE PROCEDURAL GUIDE OF 2.5 PSIG. AS FOUND SETTING WAS 1.5 PSIG. NORMAL DRYWELL PRESSURE IS APPROXIMATELY 2.0 PSIG. CORRECTIVE ACTION WAS THE ADJUSTMENT OF 10-PS-101D TO WITHIN PROCEDURAL GUIDE VALUE OF 2.5 PSIG AND SUBMISSION OF A TEMPORARY CHANGE AND PROPOSED REVISION TO INSTRUMENT SURVEILLANCE PROCEDURE F-ISP-4-1 REQUIRING VERIFICATION OF PRIMARY RELAY STATUS PRIOR TO COMMENCEMENT OF TEST. ALSO, THE SURVEILLANCE FREQUENCY OF 10-PS-101D WAS INCREASED FOR TREND OBSERVATION.

[150] FITZPATRICK DOCKET 50-333 LER 83-040 REV 1
 UPDATE ON ISOLATION OF BOTH HYDROGEN/OXYGEN ANALYZERS.
 EVENT DATE: 092183 REPORT DATE: 110783 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187807) TESTING OF THE POST-ACCIDENT SAMPLING SYSTEM (PASS), A NEW PLANT MODIFICATION, CAUSED ISOLATION OF THE CONTAINMENT HYDROGEN AND OXYGEN SAMPLING LINE, THEREBY RENDERING THE HYDROGEN AND OXYGEN SAMPLING SYSTEM INOPERABLE. THIS VIOLATED PLANT TECH SPEC 3.7.A.9 WHICH REQUIRES CONTINUOUS MONITORING OF CONTAINMENT HYDROGEN AND OXYGEN WHEN CONTAINMENT INTEGRITY IS REQUIRED. THIS CONDITION EXISTED FOR APPROXIMATELY 2 HOURS. THE PASS AND CONTAINMENT ATMOSPHERIC MONITORING SYSTEM UTILIZE A COMMON DISCHARGE LINE TO THE SUPPRESSION POOL. WHEN THE PASS IS TO BE USED, A SOLENOID OPERATED VALVE (SOV) MUST BE OPENED TO THIS DISCHARGE LINE. THIS SOV IS INTERLOCKED WITH A SOV IN THE DISCHARGE LINE WHICH PREVENTS BACKFLOW OF A POTENTIALLY HIGHLY CONTAMINATED SAMPLE TO THE CONTAINMENT ATMOSPHERE MONITORING PANELS. TO CORRECT THE SITUATION AS IT NOW EXISTS, A CHANGE TO THE TECH SPECS HAS BEEN INITIATED BY THE SITE AND IS CURRENTLY IN THE REVIEW CYCLE. THE CHANGE WOULD ALLOW SHORT TERM ISOLATION OF THE CONTAINMENT ATMOSPHERIC MONITORING SYSTEM FOR SAMPLING OPERATIONS OR TRAINING PURPOSES.

[151] FITZPATRICK DOCKET 50-333 LER 83-041
 MANGANESE IN MOLLUSKS EXCEEDS LIMIT.
 EVENT DATE: 092383 REPORT DATE: 100583 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187675) THE DETECTED LEVEL OF MANGANESE-54 ONSITE MOLLUSK SAMPLE WAS GREATER THAN 10 TIMES THE CONTROL LOCATION OFFSITE RESULTS FOR THE SAME SAMPLE PERIOD. A POSSIBLE EXPLANATION FOR THE DETECTION OF THE 10 TIMES CONCENTRATION OF MN-54 IN THE MOLLUSK SAMPLES WHEN LIQUID RELEASES ARE WITHIN LEGAL LIMITS IS THE VERY HIGH BIOACCUMULATION FACTOR (CONCENTRATION FACTOR) FOR MANGANESE IN MOLLUSKS. DUE TO THE FACT THAT STABLE MANGANESE IS AN ESSENTIAL TRACE ELEMENT IMPORTANT TO FRESH WATER MOLLUSKS, A BIOACCUMULATION FACTOR OF UP TO 1,600,000 CAN EXIST (MEAN VALUE = 300,000). THE DETECTED LEVEL OF CO-60 IN THE NMPP ONSITE AND FITZPATRICK ONSITE PERIPHYTON SAMPLES WAS GREATER THAN 10 TIMES THE CONTROL LOCATION OFFSITE RESULTS FOR THE SAME SAMPLE PERIOD. A POSSIBLE EXPLANATION FOR THE DETECTION OF THE 10 TIMES CONCENTRATION FOR CO-60 IN THE PERIPHYTON SAMPLES COLLECTED IS THE HIGH BIOACCUMULATION FACTOR (CONCENTRATION FACTOR) FOR THIS ELEMENT IN COMPARISON TO OTHER ELEMENTS. DUE TO THE FACT THAT STABLE COBALT IS AN ESSENTIAL TRACE ELEMENT IMPORTANT TO FRESH WATER ALGAE, A BIOACCUMULATION FACTOR OF UP TO 30,000 CAN EXIST (MEAN VALUE = 6,760).

[152] FITZPATRICK DOCKET 50-333 LER 83-044 REV 1
 UPDATE ON TWO INOPERABLE DRYWELL PARTICULATE MONITORS.
 EVENT DATE: 093083 REPORT DATE: 112883 NSSS: GE TYPE: BWR
 SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187857) "UPDATE REPORT-PREVIOUS REPORT DATE 10-28-83." DURING NORMAL OPERATION, DRYWELL CONTINUOUS ATMOSPHERE (PARTICULATE) RADIOACTIVITY MONITORING SYSTEM "A" AND "B" SIDE WERE OUT OF SERVICE WHICH MADE THE PLANT ENTER A 30 DAY LIMITING CONDITION FOR OPERATION AS PERMITTED BY TECH SPEC SECTION 3.6.D.3. OTHER REQUIRED COOLANT LEAKAGE MONITORING SYSTEMS WERE OPERABLE AS REQUIRED BY TECH SPEC SECTION 3.6.D.2. APPROXIMATELY 2 HOURS AFTER COMPLETION OF THE WEEKLY FILTER AND CARTRIDGE CHANGE OUT OF THE "A" UNIT, THE PARTICULATE MONITOR INDICATOR WAS OBSERVED BY OPERATING PERSONNEL TO BE HARD DOWNSCALE. UNIT "B" AT AT THE TIME WAS OUT OF SERVICE FOR REPAIRS. THE FIRST SUSPECTED CAUSE OF THE DOWNSCALE INDICATION WAS A FAILED DETECTOR. DETECTOR WAS REPLACED WITH A KNOWN OPERABLE ONE, WHICH RESULTED IN THE CONTINUATION OF THE DOWNSCALE INDICATION. ORIGINAL DETECTOR WAS PUT BACK INTO THE MONITOR AND DETECTOR VOLTAGE MEASURED AND

FOUND TO BE SATISFACTORY. AFTER VOLTAGE MEASUREMENT COMPLETION, DETECTOR WAS RECONNECTED TO THE MONITOR, RESULTING IN THE INDICATION RETURNING TO NORMAL AFTER AMPLIFIER UNSATURATED. CAUSE OF THE ORIGINAL DOWNSCALE MAY HAVE BEEN A LOOSE CONNECTION BETWEEN DETECTOR HIGH VOLTAGE CONNECTION AND CABLE CONNECTOR, WHICH LOSS CONTACT DUE TO VIBRATION CAUSED BY THE RESTART OF THE MONITOR FLOW PUMP.

[153] FITZPATRICK DOCKET 50-333 LER 83-045 REV 1
 UPDATE ON MISSED APRM SURVEILLANCE TEST.
 EVENT DATE: 100483 REPORT DATE: 110183 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187856) DURING A MANAGEMENT REVIEW IT WAS DISCOVERED THAT SURVEILLANCE TEST F-ST-5B, "AVERAGE POWER RANGE MONITOR INSTRUMENT FUNCTIONAL TEST" HAD EXCEEDED THE REQUIRED FREQUENCY OF SEVEN DAYS PLUS OR MINUS 25% AS PER TECH SPEC TABLE 4.1-1 BY EIGHTEEN MINUTES. F-ST-5B WAS IMMEDIATELY CONDUCTED AND FOUND SATISFACTORY. DURING A ROUTINE REVIEW OF THE SURVEILLANCE SCHEDULE BY THE SHIFT SUPERVISOR, IT WAS NOTED THAT SURVEILLANCE TEST F-ST-5B WAS OVERDUE ON SURVEILLANCE SCHEDULE COMPUTER PRINTOUT. RESPONSIBLE INDIVIDUALS INVOLVED HAVE BEEN COUNSELLED AS TO THE IMPORTANCE OF TIMELY SURVEILLANCE SCHEDULE UPDATE AND DISTRIBUTION. REVISION 1 WAS SUBMITTED TO CORRECT TYPOGRAPHICAL AND EDITORIAL ERRORS.

[154] FITZPATRICK DOCKET 50-333 LER 83-049
 HPCI DECLARED INOPERABLE FOLLOWING TURBINE VALVE STEM FRACTURES.
 EVENT DATE: 102283 REPORT DATE: 111883 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES

(NSIC 187556) DURING NORMAL OPERATION, WHILE PERFORMING A GENERAL AREA VISUAL INSPECTION, IT WAS NOTICED THAT THE STEM OF THE HIGH PRESSURE COOLANT INJECTION TURBINE STOP VALVE HAD FRACTURED NEAR THE VALVE OPERATOR COUPLING. INITIAL ACTION WAS TO DECLARE THE SYSTEM INOPERABLE, PLACING THE PLANT IN A SEVEN DAY LIMITING CONDITION OF OPERATION PER TECH SPEC SECTION 3.5.C.1.A. SURVEILLANCE TESTING OF OTHER REDUNDANT SYSTEMS, AS REQUIRED BY TECH SPEC SECTION 4.5.C.1.A, WAS CONDUCTED. THE CAUSE OF VALVE STEM FRACTURE IS NOT KNOWN AT THIS TIME. THE VALVE STEM HAS BEEN SENT TO BATTELLE COLUMBUS LABORATORIES FOR METALLURGICAL FAILURE ANALYSIS. INITIAL CORRECTIVE ACTION WAS TO REPLACE THE FAILED STEM WITH A NEW REPLACEMENT STEM. FUTURE PREVENTIVE ACTIONS WILL BE DETERMINED AFTER REVIEW OF THE FAILURE ANALYSIS REPORT. THIS INTERIM REPORT WILL BE SUPPLEMENTED WITH AN UPDATED LER UPON RECEIPT OF THE FAILURE ANALYSIS REPORT.

[155] FITZPATRICK DOCKET 50-333 LER 83-052
 HPCI INOPERABLE.
 EVENT DATE: 110183 REPORT DATE: 111883 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: TURBINES
 VENDOR: TERRY STEAM TURBINE COMPANY

(NSIC 187600) DURING THE PERFORMANCE OF F-ST-48 THE HPCI TURBINE STOP VALVE TRIPPED SHUT. ATTEMPTS TO CYCLE THE HPCI TURBINE STOP VALVE FAILED AND HPCI WAS DECLARED INOPERABLE IN ACCORDANCE WITH PLANT TECH SPECS, PARAGRAPH 3.5.1A. THE REDUNDANT RCIC AND ADS SYSTEMS WERE AVAILABLE AT THE TIME OF THE OCCURRENCE. HPCI TURBINE HYDRAULIC TRIP TYPE-CCS TRIPPED AND WOULD NOT RESET CAUSING THE TURBINE STOP VALVE TO SHUT AND NOT RESET. THE CAUSE OF THE HYDRAULIC TRIP FAILING TO RESET WAS DIRT UNDER THE TRIP PISTON ALLOWING HYDRAULIC OIL TO BE DUMPED FROM THE STOP VALVE HYDRAULIC ACTUATOR CAUSING THE STOP VALVE TO REMAIN IN THE TRIPPED POSITION AND NOT BEING ABLE TO RESET. THE HYDRAULIC TRIP ASSEMBLY WAS DISASSEMBLED, CLEANED, AND INSPECTED. THE BALL IN THE TAPPET AND BALL ASSEMBLY, ITEM NUMBER 13, DRAWING C-915-X, WAS FOUND TO BE WORN AND WAS REPLACED. THE HYDRAULIC OIL SYSTEM FILTERS WERE INSPECTED, FOUND TO BE DIRTY AND REPLACED. THE

HPCI HYDRAULIC OIL FILTERS ARE TO BE INCORPORATED INTO THE PREVENTIVE MAINTENANCE PROGRAM AND PERIODICALLY INSPECTED.

[156] FITZPATRICK DOCKET 50-333 LER 83-054
HPCI VENT LINE CRACKS.
EVENT DATE: 110483 REPORT DATE: 112883 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PIPES, FITTINGS

(NSIC 187808) WHILE WARMING THE HIGH PRESSURE COOLANT INJECTION (HPCI) STEAM HEADER, A STEAM LEAK OCCURRED IN A THREE QUARTER INCH PIPE TO THE HEADER VENT. THE HPCI WAS REMOVED FROM SERVICE TO MAKE THE REPAIRS, THUS THE REQUIREMENTS OF TECH SPEC 3.5.C WERE NOT MET. THE VENT CONNECTION CONSISTS OF A SOCKET WELDED TO THE STEAM HEADER, A ONE AND ONE HALF INCH LONG SCHEDULE 80 A106 GRADE B NIPPLE, TWO SERIES 1,500 LBS. THREE QUARTER INCH SOCKET WELD GATE VALVES, AND A CAP TO FORM THE VENT SYSTEM. THE CRACK OCCURRED IN THE HEAT AFFECTED AREA OF THE WELD ON THE SHORT PIPE NIPPLE. THE CRACK PROGRESSED ABOUT 120 DEGREES AROUND THE PIPE. THE FAILURE IS TYPICAL OF LOW CYCLE FATIGUE FAILURE CAUSED BY VIBRATION OF THE STEAM HEADER. THE NIPPLE IS OF SMALL SECTION MODULUS WHICH RESULTS IN HIGH STRESS BECAUSE OF THE MASSIVE VALVES ON THE VENT LINE. THE SYSTEM SUPPORTS ON PIPING FROM THE RHR HEAT EXCHANGER TO THE FIRST ANCHOR WILL BE CHECKED AGAINST PIPE SUPPORT DESIGN TO VERIFY THE REQUIRED INSTALLATION OF SUPPORTS.

[157] FITZPATRICK DOCKET 50-333 LER 83-057
REACTOR COOLANT LEAKAGE RATE NOT CALCULATED.
EVENT DATE: 110683 REPORT DATE: 112883 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187739) WHILE PERFORMING A DAILY SURVEILLANCE DURING NORMAL OPERATIONS, THE CALCULATION OF REACTOR COOLANT LEAKAGE RATES INSIDE THE PRIMARY CONTAINMENT WAS NOT PERFORMED, CONTRARY TO TECH SPEC 4.6.D WHICH REQUIRES THAT THESE LEAKAGE RATES BE ESTABLISHED ONCE PER DAY. REDUNDANT INSTRUMENTATION MONITORING REACTOR COOLANT LEAK RATES WAS AVAILABLE TO THE CONTROL ROOM OPERATOR. AT NO TIME DURING THIS EVENT DID LEAKAGE RATES EXCEED THE LIMITS ALLOWED BY TECH SPEC 3.6.D. THE CAUSE OF THIS EVENT WAS PERSONNEL ERROR, ON THE PART OF THE AUXILIARY OPERATOR PERFORMING THE SURVEILLANCE AND INADEQUATE REVIEW OF THE COMPLETED TEST BY THE CONTROL ROOM OPERATOR AND SHIFT SUPERVISOR. THE MISSING DATA WAS RECORDED IMMEDIATELY UPON DISCOVERY OF THE OMISSION. THE SHIFT PERSONNEL RESPONSIBLE FOR THIS EVENT WERE COUNSELED ON THE IMPORTANCE OF RECORDING ALL REQUIRED DATA FOR ANY SURVEILLANCE.

[158] FT. CALHOUN 1 DOCKET 50-285 LER 82-017 REV 1
UPDATE ON HYDROGEN MONITOR CONTAINMENT ISOLATION VALVES FAIL OPEN.
EVENT DATE: 083082 REPORT DATE: 052583 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES
VENDOR: VALCOR ENGINEERING CORP.
CONAX CORP.

(NSIC 184731) DURING PRE-OPERATIONAL TESTING OF THE REDUNDANT CONTAINMENT HYDROGEN MONITORS, A CONTROL ROOM OPERATOR NOTICED THAT THERE WAS NO VALVE POSITION INDICATION FOR INBOARD CONTAINMENT ISOLATION VALVES, HCV-820B AND 821B, ASSOCIATED WITH HYDROGEN MONITOR VA-81A. SUBSEQUENTLY, IT WAS DETERMINED THAT THE SUBJECT VALVES HAD FAILED OPEN. THESE VALVE FAILURES RESULTED IN NONCOMPLIANCE WITH TECH SPEC 2.6(1)A. EMERGENCY PROCEDURE EP-25, "LOSS OF CONTAINMENT INTEGRITY", WAS IMMEDIATELY IMPLEMENTED. THE REDUNDANT OUTBOARD ISOLATION VALVES, HCV-820A AND 821A, WERE VERIFIED CLOSED AND OPERABLE. AFTER TROUBLESHOOTING THE TWO SUBJECT VALVES, IT WAS DISCOVERED THAT THE ISOLATION VALVES CONTAINED CONAX ENVIRONMENTAL SEALS THAT HAD FAILED. ONE SEAL WAS SHORTED INTERNALLY AND THE OTHER HAD SHORTED TO GROUND. THE DISTRICT HAS POSTULATED THAT

AN ELEVATED DC VOLTAGE MAY HAVE CAUSED THE SOLENOIDS TO GET TOO HOT AND CAUSED THE CONAX SEAL FAILURE. IN ORDER TO ENSURE THE MAINTENANCE OF CONTAINMENT INTEGRITY, PER THE FORT CALHOUN TECH SPEC DEFINITION, BOTH VALVES WERE CAPPED OFF INSIDE CONTAINMENT WITHIN SIX HOURS FROM INITIATION OF THE EVENT. THE VALVES AND PENETRATIONS WERE THEN LEAK TESTED TO ENSURE THAT NO LEAKAGE PATHS EXISTED FROM CONTAINMENT TO ATMOSPHERE.

[159] FT. CALHOUN 1 DOCKET 50-285 LER 83-010
 SEQUENCER TIMES FOR LPSI PUMP EXCEEDS LIMIT.
 EVENT DATE: 103183 REPORT DATE: 111083 NSSS: CE TYPE: PWR
 SYSTEM: OTHER ENGRD SAFETY FEATR SYS COMPONENT: RELAYS
 VENDOR: EAGLE SIGNAL

(NSIC 187781) DURING THE PERFORMANCE OF SURVEILLANCE TEST, ST-ESF-5, SECTION F.1 (THE MONTHLY AC SEQUENCER TIMER TEST), TIMER SI-1A (CORRESPONDING TO THE LOW PRESSURE SAFETY INJECTION PUMP) ON SEQUENCER SI-2 FAILED TO TIME OUT WITHIN THE PRESCRIBED LIMIT. DURING THE TIME OF THE FAILURE, THE DC SEQUENCER CIRCUITRY WHICH ACTIVATES SI-1A AS WELL AS THE AC AND DC SEQUENCER CIRCUITRY ACTUATING THE REDUNDANT LOW PRESSURE SAFETY INJECTION PUMP (SI-1B) WAS OPERABLE. THE FAILURE OF THE RELAY TO TIME OUT WITHIN THE PRESCRIBED LIMIT WAS DUE TO A DIRTY OPERATING MECHANISM. THE BLISS EAGLE TIMER WAS REPLACED WITH A SPARE WHICH WAS TESTED SATISFACTORILY FOR OPERATION PER MAINTENANCE PROCEDURE MP-EE-20.

[160] FT. ST. VRAIN DOCKET 50-267 LER 80-047 REV 1
 UPDATE ON REACTOR SHUTDOWN DUE TO INOPERABLE SNUBBERS.
 EVENT DATE: 082580 REPORT DATE: 102783 NSSS: GA TYPE: HTGR
 SYSTEM: OTHER SYSTEMS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS

(NSIC 187478) SPRING HANGERS NOT PROPERLY ADJUSTED. A SCHEDULED SURVEILLANCE SHOWED SEVERAL HYDRAULIC SNUBBERS TO BE INOPERABLE. NINE OF THE SNUBBERS COULD NOT BE REPAIRED IN THE 72 HOUR PERIOD ALLOWED BY LCO 4.3.10, AND AN ORDERLY SHUTDOWN BEGAN. THE REACTOR WAS MANUALLY SCRAMMED. SHUTDOWN REQUIRED BY LCO 4.3.10. REPORTABLE PER TECH SPEC AC 7.5.2(B)2. INVESTIGATION REVEALED THAT CONSTANT SUPPORT HANGERS (SPRING HANGERS) WERE NOT PROPERLY ADJUSTED FOR THE HOT POSITION AND WERE NOT CARRYING THE APPROPRIATE LOADS. THE AFFECTED SNUBBERS WERE REPAIRED, READJUSTED, OR REPLACED AS REQUIRED AND THE PLANT WAS SHUTDOWN IN ACCORDANCE WITH THE REQUIREMENTS OF LCO 4.3.10. REPAIRS WERE COMPLETED DURING SCHEDULED MAINTENANCE SHUTDOWN PERIOD. SURVEILLANCE INTERVAL ADJUSTED TO 31 DAYS PLUS OR MINUS 25 PERCENT.

[161] FT. ST. VRAIN DOCKET 50-267 LER 81-008 REV 2
 UPDATE ON DRIFT IN PRIMARY COOLANT SYSTEM PRESSURE SWITCHES.
 EVENT DATE: 012081 REPORT DATE: 092783 NSSS: GA TYPE: HTGR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187483) DRIFT. INSTRUMENT PERSONNEL PERFORMED THE PRIMARY COOLANT PRESSURE SCRAM CALIBRATION AND FOUND THAT THE VOLTAGE OUTPUTS OF THE THREE PRESSURE TRANSMITTERS WERE HIGH AND COULD HAVE CAUSED THE PRIMARY COOLANT LOW PRESSURE SWITCHES TO TRIP BELOW THE LIMITS OF LCO 4.4.1, TABLE 4.4-1. THIS OCCURRENCE WAS REPORTED PER TECH SPEC 7.5.2(B)1 AND 7.5.2(B)2. SIMILAR OCCURRENCES: RO 77-46, 79-57, 81-030, AND 81-055. THE HIGH OUTPUT VOLTAGES FROM THE PRESSURE TRANSMITTERS WERE DUE TO INSTRUMENT DRIFT OF THE PRESSURE TRANSMITTERS. THE PRESSURE TRANSMITTERS WERE CALIBRATED AND THE SURVEILLANCE TEST SUCCESSFULLY COMPLETED. NEITHER MONTHLY CHECKS NOR ANNUAL CALIBRATIONS HAVE REVEALED ANY FURTHER INSTRUMENT DRIFT OF THE PRESSURE TRANSMITTERS SINCE SEPTEMBER, 1981. REFER TO RO'S 81-030 AND 81-055.

[162] FT. ST. VRAIN DOCKET 50-267 LER 81-030 REV 2
 UPDATE ON DRIFT IN PRIMARY COOLANT SYSTEM PRESSURE SWITCHES.
 EVENT DATE: 042281 REPORT DATE: 092783 NSSS: GA TYPE: HTGR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187484) DRIFT. INSTRUMENT PERSONNEL PERFORMED THE PRIMARY COOLANT PRESSURE SCRAM CALIBRATION CHECK AND FOUND THAT THE VOLTAGE OUTPUTS OF TWO OF THE THREE PRESSURE TRANSMITTERS WERE LOW AND COULD HAVE CAUSED THE PRIMARY COOLANT HIGH PRESSURE SWITCHES TO TRIP ABOVE THE LIMITS OF LCO 4.4.1, TABLE 4.4-1. THIS OCCURRENCE WAS REPORTED PER TECH SPEC 7.5.2(B)1 AND 7.5.2(B)2. SIMILAR OCCURRENCES: RO 77-46, 79-57, 81-008, AND 81-055. THE LOW VOLTAGE OUTPUTS FROM THE PRESSURE TRANSMITTERS WERE DUE TO INSTRUMENT DRIFT. THE PRESSURE TRANSMITTERS WERE CALIBRATED AND THE SURVEILLANCE TEST SUCCESSFULLY COMPLETED. NEITHER MONTHLY CHECKS NOR ANNUAL CALIBRATIONS HAVE REVEALED ANY FURTHER INSTRUMENT DRIFT OF THE PRESSURE TRANSMITTERS SINCE SEPTEMBER, 1981. REFER TO RO'S 81-008 AND 81-055.

[163] FT. ST. VRAIN DOCKET 50-267 LER 81-055 REV 1
 UPDATE ON DRIFT IN PRIMARY COOLANT PRESSURE SWITCH.
 EVENT DATE: 082181 REPORT DATE: 092783 NSSS: GA TYPE: HTGR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187475) INSTRUMENT DRIFT. INSTRUMENT PERSONNEL PERFORMED THE PRIMARY COOLANT PRESSURE SCRAM CALIBRATION CHECK AND FOUND THAT THE VOLTAGE OUTPUTS OF ONE OF THE THREE PRESSURE TRANSMITTERS WERE LOW AND COULD HAVE CAUSED THE PRIMARY COOLANT HIGH PRESSURE SWITCHES TO TRIP ABOVE THE LIMITS OF LCO 4.4.1, TABLE 4.4-1. THIS OCCURRENCE WAS REPORTED PER TECH SPEC AC 7.5.2(B)1 AND AC 7.5.2(B)2. SIMILAR OCCURRENCES: RO 77-46, 79-57, 81-008, AND 81-030. THE LOW VOLTAGES FROM THE PRESSURE TRANSMITTERS WERE DUE TO INSTRUMENT DRIFT. THE PRESSURE TRANSMITTERS WERE CALIBRATED AND THE SURVEILLANCE TEST SUCCESSFULLY COMPLETED. NEITHER MONTHLY CHECKS NOR ANNUAL CALIBRATIONS HAVE REVEALED ANY FURTHER INSTRUMENT DRIFT OF THE PRESSURE TRANSMITTERS SINCE SEPTEMBER, 1981. REFER TO RO'S 81-008 AND 81-030.

[164] FT. ST. VRAIN DOCKET 50-267 LER 82-049 REV 1
 UPDATE ON STEAM GENERATOR LEAK.
 EVENT DATE: 120882 REPORT DATE: 091683 NSSS: GA TYPE: HTGR
 SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: HEAT EXCHANGERS

(NSIC 187688) TUBING LEAK. A SECONDARY TO PRIMARY SIDE LEAK WAS DISCOVERED IN THE EES SECTION OF THE B-2-3 MODULE IN THE LOOP 2 STEAM GENERATOR. THE LEAK IS ASSUMED TO HAVE DEVELOPED FOLLOWING A REACTOR SCRAM TRANSIENT ON SEPTEMBER 30, 1982. ACCOMPANYING OCCURRENCES REPORTED IN RO 82-044. SIMILAR REPORT IS RO 77-42. THE ACTUAL CAUSE WAS NOT IDENTIFIED, BUT APPEARS TO BE RANDOM IN NATURE. THE AFFECTED STEAM GENERATOR WAS ISOLATED. THE MODULE AND TUBE WERE IDENTIFIED, THE LEAK ELEVATION LOCATED, AND THE LEAK RATE MEASURED. THE TUBE ENDS WERE PLUGGED AND CAPPED. TUBE MATERIAL SAMPLES WERE METALLURGICALLY EXAMINED.

[165] FT. ST. VRAIN DOCKET 50-267 LER 83-008 REV 2
 UPDATE ON PCRV HELIUM PRESSURE EXCEEDS 100 PSIA.
 EVENT DATE: 022283 REPORT DATE: 102783 NSSS: GA TYPE: HTGR
 SYSTEM: REACTOR VES. & APPURTENANCES COMPONENT: VESSELS, PRESSURE

(NSIC 187477) LICENSED OPERATOR ERROR. WITH THE SECONDARY COVERS AND MISSILE SHIELDS REMOVED FOR VALVE MAINTENANCE, THE PRESTRESSED CONCRETE REACTOR VESSEL (PCRV) HELIUM PRESSURE WAS ALLOWED TO EXCEED 100 PSIA. THIS IS REPORTABLE AS A DEGRADED MODE OF LCO 4.2.7(B) PER TECH SPEC AC 7.5.2(B)2. SIMILAR OCCURRENCES ARE RO'S 82-020, 82-005, 81-067, AND 80-57. OPERATOR BEING INVOLVED IN RESTORING

PRIMARY AND SECONDARY FLOWS FOLLOWING A TRIP OF THE AUXILIARY BOILER NO. 2 ALLOWED PCRV PRESSURE TO EXCEED THE 100 PSIA LIMIT. THE PCRV WAS DEPRESSURIZED TO LESS THAN 100 PSIA. THE OPERATOR WAS REMINDED OF HIS DUTY TO MAINTAIN COMPLIANCE WITH TECH SPEC.

[166] FT. ST. VRAIN DOCKET 50-267 LER 83-031
HYDRAULIC SNUBBER INOPERABLE.
EVENT DATE: 081883 REPORT DATE: 091683 NSSS: GA TYPE: HTGR
SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS

(NSIC 187686) LEAKING RESERVOIR FITTINGS. DURING TESTING, ONE HYDRAULIC SNUBBER WAS FOUND INOPERABLE. SINCE THE REACTOR WAS OPERATING AT POWER, THIS EVENT CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.3.10 AND IS REPORTABLE PER TECH SPEC AC 7.5.2(B)2. SIMILAR REPORTS ARE RO'S: 83-004, 83-016, AND 83-022. LEAKING RESERVOIR FITTINGS ALLOWED THE LOSS OF OIL. THE SNUBBER WAS REMOVED AND REPLACED WITH A REBUILT, TESTED, QUALIFIED SPARE.

[167] FT. ST. VRAIN DOCKET 50-267 LER 83-033
GAS WASTE VACUUM TANK RUPTURE DISC RUPTURES.
EVENT DATE: 082783 REPORT DATE: 092683 NSSS: GA TYPE: HTGR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: VALVES

(NSIC 187645) WHILE INVESTIGATING POSSIBLE SOURCES OF LEAKAGE INTO THE GASEOUS WASTE SYSTEM, THE GAS WASTE VACUUM TANK RUPTURE DISC (M-63802) WAS FOUND RUPTURED. THIS EVENT IS REPORTABLE PER TECH SPEC AC 7.5.2(B)4. SIMILAR RO'S: 82-050, 82-009. NO UPSCALE OR OUT OF THE ORDINARY READINGS WERE RECORDED BY THE REACTOR PLANT EXHAUST VENT STACK MONITORING SYSTEM. FOR THIS REASON, IT CANNOT BE DETERMINED WHEN RUPTURE DISC M-63802 RUPTURED. M-63802 WAS DISASSEMBLED, REPLACED, AND RETURNED TO NORMAL SERVICE.

[168] FT. ST. VRAIN DOCKET 50-267 LER 83-034
DIESEL GENERATOR HAS PROBLEMS DURING TESTING.
EVENT DATE: 092183 REPORT DATE: 102183 NSSS: GA TYPE: HTGR
SYSTEM: ONSITE POWER SYSTEM & CONTROL COMPONENT: VALVES

(NSIC 187482) VALVE AND GOVERNOR FAILURE. PROBLEMS WERE EXPERIENCED WITH 1A DIESEL-GENERATOR SET DURING CONDUCT OF THE WEEKLY SURVEILLANCE TEST (SR 5.6.1). THIS EVENT CONSTITUTED OPERATION IN A DEGRADED MODE OF LCO 4.6.1(D) AND IS BEING REPORTED PER TECH SPEC 7.5.2(B)2. SIMILAR REPORTS: RO'S 81-017, 81-029, 81-031, 81-035, 81-057, 83-014. UPON CHECKING OPERATING PARAMETERS ON THE LOADED DIESEL-GENERATOR SET, IT WAS NOTED THAT THE 1A DIESEL ENGINE WAS OVERHEATING DUE TO THE COOLING WATER TEMPERATURE CONTROL VALVE (TCV) NOT OPENING. THE DIESEL-GENERATOR SET WAS IMMEDIATELY SHUTDOWN. THE TCV WAS INSPECTED AND RETESTED WITH NO PROBLEMS FOUND. SUBSEQUENT TESTING REVEALED GOVERNOR PROBLEMS WHICH WERE IMMEDIATELY CORRECTED BY REPLACING A MAGNETIC PICK-UP UNIT. THE DIESEL-GENERATOR SET WAS RETURNED TO OPERABLE STATUS IN APPROXIMATELY EIGHT HOURS. THE TCV IS A 3", SPRING LOADED, AIR OPERATED, MASONEILAN MODEL 37-20521. THE MAGNETIC PICK-UP UNIT IS WOODWARD GOVERNOR COMPANY PART NUMBER 1680-622.

[169] FT. ST. VRAIN DOCKET 50-267 LER 83-035
EMERGENCY FEEDWATER INOPERABLE.
EVENT DATE: 092283 REPORT DATE: 102183 NSSS: GA TYPE: HTGR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES

(NSIC 187695) LEAKY RELIEF VALVE GASKET. EMERGENCY FEEDWATER TO THE LOOP I HELIUM CIRCULATOR WATER TURBINE DRIVES WAS ISOLATED TO ALLOW REPAIR OF A LEAKING RELIEF VALVE AND CALIBRATION OF TWO ASSOCIATED PRESSURE CONTROL VALVES. THIS

EVENT CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.2.2 AND IS REPORTABLE PER TECH SPEC 7.5.2(B)2. SIMILAR RO'S ARE: 83-015, 83-020, 83-023. A LEAKING COPPER GASKET ON RELIEF VALVE V-21542 NECESSITATED HEADER ISOLATION. THE VALVE IS A DRESSER 1500# CONSOLIDATED SAFETY RELIEF VALVE, MODEL NO. 1916-GC/P1. THE VALVE WAS REPAIRED AND THE WATER TURBINE DRIVE HEADER RETURNED TO SERVICE WITHIN THE TIME ALLOWED BY LCO 4.2.2(A).

[170] FT. ST. VRAIN DOCKET 50-267 LER 83-038
PPS FEEDWATER FLOW CIRCUIT MODULE INOPERABLE.
EVENT DATE: 092783 REPORT DATE: 102783 NSSS: GA TYPE: HTGR
SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: ELECTRICAL CONDUCTORS

(NSIC 187696) LOOSE CONNECTION. DURING SCHEDULED SURVEILLANCE TESTING ON THE FEEDWATER FLOW LOW PLANT PROTECTION SYSTEM (PPS) CIRCUITRY FOR THE 1C CIRCULATOR, THE A LOGIC CT-2A2 MODULE WAS FOUND TO BE INOPERABLE. THIS CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.4.1 AND IS REPORTABLE PER TECH SPEC 7.5.2(B)1 AND (B)2. REDUNDANT SYSTEM OPERABLE. SIMILAR REPORTS: RO'S 82-019, 82-047. THE CAUSE OF THIS EVENT WAS A LOOSE CONNECTION IN THE CT-2A2 LOGIC MODULE OF THE PPS. CT-2A2 WAS REPLACED WITH A SPARE LOGIC MODULE AND THE SURVEILLANCE TEST SUCCESSFULLY COMPLETED. THE LOOSE CONNECTION WAS SOLDERED AND THE REPAIRED MODULE WILL NOW BE USED AS A SPARE.

[171] FT. ST. VRAIN DOCKET 50-267 LER 83-036
EMERGENCY FEEDWATER ISOLATED DUE TO LEAKY VALVES.
EVENT DATE: 092883 REPORT DATE: 102883 NSSS: GA TYPE: HTGR
SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: VALVES

(NSIC 187680) REPLACEMENT OF VALVE INTERNALS. ON TWO OCCASIONS IN SEPTEMBER, 1983, THE EMERGENCY FEEDWATER SUPPLY HEADER TO THE LOOP I HELIUM CIRCULATOR WATER TURBINE DRIVES WAS ISOLATED TO PERFORM MAINTENANCE ON TWO LEAKING HEADER SAFETY VALVES AND ONE PRESSURE CONTROL VALVE. WITH THE REACTOR OPERATING AT 65% POWER DURING EACH OF THE OCCASIONS, THESE EVENTS CONSTITUTE OPERATIONS IN A DEGRADED MODE OF LCO 4.2.2(A), AND ARE REPORTABLE PER TECH SPEC AC 7.5.2(B)2. SIMILAR OCCURRENCES: RO 83-023, 83-020, 83-015, 82-034, 82-031, 82-029, 82-028. REPAIR OF THE TWO SAFETY RELIEF VALVES AND THE ONE PRESSURE CONTROL VALVE REQUIRED THE REPLACEMENT OF THE VALVE INTERNAL PARTS TO ELIMINATE INTERNAL LEAKAGE THROUGH THE VALVES AND NECESSITATED ISOLATION OF THE HELIUM CIRCULATOR WATER TURBINE DRIVES. THE VALVES WERE REPAIRED AND THE EMERGENCY FEEDWATER SUPPLY HEADER RETURNED TO SERVICE WITHIN THE TIME ALLOWED BY LCO 4.2.2.

[172] FT. ST. VRAIN DOCKET 50-267 LER 83-037
BEARING WATER MAKEUP PUMP LEAKS.
EVENT DATE: 092883 REPORT DATE: 102883 NSSS: GA TYPE: HTGR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PUMPS

(NSIC 187681) WORN MECHANICAL SEAL. ONE OF THE BEARING WATER MAKEUP PUMPS WAS TAKEN OUT OF SERVICE WHILE THE REACTOR WAS AT 65% POWER. THIS EVENT CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.2.2, AND IS REPORTABLE PER TECH SPEC AC 7.5.2(B)2. REDUNDENT SYSTEMS WERE AVAILABLE AND OPERABLE. SIMILAR REPORTS ARE RO'S: 80-077, 81-052, AND 82-036. THE BACKUP BEARING WATER PUMP WAS REMOVED FROM SERVICE DUE TO A LEAKING MECHANICAL SEAL. NORMAL OPERATION AND WEAR WERE THE CAUSES OF THE LEAK. THE MECHANICAL SEAL WAS REPLACED, AND THE PUMP WAS RETURNED TO SERVICE. THE PUMP MODEL IS 38059 GOULDS. NO FUTURE CORRECTIVE ACTION IS ANTICIPATED OR REQUIRED.

[173] FT. ST. VRAIN DOCKET 50-267 LER 83-040
 DEWPOINT MOISTURE MONITOR INOPERABLE DUE TO MIRROR OVERHEATING.
 EVENT DATE: 092883 REPORT DATE: 102883 NSSS: GA TYPE: HTGR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187693) DECREASE IN NITROGEN COOLING; OUT OF PHASE HEAT CONTROLLER. ONE OF THE THREE LOOP II PLANT PROTECTIVE SYSTEM DEWPOINT MOISTURE MONITORS WAS DISCOVERED INOPERABLE DUE TO OVERHEATING OF THE MIRROR ABOVE ALLOWABLE LIMITS. THIS EVENT CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.4.1, TABLE 4.4-1, AND IS REPORTABLE PER TECH SPEC AC 7.5.2(B)2. REDUNDANT MONITORS OPERABLE. SIMILAR REPORTS: RO'S 82-027, 82-046, AND 83-001. THE COMBINATION OF A SLIGHT PRESSURE DECREASE IN THE MOISTURE MONITOR NITROGEN SUPPLY TANK REDUCING COOLING CAPABILITY TO THE MIRROR AND A SMALL CONTINUOUS FLOW OF CURRENT TO THE MIRROR HEADER INCREASED MIRROR TEMPERATURE ABOVE NORMAL. THE INOPERABLE CHANNEL WAS PLACED IN A TRIPPED CONDITION. THE NITROGEN SUPPLY TANK WAS REFILLED, AND THE HEATER POWER CONTROLLER PHASE BALANCE WAS ADJUSTED SLIGHTLY.

[174] FT. ST. VRAIN DOCKET 50-267 LER 83-039
 DIESEL GENERATOR TRIPS DUE TO SPURIOUS SIGNAL.
 EVENT DATE: 092983 REPORT DATE: 102883 NSSS: GA TYPE: HTGR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS

(NSIC 187682) HEAT-BRITTLEMENT OF SIGNAL CABLE INSULATION. PROBLEMS WERE EXPERIENCED WITH THE 1B DIESEL-GENERATOR SET DURING PERFORMANCE OF THE WEEKLY SURVEILLANCE TEST. THIS EVENT CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.6.1(D) AND IS REPORTABLE PER TECH SPEC AC 7.5.2(B)2. SIMILAR REPORTS: RO'S 81-031, 81-035, 83-014. A SIGNAL CABLE USED IN CONJUNCTION WITH THE ENGINE TRIP CIRCUIT HAD FAILED DUE TO HEAT-BRITTLEMENT OF THE INSULATION, THUS CAUSING AN ERRONEOUS TRIP SIGNAL. THE CABLE WAS REPLACED AND THE 1B DIESEL-GENERATOR SET WAS SUCCESSFULLY TESTED AND RETURNED TO NORMAL STANDBY STATUS.

[175] FT. ST. VRAIN DOCKET 50-267 LER 83-041
 DIESEL GENERATOR INOPERABLE DUE TO LEAKY AIR FILTER.
 EVENT DATE: 100583 REPORT DATE: 110483 NSSS: GA TYPE: HTGR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: FILTERS

(NSIC 187694) BLOWN OUT PETCOCK DRAIN. THE 1D EMERGENCY DIESEL ENGINE OF THE 1B EMERGENCY GENERATOR SET WAS TAKEN OUT OF SERVICE TO REPAIR AN AIR LEAK IN FILTER (M-92817). WITH THE REACTOR OPERATING AT POWER, THIS EVENT IS REPORTABLE AS A DEGRADED MODE OF LCO 4.6.1(D) PER TECH SPEC AC 7.5.2(B)2. REDUNDANT EMERGENCY DIESEL GENERATOR SET WAS AVAILABLE AND OPERABLE. SIMILAR REPORTS: RO'S 83-014, 82-035, 82-033, 81-066, 81-057, 81-035, 81-029, AND 81-017. THE BLOWN OUT PETCOCK DRAIN IN THE FILTER (M-92817) RESULTED IN A LEAK IN THE AIR SUPPLY TO THE AIR STARTER MOTOR OF THE 1D EMERGENCY DIESEL ENGINE. THE POLYCARBONATE BOWL WAS REPLACED AND TESTED. AN OPERABILITY TEST OF THE 1B EMERGENCY GENERATOR SET WAS PERFORMED AND THE 1B EMERGENCY GENERATOR SET RETURNED TO SERVICE.

[176] FT. ST. VRAIN DOCKET 50-267 LER 83-042
 BOILER FEED PUMP INOPERABLE DUE TO SPEED OSCILLATIONS.
 EVENT DATE: 100683 REPORT DATE: 110483 NSSS: GA TYPE: HTGR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: MECHANICAL FUNCTION UNITS

(NSIC 187679) LOOSE, WORN GOVERNOR LINKAGE. ON THREE SEPARATE OCCASIONS FROM OCTOBER 6, 1983, TO OCTOBER 11, 1983, THE "1A" BOILER FEEDPUMP WAS REMOVED FROM SERVICE TO RESOLVE SPEED OSCILLATION PROBLEMS WHILE THE "1C" BOILER FEED PUMP WAS OUT FOR REPAIRS. SINCE THE REACTOR WAS OPERATING AT POWER ON ALL THREE OCCASIONS, THESE EVENTS CONSTITUTE OPERATIONS IN A DEGRADED MODE OF LCO 4.3.2 AND ARE REPORTABLE PER TECH SPEC AC 7.5.2(B)2. SIMILAR RO'S: 79-003, 80-044, AND

83-032. THE "1A" BOILER FEEDPUMP SPEED OSCILLATIONS WERE CAUSED BY A LOOSE, WORN GOVERNOR LINKAGE. THE WORN LINKAGE WAS REMACHINED AND FITTED WITH NEW BUSHINGS. THE LINKAGE WAS REINSTALLED AND THE "1A" BOILER FEEDPUMP WAS RETURNED TO SERVICE.

[177] FT. ST. VRAIN DOCKET 50-267 LER 83-043
 ASSUMPTIONS SUPPORTING TECH SPEC LCO 4.1.9 ARE NOT CONSERVATIVE.
 EVENT DATE: 101183 REPORT DATE: 102583 NSSS: GA TYPE: HTGR
 SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS

(NSIC 187697) ASSUMPTIONS CONCERNED FLOW AND TEMPERATURE IN CORE. AS A RESULT OF A TECHNICAL REVIEW OF SPECIFICATION LCO 4.1.9, ASSUMPTIONS SUPPORTING THE ANALYSIS WERE FOUND TO BE NON-CONSERVATIVE, OBVIATING THE BASIS FOR THE SPECIFICATION AND CREATING THE POTENTIAL FOR REACTOR OPERATION IN A MANNER LESS CONSERVATIVE THAN INTENDED IN THE BASIS FOR THE SPECIFICATION. NO EVIDENCE OF PREMATURE FUEL FAILURE HAS BEEN OBSERVED AS A RESULT OF LOW AND CONSTANT CIRCULATING ACTIVITY AND POST IRRADIATION FUEL EXAMINATION. NON-CONSERVATIVE ASSUMPTIONS IN THE DEVELOPMENT OF SPECIFICATION LCO 4.1.9 OBVIATED THE BASIS FOR THE SPECIFICATION. INTERIM CONSERVATIVE GUIDELINES ARE BEING FOLLOWED UNTIL A MORE COMPLETE ANALYSIS SUPPORTING A FORMAL TECH SPEC CHANGE CAN BE COMPLETED.

[178] FT. ST. VRAIN DOCKET 50-267 LER 83-049
 CORE OUTLET TEMPERATURE EXCEEDS LIMIT.
 EVENT DATE: 111083 REPORT DATE: 120983 NSSS: GA TYPE: HTGR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VESSELS, PRESSURE

(NSIC 187673) MOISTURE INGRESS. THE REACTOR OPERATED AT POWER WITH THE AVERAGE CORE OUTLET TEMPERATURE GREATER THAN 1200 DEGREES FAHRENHEIT, AND TOTAL PRIMARY COOLANT OXIDANTS GREATER THAN 10 PPM (PARTS PER MILLION). THIS EVENT CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.2.10 AND IS REPORTABLE PER TECH SPEC AC 7.5.2(B)2. SIMILAR REPORTS: RO 83-025, 83-012, 83-003, 82-049, 82-030, 82-026, 82-023, 82-017. THE PLANT HAD EXPERIENCED MOISTURE INGRESS TO THE REACTOR VESSEL AS A RESULT OF A TURBINE TRIP AND REACTOR SCRAM ON OCTOBER 29, 1983. THE HELIUM PURIFICATION SYSTEM WAS UTILIZED TO REDUCE THE PRIMARY COOLANT IMPURITY LEVELS.

[179] FT. ST. VRAIN DOCKET 50-267 LER 83-050 REV 1
 UPDATE ON MISSED PCRV COOLING WATER TEMPERATURE SCANNER TEST.
 EVENT DATE: 111683 REPORT DATE: 122983 NSSS: GA TYPE: HTGR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187690) OPERATOR ERROR. IT WAS DETERMINED THAT SPECIFICATION SR 5.4.4, PCRV COOLING WATER SYSTEM TEMPERATURE SCANNER SURVEILLANCE REQUIREMENT, HAD NOT BEEN PERFORMED WITHIN THE REQUIRED SURVEILLANCE INTERVAL. THIS EVENT IS REPORTABLE PER TECH SPEC AC 7.5.2(B)3. SIMILAR REPORTS: 80-78, 82-39. A TEMPORARY SCHEDULING TECHNICIAN DID NOT ENSURE THAT THE TECH SPEC SURVEILLANCE TEST, SR 5.4.4-M/5.4.4-A1, WAS DELIVERED TO THE RESPONSIBLE DEPARTMENT PRIOR TO THE "LATE" DATE. PERSONNEL WERE REMINDED OF THEIR DUTIES AND THE IMPORTANCE OF ADHERING TO THE TECH SPEC SURVEILLANCE TESTING PROGRAM REQUIREMENTS. THE TEST WAS SUCCESSFULLY COMPLETED ON NOV 21, 1983.

[180] FT. ST. VRAIN DOCKET 50-267 LER 83-052
 PCRV COOLING WATER OUTLET TEMPERATURE EXCEEDS LIMIT.
 EVENT DATE: 120883 REPORT DATE: 010684 NSSS: GA TYPE: HTGR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: HEAT EXCHANGERS

(NSIC 187691) OPERATOR LIMITED SERVICE WATER TO HEAT EXCHANGER. THE PCRV COOLING WATER OUTLET TEMPERATURE EXCEEDED THE 120 F LIMIT. THIS EVENT CONSTITUTES OPERATION IN A DEGRADED MODE OF LCO 4.2.15(B) AND IS REPORTABLE PER TECH SPEC AC

7.5.2(B)2. RELATED OCCURRENCES ARE RO'S 83-006, 82-054, 82-045, AND 83-043. WITH SERVICE WATER FLOW TO THE PCRV COOLING WATER HEAT EXCHANGERS ISOLATED, PCRV COOLING WATER OUTLET TEMPERATURE INCREASED ABOVE THE 120 F LIMIT. SERVICE WATER FLOW WAS RESTORED TO THE HEAT EXCHANGERS, RESULTING IN THE PCRV COOLING WATER OUTLET TEMPERATURE DECREASING TO WITHIN ACCEPTABLE LIMITS. OPERATIONS PERSONNEL WERE REMINDED OF THEIR DUTY TO MONITOR AND MAINTAIN PLANT PARAMETERS WITHIN TECH SPEC LIMITS. NO FURTHER CORRECTIVE ACTION IS ANTICIPATED OR REQUIRED.

[181] GINNA DOCKET 50-244 LER 83-012 REV 1
 UPDATE ON CONTAINMENT HATCH LEAKAGE.
 EVENT DATE: 032383 REPORT DATE: 050683 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 183490) WHILE AT 100% STEADY STATE OPERATION, LOCAL LEAK TESTING OF THE CONTAINMENT PERSONNEL HATCH WAS BEING PERFORMED WITHIN THE 6 MONTH FREQUENCY REQUIRED BY TECH SPECS. BASED ON REVIEW OF THE TEST DATA, THE PERSONNEL HATCH MET THE ALLOWABLE LEAKAGE REQUIREMENTS, HOWEVER, THE INDIVIDUAL DOORS, WHEN USED AS A SINGLE BARRIER FOR CONTAINMENT INTEGRITY, HAD A HIGHER LEAK RATE THAN ALLOWED FOR THE CONTAINMENT HATCH (TECH SPECS SECTION 4.4.2.2). THIS WOULD HAVE ALLOWED EXCESSIVE LEAKAGE THROUGH THIS PENETRATION FOR THE ESTIMATED 6 HOURS THE HATCH WAS IN USE ABOVE COLD SHUTDOWN CONDITIONS WITH ONE DOOR OPEN. BASED ON CONDITIONS EXPLAINED UNDER THE CAUSE INVESTIGATION, THIS IS BEING REPORTED UNDER 6.9.2A(6) OF THE TECH SPECS AS A PROCEDURAL INADEQUACY THAT COULD HAVE RENDERED THIS CONTAINMENT BOUNDARY INOPERABLE. DURING THE PLANT OPERATIONS REVIEW COMMITTEE REVIEW OF THE TEST RESULTS, IT WAS IDENTIFIED THAT MAINTENANCE COMPLETED ON 10/07/82 HAD INCLUDED REPACKING OF THE SHAFT AREA. THE MAINTENANCE PROCEDURE HAD INCORRECTLY, FOR THIS INSTANCE, REQUIRED ONLY DOOR SEAL LEAK TESTING. THIS PROCEDURE HAS BEEN REVISED TO ASSURE THE PROPER POST MAINTENANCE TESTING IS COMPLETED. ALL OTHER MAINTENANCE PROCEDURES ARE BEING REVIEWED AND REVISED, IF NECESSARY, TO ASSURE PROPER POST MAINTENANCE TESTING WILL BE PERFORMED.

[182] GRAND GULF 1 DOCKET 50-416 LER 82-047 REV 1
 UPDATE ON PROCEDURE ERROR CONCERNING RPV HEAD TENSIONING.
 EVENT DATE: 083082 REPORT DATE: 021883 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR VES. & APPURTENANCES COMPONENT: VESSELS, PRESSURE
 VENDOR: CBI NUCLEAR COMPANY

(NSIC 186252) THE REACTOR VESSEL (RPV) FLANGE AND HEAD FLANGE TEMPERATURES WERE NOT VERIFIED TO GREATER THAN OR EQUAL TO 70 DEGREES F, 30 MINUTES PRIOR TO AND WITHIN EVERY 30 MINUTES DURING TENSIONING OF THE RPV HEAD CONTRARY TO TECH SPEC 4.4.6.1.4.B. THE CAUSE WAS PERSONNEL ERROR AND PROCEDURAL INADEQUACY. UPON OBSERVANCE OF THE ERROR, TEMPERATURES WERE RECORDED IN THE CONTROL ROOM LOG IN THE SPECIFIED FREQUENCY FOR THE DURATION OF HEAD TENSIONING. PROCEDURE 06-OP-1B13-V-0001 HAS BEEN WRITTEN TO RECORD THE TEMPERATURES AS REQUIRED AND IS REFERENCED IN THE HEAD TENSIONING PROCEDURE, 07-S-14-184 (REVISED JANUARY 10, 1983).

[183] GRAND GULF 1 DOCKET 50-416 LER 82-060 REV 3
 UPDATE ON MISSING SMOKE DETECTORS IN AUXILIARY BUILDING STAIRWELL.
 EVENT DATE: 091082 REPORT DATE: 090883 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186253) DURING AN INSPECTION, BY THE FIRE PROTECTION COORDINATOR, AN AREA CONTAINING SAFETY RELATED CABLE IN THE AUXILIARY BUILDING WAS IDENTIFIED AS NOT HAVING SMOKE DETECTORS. THE AREA WAS STAIRWELL 1A12 ON ELEVATIONS 185 AND 208 FEET. AN INVESTIGATION REVEALED NO COMBUSTIBLES IN THE AREA. AN HOURLY FIRE

WATCH WAS ESTABLISHED. THE SMOKE DETECTOR WAS OMITTED FROM THE ORIGINAL PLANT DESIGN. DCP 82-717 PROVIDES FOR INSTALLATION OF SMOKE DETECTORS IN STAIRWELL 1A12. AN HOURLY FIRE WATCH WILL BE MAINTAINED IN THE INTERIM. SMOKE DETECTOR INSTALLATION IS EXPECTED TO BE COMPLETED PRIOR TO COMMERCIAL OPERATION.

[184] GRAND GULF 1 DOCKET 50-416 LER 83-011S REV 2
 UPDATE ON NUMEROUS OPEN FIRE BARRIERS.
 EVENT DATE: 010383 REPORT DATE: 090883 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186727) FROM JANUARY 3 TO JANUARY 24, 1983, CERTAIN FIRE RATED BARRIERS IN THE CONTROL BUILDING AND AUXILIARY BUILDING WERE OPENED TO PERFORM PLANNED MAINTENANCE ACTIVITIES. FIRE WATCHES WERE ESTABLISHED PER TECH SPEC 3.7.7.A. THIS IS SUBMITTED AS A SPECIAL REPORT PURSUANT TO TECH SPEC 3.7.7.A. THE LIST OF FIRE BARRIERS WERE OPENED TO ROUTE CABLES IN ACCORDANCE WITH MAINTENANCE WORK AUTHORIZATIONS. ALL FIRE BARRIERS HAVE BEEN RESTORED. THIS IS A FINAL REPORT.

[185] GRAND GULF 1 DOCKET 50-416 LER 83-049 REV 1
 UPDATE ON INOPERABLE DIESEL GENERATOR.
 EVENT DATE: 040983 REPORT DATE: 090883 NSSS: GE TYPE: BWR
 SYSTEM: COMPRESSED AIR SYSTEMS & CONT COMPONENT: VALVES

(NSIC 186729) ON 4-9-83, WHILE IN COLD SHUTDOWN, A D/G 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. D/G 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. THE ATTACHED SUPPLEMENTAL INFORMATION PROVIDES FURTHER CORRECTIVE ACTION.

[186] GRAND GULF 1 DOCKET 50-416 LER 83-076 REV 1
 UPDATE ON INOPERABLE DRYWELL RADIATION MONITOR CHANNELS.
 EVENT DATE: 061083 REPORT DATE: 090883 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186730) ON JUNE 10, 1983, TWO OF THE FOUR CHANNELS FOR THE CONTAINMENT AND DRYWELL VENTILATION EXHAUST RADIATION MONITOR FAILED THEIR MONTHLY FUNCTIONAL SURVEILLANCE AND WERE DECLARED INOPERABLE. THE APPROPRIATE ACTION STATEMENT OF TECH SPEC 3.3.7.1 WAS CARRIED OUT. THIS EVENT IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE SURVEILLANCE REQUIRED ALL CHANNELS TO BE LESS THAN 1.5 TIMES THE LOWEST READING TO VERIFY CHANNEL OPERATION UPON RETURNING IT TO SERVICE. UPON EVALUATION, IT WAS DETERMINED THAT THIS REQUIREMENT WAS TOO RESTRICTIVE & THE PROCEDURE WAS REVISED TO INDICATE THAT A READING OF LESS THAN 5 TIMES THE LOWEST READING IS ACCEPTABLE. THE SURVEILLANCE WAS PERFORMED SATISFACTORILY ON 7/21/83.

[187] GRAND GULF 1 DOCKET 50-416 LER 83-077
 CONTROL ROOM STANDBY FRESH AIR UNIT HEATER FAILS.
 EVENT DATE: 062283 REPORT DATE: 071883 NSSS: GE TYPE: BWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: RELAYS
 VENDOR: ALLEN-BRADLEY CO.

(NSIC 184608) ON JUNE 22, 1983, WHILE PERFORMING THE CONTROL ROOM STANDBY FRESH

AIR UNIT "A" MONTHLY SURVEILLANCE AS REQUIRED BY TECH SPEC 4.7.2.A, THE UNIT HEATER FAILED TO OPERATE. AN LCO WAS ENTERED IN ACCORDANCE WITH TECH SPEC 3.7.2 PENDING A MAINTENANCE INVESTIGATION. THE HEATER'S FUNCTION IS TO CONTROL MOISTURE AFTER AIR EXITS THE DEMISTER BUT PRIOR TO THE AIR ENTERING THE FILTERS. THE CAUSE OF THE HEATER FAILURE WAS A MALFUNCTIONING CONTROL RELAY. THE RELAY (ALLEN BRADLEY PART NO. 700-C400-A24) WAS REPLACED AND THE SURVEILLANCE WAS PERFORMED SATISFACTORILY. THE SYSTEM WAS RESTORED TO OPERABILITY ON JUNE 25, 1983.

[188] GRAND GULF 1 DOCKET 50-416 LER 83-081
CONTROL ROOM FRESH AIR UNIT NOT DECLARED INOPERABLE AS REQUIRED.
EVENT DATE: 062483 REPORT DATE: 072283 NSSS: GE TYPE: BWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 184609) ON JUNE 24, 1983, CONTROL ROOM FRESH AIR UNIT "A" SHOULD HAVE BEEN DECLARED INOPERABLE WHEN THE RESULTS OF THE LABORATORY ANALYSIS OF A CARBON SAMPLE REQUIRED BY TECH SPEC 4.7.2.C WERE NOT RECEIVED WITHIN THE 31 DAY TIME LIMIT. DUE TO A FAILURE TO REPORT THIS TO OPERATIONS, INOPERABILITY WAS NOT DECLARED UNTIL JUNE 27, 1983. THE "A" FRESH AIR UNIT REACHED 720 HOURS OF CHARCOAL ABSORBER OPERATION ON MAY 24, 1983. UNIT "B" WAS OPERABLE. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. SHIPMENT OF THE SAMPLE WAS DELAYED PENDING APPROVAL OF THE VENDOR AS A QUALIFIED SUPPLIER OF THE SERVICE. THE VENDOR WAS APPROVED. ON JUNE 30, 1983, THE SAMPLE PASSED THE TESTING CRITERIA AND THE FRESH AIR UNIT WAS RESTORED TO SERVICE. THIS IS A FINAL REPORT.

[189] GRAND GULF 1 DOCKET 50-416 LER 83-079 REV 1
UPDATE ON FAILURE OF DRYWELL PRESSURE RPS TRIP.
EVENT DATE: 062583 REPORT DATE: 091583 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ROSEMOUNT, INC.

(NSIC 186732) ON 6-25-83, AN AUXILIARY TRIP UNIT FOR HIGH DRYWELL PRESSURE INDICATED A TRIP CONDITION YET NO REACTOR PROTECTION SYSTEM RESPONSE OCCURRED WHEN A HALF-SCRAM SHOULD HAVE BEEN PRESENT. THE EVENT OCCURRED DURING PERFORMANCE OF AN 18 MONTH SURVEILLANCE TEST WHICH WAS BEING RUN FOR FUTURE ENTRANCE INTO A DIFFERENT OPERATIONAL CONDITION AND WAS NOT NEEDED FOR THE PLANT MODE. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.A. THE CAUSE WAS A DEFECTIVE ROSEMOUNT AUXILIARY TRIP UNIT. THE TRIP UNIT WAS REPLACED AND THE SAME SURVEILLANCE WAS SATISFACTORILY PERFORMED. THE FAILED UNIT IS PENDING REWORK AT WHICH TIME THE EXACT FAILURE MODE WILL BE DETERMINED. AN UPDATE REPORT IS EXPECTED TO BE SUBMITTED BY NOVEMBER 30, 1983.

[190] GRAND GULF 1 DOCKET 50-416 LER 83-079 REV 2
UPDATE ON FAILURE OF DRYWELL PRESSURE RPS TRIP.
EVENT DATE: 062583 REPORT DATE: 121283 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: ROSEMOUNT, INC.

(NSIC 187872) ON 6-25-83, AN AUX. TRIP UNIT FOR HIGH DRYWELL PRESSURE INDICATED A TRIP CONDITION YET NO REACTOR PROTECTION SYSTEM (RPS) RESPONSE OCCURRED WHEN A HALF-SCRAM SHOULD HAVE BEEN PRESENT. THE EVENT OCCURRED DURING PERFORMANCE OF AN 18 MONTH SURVEILLANCE TEST WHICH WAS BEING RUN FOR FUTURE ENTRANCE INTO A DIFFERENT OPERATIONAL CONDITION AND WAS NOT NEEDED FOR THE PLANT MODE. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.A. THE CAUSE WAS A DEFECTIVE ROSEMOUNT AUXILIARY TRIP UNIT. THE TRIP UNIT WAS REPLACED AND THE SAME SURVEILLANCE WAS SATISFACTORILY PERFORMED. THE FAILED UNIT HAS BEEN REWORKED. THIS IS A FINAL REPORT.

[191] GRAND GULF 1 DOCKET 50-416 LER 83-080 REV 1
 UPDATE ON HIGH CONTROL ROOM TEMPERATURE.
 EVENT DATE: 062683 REPORT DATE: 101183 NSSS: GE TYPE: BWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186733) BEGINNING ON 6-26-83, DUE TO PROBLEMS WITH THE HVAC SYSTEM, TEMPERATURES IN THE CONTROL ROOM EXCEEDED THE 77 DEGREE F LIMIT OF TECH SPEC 3.7.8 A NUMBER OF TIMES, BUT BY NO MORE THAN 4 DEGREES. THE TEMPERATURES WERE ALWAYS RESTORED WITHIN 2 HOURS. DURING MAINTENANCE ON THE SYSTEM THE ACTION STATEMENT OF TECH SPEC 3.7.2 WAS ENTERED DUE TO WORK TAGGING BOUNDARIES. THE CAUSE OF THE B UNIT COOLING DEFICIENCY WAS A MALFUNCTIONING CONDENSER COOLING WATER FLOW CONTROL VALVE. THE LIMIT SWITCH ON THE VALVE WAS ADJUSTED TO CORRECT THE MALFUNCTION. THE FAILURE OF THE A UNIT TO PROPERLY COOL IS DISCUSSED IN LER 83-110. THIS IS SUBMITTED AS A FINAL REPORT PURSUANT TO TECH SPEC 6.9.1.13.B.

[192] GRAND GULF 1 DOCKET 50-416 LER 83-078 REV 1
 UPDATE ON TWO INOPERABLE DIESEL GENERATORS.
 EVENT DATE: 070183 REPORT DATE: 100583 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: VALVES
 VENDOR: CORSBY VALVE & GAGE CO.

(NSIC 186731) ON JULY 1, 1983, THE CONTROL ROOM OPERATORS WERE UNABLE TO MAINTAIN THE AIR RECEIVER PRESSURE FOR DIESEL GENERATOR 11 GREATER THAN 160 PSIG AS REQUIRED BY TECH SPEC 4.8.1.12.A.7. DIESEL GENERATOR 12 WAS ALREADY INOPERABLE DUE TO A MAINTENANCE TAG OUT OF THE STANDBY SERVICE WATER "B" SUBSYSTEM. DUE TO THE INOPERABLE STATUS OF THE TWO DIESEL GENERATORS, ACTION (A) OF TECH SPEC 3.8.1.2 WAS ENTERED. THIS IS BEING SUBMITTED PURSUANT TO TECH SPEC 6.9.1.13.B AS A FINAL REPORT. THE CAUSE WAS SETPOINT DRIFT ON THE RELIEF VALVES FOR THE DIESEL-DRIVEN AND ELECTRIC MOTOR-DRIVEN AIR COMPRESSORS. THE RELIEF VALVES DO NOT HAVE A FIXED BLOWDOWN RING. THIS ALLOWS SETPOINT DRIFT WHEN THE VALVE LIFTS. REPLACEMENT OF THESE VALVES WITH A DIFFERENT TYPE IS EXPECTED TO BE COMPLETED BY DECEMBER 31, 1983.

[193] GRAND GULF 1 DOCKET 50-416 LER 83-092 REV 1
 UPDATE ON CONTROL ROOM CHLORINE DETECTOR DEFICIENCIES.
 EVENT DATE: 070783 REPORT DATE: 101283 NSSS: GE TYPE: BWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WALLACE & TIEMAN, INC.

(NSIC 186736) ON 7/9/83, IT WAS DISCOVERED THAT AN INAPPROPRIATE MAINT. RETEST WAS PERFORMED ON 7/8/83 FOR BOTH CR CHLORINE DETECTORS AND THAT BOTH DETECTION SYSTEMS WERE RELEASED FOR WORK AT THE SAME TIME ON 7/7/83 WITHOUT SATISFYING THE LCO REQUIREMENTS OF TECH SPEC 3.3.7.8.B. ON 7/12/83, IT WAS DETERMINED THAT REPLACEMENT PARTS WERE NOT PURCHASED ON THE PROPER QUALITY LEVEL REQUIREMENTS. THE CAUSES WERE DUE TO PERSONNEL ERROR. IMMEDIATELY AFTER DISCOVERY OF THE ERRORS, THE SYSTEMS WERE DECLARED INOPERABLE. THE CONDITIONS OF TECH SPEC 3.3.7.8.B WERE MET UNTIL THE CORRECT RETEST WAS COMPLETED AND THE CORRECT PARTS WERE RECEIVED AND INSTALLED ON AUGUST 20, 1983. THIS IS A FINAL REPORT.

[194] GRAND GULF 1 DOCKET 50-416 LER 83-089 REV 1
 UPDATE ON 19 UNTESTED FIRE DETECTORS.
 EVENT DATE: 070883 REPORT DATE: 100583 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: FENWALL ELECTRONICS CO.

(NSIC 186735) DURING TECH SPEC REVIEWS, IT WAS DISCOVERED THAT A SURVEILLANCE TEST DID NOT EXIST TO TEST THE CARBON DIOXIDE HEAT DETECTORS IN 19 SAFETY-RELATED ROOMS. A SPECIAL TEST WAS USED AT THE TIME (NOV. 2, 1982) TO SATISFY TECH SPEC

4.3.7.9. ON JULY 8, 1983, IT WAS DISCOVERED THAT THE LATE DATE OF MAY 2, 1983, WAS NOT ADHERED TO. THIS IS A FINAL REPORT. DUE TO DELAYS WITH THE ONGOING SURV. REVIEW PROGRAM, THE NEW PROCEDURE WAS NOT ISSUED UNTIL AFTER THE LATE DATE. THE PROCEDURE WAS ISSUED ON 7/20/83 AND WAS COMPLETED SUCCESSFULLY ON SEPTEMBER 12, 1983. AN HOURLY FIRE WATCH WAS IN EFFECT UNTIL COMPLETION OF THE SURVEILLANCE PROCEDURE.

[195] GRAND GULF 1 DOCKET 50-416 LER 83-094 REV 1
 UPDATE ON RHR PUMP BREAKER TRIP.
 EVENT DATE: 071183 REPORT DATE: 092883 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: I-T-E CIRCUIT BREAKER

(NSIC 186737) ON 7/11/83, THE RHR "A" PUMP BREAKER IMMEDIATELY TRIPPED DURING THE FIRST TEST START ATTEMPT FOLLOWING MAINTENANCE TO CLEAN THE RACK TO BREAKER AUXILIARY CONTACTS. THE REMOTE SWITCH TRIP LIGHT CAME ON BUT NO BREAKER FLAGS WERE EVIDENT. THE PUMP WAS DECLARED INOPERABLE AND THE LCO ACTIONS OF TECH SPEC 3.4.9.2.i AND 3.5.2 WERE MET. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THIS IS A FINAL REPORT. THE BREAKER WAS INSPECTED AND TESTED NUMEROUS TIMES IN THE TEST POSITION. THE PUMP WAS THEN STARTED TWICE AND NO PROBLEMS WERE FOUND. THE BREAKER WORM GEAR ROD WAS FOUND MISALIGNED APPARENTLY DUE TO BEING USED AS A STEP. THE ROD WAS REALIGNED AND STOOLS WERE ORDERED FOR THESE ROOMS.

[196] GRAND GULF 1 DOCKET 50-416 LER 83-084 REV 1
 UPDATE ON FAILURE OF RHR PUMP TO START AFTER LOCA SIGNAL.
 EVENT DATE: 071883 REPORT DATE: 092683 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: TOPAZ ELECTRONICS

(NSIC 186734) ON JULY 18, 1983, AN UNANTICIPATED ACTIVATION OF THE DIVISION II LOCA LOGIC OCCURED. ALL AUTO ACTIONS EXPECTED TO OCCUR DID IN FACT OCCUR, EXCEPT FOR THE AUTO START OF RHR "C" PUMP. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE EVENT WAS ALSO REPORTED PURSUANT TO 1W0 CFR 50.72. THE CAUSE OF THE LOCA SIGNAL WAS A MALFUNCTIONING INVERTER. THE FAILURE OF THE RHR "C" PUMP TO START IS BELIEVED TO STEM FROM THE LSS (LOAD SHED SEQUENCE) PANEL (SEE LER 83-083). APPARENTLY RELAY XK18 OF THE LSS PANEL FAILED TO GET A SIGNAL TO ENERGIZE. A MAINTENANCE INSPECTION REVEALED NO OTHER PROBLEMS. THE INVERTER WAS REPLACED.

[197] GRAND GULF 1 DOCKET 50-416 LER 83-102 REV 1
 UPDATE ON DIESEL GENERATOR TRIP WHEN EXCITATION FAILS.
 EVENT DATE: 072483 REPORT DATE: 121583 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: PORTEC INCORPORATED

(NSIC 187873) ON JULY 24, 1983, WHILE PERFORMING A 24 HOUR TEST AS REQUIRED BY TECH SPEC 4.8.1.1.2.D.9, THE DIVISION I DIESEL GENERATOR TRIPPED ON LOSS OF EXCITATION AFTER APPROXIMATELY 7 HOURS OF OPERATION. OPERATIONS NOTED FLUCTUATIONS ON THE FIELD VOLTAGE AND WERE IN THE PROCESS OF SHUTTING DOWN THE DIESEL WHEN IT TRIPPED AT APPROXIMATELY 0.3 MW OUTPUT. THIS IS CONSIDERED AN INVALID FAILURE PURSUANT TO REGULATORY POSITION C.2.E.(3) OF R.G. 1.100. THE CAUSE WAS A MALFUNCTIONING VOLTAGE REGULATOR WHICH WAS REPLACED. THE REGULATOR FAILED DUE TO AN INTEGRATED CIRCUIT FAILURE. INTEGRATED CIRCUIT (ID NO. U2) FAILURE WAS DUE TO A DIODE CEASING TO FUNCTION PROPERLY. THIS RESULTED IN THE VOLTAGE REGULATOR BECOMING UNSTABLE DUE TO SINGLE PHASE OPERATION. THIS IS A FINAL REPORT.

[198] GRAND GULF 1 DOCKET 50-416 LER 83-113 REV 1
 UPDATE ON BOTH CONTROL ROOM FRESH AIR TRAINS INOPERABLE.
 EVENT DATE: 072983 REPORT DATE: 092083 NSSS: GE TYPE: BWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187637) DURING PERFORMANCE OF AN ECCS SURVEILLANCE TEST, THE "B" STANDBY FRESH AIR UNIT TO THE CR WAS INTENTIONALLY LOST WITH A SIMULATED LOSS OF POWER. THE "B" UNIT WAS REQUIRED TO BE OPERATING PER TECH SPEC 3.7.2, ACTION (B.1) BECAUSE "A" UNIT WAS INOPERATIVE. WITH BOTH UNITS INOPERATIVE, THE REQUIREMENTS OF TECH SPEC 3.7.2, ACTION (B.2) WERE MET. THE "B" UNIT WAS SHED FROM THE ESF BUS AND DID NOT RESTART BECAUSE NO LOCA SIGNAL EXISTED. THE "A" UNIT WAS INOPERATIVE BECAUSE OF A/C COMPRESSOR MAINTENANCE. THE MOMENTARY LOSS OF THE ESF BUS WAS CAUSED BY THE PERFORMANCE OF AN ECCS LOSS OF POWER SURVEILLANCE TEST. THE UNIT WAS RESTARTED FOUR HOURS LATER AFTER THE SUCCESSFUL COMPLETION OF THE TEST.

[199] GRAND GULF 1 DOCKET 50-416 LER 83-115 REV 1
 UPDATE ON FAILURES WHEN AC APPLIED TO DC CIRCUITS.
 EVENT DATE: 080383 REPORT DATE: 110383 NSSS: GE TYPE: BWR
 SYSTEM: DC ONSITE POWER SYS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187823) AN INTERCONNECTION BETWEEN DIV. I 120V AC & 125V DC CIRCUITS WAS DISCOVERED ON 8/4/83 WHICH CAUSED THE FOLLOWING ON 8/3 & 4/83 - RHR A PUMP FAILED TO START, ALL DIV. I BUSSES WERE INCORRECTLY SHOWN TO BE TRIPPED BY ANNUNCIATORS, NUMEROUS ANNUNCIATORS ON THE DIV. I CONTROL ROOM PANELS CAME ON, AN OPTICAL ISOLATOR IN THE RHR A LOGIC CIRCUITS FAILED, AND BREAKER 52-15501 TRIPPED. THIS IS A FINAL REPORT. A DIV. I 125V DC COMPUTER CABLE WAS INCORRECTLY TERMINATED ON THE 120V AC DRYWELL RECIRC. FAN A CONTROL CIRCUIT. THIS INSERTED 120V AC ONTO THE DIV. I 125V DC SYSTEM. THE CABLE WAS INSTALLED DURING A RECENT DRYWELL VENTILATION MODIFICATION. THE CABLE WAS DISCONNECTED TO REMOVE THE AC VOLTAGE FROM THE DC CIRCUITS. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B.

[200] GRAND GULF 1 DOCKET 50-416 LER 83-121 REV 1
 UPDATE ON RELAY CONTACT FAILURE.
 EVENT DATE: 081783 REPORT DATE: 111083 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: RELAYS
 VENDOR: AGASTAT RELAY CO.

(NSIC 187638) ON AUG. 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. THIS IS A FINAL REPORT. THE FAILED RELAY WAS REPLACED. THE CAUSE OF THIS AND OTHER SIMILAR FAILURES ARE UNDER INVESTIGATION BY GENERAL ELECTRIC AND AMERACE (AGASTAT RELAY SUPPLIER). MP&L'S PROPOSED CORRECTIVE ACTIONS WERE COMMUNICATED AT A MEETING WITH THE NRC ON 9/23/83 IN ATLANTA, GA. AND BY PRD 83/12 (AECM-83/0668 DATED 10/17/83) IN ACCORDANCE WITH 10 CFR 21.

[201] GRAND GULF 1 DOCKET 50-416 LER 83-128 REV 1
 UPDATE ON TWO OPEN FIRE BARRIERS.
 EVENT DATE: 091283 REPORT DATE: 120683 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187874) ON SEPT. 12, 1983, DURING THE PERFORMANCE OF ROUTINE MAINTENANCE WORK, TWO CONTROL BUILDING FIRE RATED PENETRATIONS (CE428B AND CE77E) WERE FOUND UNSEALED. FIRE WATCHES WERE ESTABLISHED UPON DISCOVERY IN ACCORDANCE WITH TECH SPEC 3.7.7. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.12.B. PENETRATION

CE428B WAS VERIFIED CLOSED DURING THE CONTROL BUILDING PENETRATION WALKDOWN PERFORMED FROM DECEMBER 1982 TO FEBRUARY 1983. THE PENETRATIONS WERE RESEALED AND THE LCO'S WERE LIFTED ON SEPT. 17, 1983. THE CAUSE WAS DUE TO PROCEDURAL INADEQUACY. PROGRAMMATIC CONTROLS, TO REQUIRE AUTHORIZATION PRIOR TO OPENING PENETRATIONS WERE IMPLEMENTED.

[202] GRAND GULF 1 DOCKET 50-416 LER 83-135 REV 1
 UPDATE ON IMPROPER MODIFICATION OF STARTING AIR TANK.
 EVENT DATE: 091383 REPORT DATE: 102083 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
 VENDOR: DE LAVAL TURBINE, INC.

(NSIC 187639) ON SEPTEMBER 13, 1983, OPERATIONS WAS NOTIFIED OF A TEMPORARY CONNECTION FROM THE DISCHARGE OF THE DIVISION 2 DIESEL GENERATOR STARTING AIR STORAGE TANK D TO THE DIVISION 1 DIESEL GENERATOR THAT WAS MADE WITHOUT THE PROPER REVIEWS, AUTHORIZATIONS, AND DOCUMENTATION. THE CONNECTION WAS MADE TO JACK THE DIV. 1 D/G CRANKSHAFT OVER TO INSPECT AND DRY THE GENERATOR. THE PRESSURE IN THE C AND D TANKS DID NOT FALL BELOW 160 PSIG DURING THIS TIME. THE CAUSE WAS DUE TO PERSONNEL ERROR. THE ERROR WAS DUE TO MISCOMMUNICATION AND NONCOMPLIANCE WITH ADMINISTRATIVE PROCEDURES. THE PERSONNEL INVOLVED WERE COUNSELED AND ARE AWARE OF THE PROPER PROCEDURE. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.C.

[203] GRAND GULF 1 DOCKET 50-416 LER 83-143
 RADIATION MONITOR SAMPLE PUMP FOUND SWITCHED OFF.
 EVENT DATE: 092883 REPORT DATE: 101183 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186132) ON SEPTEMBER 28, 1983, THE CHEMISTRY SUPERVISOR REPORTED FINDING THE COMPONENT COOLING WATER PROCESS RADIATION MONITOR SAMPLE PUMP NOT OPERATING AS REQUIRED BY TECH SPEC 3.3.7.1. THE PUMP HAD BEEN SWITCHED OFF. THE PUMP WAS IMMEDIATELY RESTARTED. THE EVENT IS REPORTED PURSUANT TO TECH SPEC 6.9.1.12.B. THIS IS AN INTERIM REPORT. THESE TYPE SAMPLE PUMPS HAVE BEEN INCLUDED IN THE CHEMISTRY SECTION'S DAILY SURVEILLANCE ROUNDS. THE INSTALLATION OF A REMOTE INDICATOR FOR LOW SAMPLE FLOW IS BEING CONSIDERED. PRELIMINARY INVESTIGATIONS HAVE NOT REVEALED THE CAUSE OF THE PUMP BEING SECURED. AN UPDATE REPORT IS EXPECTED TO BE SUBMITTED BY JANUARY 30, 1984.

[204] GRAND GULF 1 DOCKET 50-416 LER 83-157 REV 1
 UPDATE ON MISCALIBRATED LPCS VALVE LEAKAGE PRESSURE SWITCH.
 EVENT DATE: 100483 REPORT DATE: 121583 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: ROSEMOUNT, INC.

(NSIC 187875) ON OCT. 4, 1983, DURING PERFORMANCE OF THE MONTHLY FUNCTIONAL TEST, THE LOW PRESSURE CORE SPRAY (LPCS) INJECTION VALVE LEAKAGE PRESSURE MONITOR ALARM SETPOINT WAS FOUND AT 52 PSIG. TECH SPEC TABLE 3.4.3.2-2 REQUIRES THE ALARM SETPOINT TO BE LESS THAN OR EQUAL TO 50 PSIG. AN LCO WAS ENTERED PURSUANT TO TECH SPEC 3.4.3.2 ACTION (D). THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THIS IS A FINAL REPORT. THE ROSEMOUNT TRIP UNIT (MODEL NUMBER 510DU) WAS RECALIBRATED AND RESTORED TO SERVICE ONE-HALF HOUR AFTER DISCOVERY. SUBSEQUENT EVALUATION REVEALED THAT AN UNSTABLE DIGITAL READOUT ASSEMBLY WAS USED TO CALIBRATE THIS DEVICE ON 9/3/83. THE FAULTY PIECE OF TEST EQUIPMENT HAS BEEN REMOVED FROM SERVICE, AND OTHER USES OF THIS DEVICE HAVE BEEN EVALUATED.

[205] GRAND GULF 1 DOCKET 50-416 LER 83-166
 DEFECTIVE TRIP DEVICE ON SSW COOLING FAN BREAKER.
 EVENT DATE: 102183 REPORT DATE: 112183 NSSS: GE TYPE: BWR
 SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: BROWN BOVERI

(NSIC 187640) ON OCTOBER 21, 1983, STANDBY SERVICE WATER (SSW) COOLING FAN C003D TRIPPED BREAKER 52-16506 ON SEVERAL START ATTEMPTS. SSW "B" WAS DECLARED INOPERABLE AND AN LCO ENTERED PURSUANT TO TECH SPEC 3.7.1.3 AND 3.7.1.1. 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. CAPACITOR BREAKDOWN MAY HAVE CAUSED TRIPPING OF THE BREAKER BEFORE THE SETPOINT WAS REACHED. THE UNIT WAS REPLACED AND THE SYSTEM WAS RESTORED ON OCTOBER 22. THIS IS AN INTERIM REPORT.

[206] GRAND GULF 1 DOCKET 50-416 LER 83-168
 RCIC VALVE OPERATOR FAILS.
 EVENT DATE: 102383 REPORT DATE: 112283 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: MOTORS
 VENDOR: LIMITORQUE CORP.

(NSIC 187642) ON OCTOBER 23, 1983, REACTOR CORE ISOLATION COOLING (RCIC) STEAM LINE WARMUP VALVE F076 REPEATEDLY TRIPPED ITS BREAKER ON ATTEMPTS TO OPERATE IT. THE VALVE WAS DECLARED INOPERABLE AND AN LCO WAS ENTERED PURSUANT TO TECH SPEC 3.6.4. VALVE F064 WAS ISOLATED AS REQUIRED BY ACTION STATEMENT (B). VALVE F076 REMAINED INOPERABLE FOR 7 HOURS. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THIS IS A FINAL REPORT. THE MOTOR ON THE VALVE WAS INSTALLED INSIDE THE INSULATION ON THE RCIC STEAM LINE CAUSING THE STEAM LINE HEAT TO BAKE THE INSULATION OFF THE MOTOR WINDING. THE MOTOR SHORTED TO GROUND. THE MOTOR WAS INITIALLY REPLACED ON OCTOBER 23, 1983. THE MOTOR WILL BE ROTATED OUT OF THE INSULATION BY NOVEMBER 30, 1983, TO PRECLUDE RECURRENCE.

[207] GRAND GULF 1 DOCKET 50-416 LER 83-170
 RCIC TURBINE TRIP VALVE STICKS.
 EVENT DATE: 102683 REPORT DATE: 112583 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: VALVES
 VENDOR: INGERSOL-RAND CO.

(NSIC 187754) ON 10/26/83, THE RCIC SYSTEM WAS DECLARED INOPERABLE AND AN LCO WAS ENTERED PURSUANT TO TECH SPEC 3.7.3 WHEN ATTEMPTS TO SECURE THE RCIC TURBINE VIA THE TRIP PUSHBUTTON FAILED. THE TURBINE TRIP THROTTLE VALVE LATCH DISENGAGED BUT THE VALVE FAILED TO FULLY CLOSE. ALSO ON 11/1/83, AFTER CORRECTION OF THIS PROBLEM THE RCIC TURBINE BEGAN TO TRIP ON OVERSPEED DURING START ATTEMPTS. THE LCO WAS LIFTED ON 11/9/83, WHEN THE PLANT ENTERED THE SHUTDOWN MODE WITH REACTOR PRESSURE LESS THAN 135 PSIG. THE CAUSE OF THE TRIP VALVE STICKING WAS DUE TO OXIDATION OF CLOSE TOLERANCE PARTS. THIS IS ATTRIBUTED TO INFREQUENT OPERATION OF THE VALVE. THE REPETITIVE OVERSPEED TRIPS WERE DUE TO THE GOVERNOR VALVE OPENING TOO FAR. A MECHANICAL STOP TO LIMIT THE VALVE POSITION WAS INSTALLED AS AN INTERIM MEASURE. AN UPDATE IS EXPECTED TO BE SUBMITTED BY 2/15/84.

[208] GRAND GULF 1 DOCKET 50-416 LER 83-174
 LEAK IN DIESEL GENERATOR FUEL OIL LINE.
 EVENT DATE: 102683 REPORT DATE: 112883 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION

VENDOR: DE LAVAL TURBINE, INC.

(NSIC 187758) DURING A DIV. II D/G MONTHLY SURVEILLANCE ON OCT. 26, 1983, A FUEL OIL LEAK WAS DISCOVERED ON THE #8LB CYLINDER INJECTOR RETURN LINE. THE D/G WAS UNLOADED AND SHUTDOWN. ACTION STATEMENT (A) OF TECH SPEC 3.8.1.1 WAS ENTERED INTO AND MET. THE D/G WAS INOPERATIVE FOR 3.15 HOURS. PER REG. GUIDE 1.108, THIS WAS NOT A VALID FAILURE. THIS IS REPORTED PURSUANT TO TECH SPEC 4.8.1.1.3. THIS IS A FINAL REPORT. THE LEAK OCCURRED AT A CRIMP CAUSED BY AN UNKNOWN BUMP BY A TOOL OR PERSONNEL DURING PREVIOUS DIESEL GENERATOR MAINTENANCE. THE LINE WAS REPLACED.

[209] GRAND GULF 1 DOCKET 50-416 LER 83-175
DIESEL GENERATOR TRIPS ON HIGH VIBRATION SIGNAL.
EVENT DATE: 102883 REPORT DATE: 112883 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
VENDOR: DE LAVAL TURBINE, INC.

(NSIC 187824) ON OCTOBER 28 AND 31, 1983, DURING A 7-DAY TEST RUN, THE DIVISION II DIESEL GENERATOR TRIPPED DUE TO A HIGH VIBRATION SIGNAL. PER REG. GUIDE 1.108, THESE WERE NOT VALID FAILURES AS THE VIBRATION CIRCUITRY IS NOT OPERATIVE IN THE EMERGENCY MODE. THE REQUIREMENTS OF TECH SPEC 3.8.1.2 WERE MET. THIS IS REPORTED PURSUANT TO TECH SPEC 4.8.1.1.3. THIS IS A FINAL REPORT. THE VIBRATION CIRCUITRY AND INSTRUMENTS WERE TESTED AND EXTENSIVE VIBRATION TESTS WERE CONDUCTED ON THE DIESEL GENERATOR. AS A RESULT, A VIBRATION DETECTOR SETPOINT WAS DETERMINED TO BE SET TOO SENSITIVE. THE SETPOINT WAS CORRECTED AND THE INSTRUMENT WAS RECALIBRATED. THE DIESEL GENERATOR WAS TESTED SATISFACTORILY.

[210] GRAND GULF 1 DOCKET 50-416 LER 83-176
COOLANT CONDUCTIVITY MONITOR ISOLATED.
EVENT DATE: 103183 REPORT DATE: 113083 NSSS: GE TYPE: BWR
SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187825) ON 10/31/83, THE FLOW FROM THE RWCU SYSTEM TO A REACTOR WATER SAMPLE STATION WAS CUT OFF BY OPERATIONS FOR RWCU MAINTENANCE AT 0520. THIS UNKNOWNLY PREVENTED CONTINUOUS RECORDING OF REACTOR COOLANT CONDUCTIVITY REQUIRED BY TECH SPEC 4.4.4.C. THIS WAS DISCOVERED BY CHEMISTRY WHEN OBTAINING A SAMPLE FOR DAILY SURV. AT 0835. A SAMPLE WAS OBTAINED AT 1145. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.1.13.B. THE CAUSE WAS PROCEDURAL ERROR. THE OPERATING PROCEDURE DID NOT WARN THAT SHUTTING OFF RWCU FLOW WOULD CAUSE A LOSS OF CONTINUOUS REACTOR COOLANT CONDUCTIVITY MONITORING. A SAMPLE WAS OBTAINED PER TECH SPEC 4.4.4.C.1 6 HRS. & 25 MIN. AFTER THE LOSS BUT THIS EXCEEDED THE 4 HOUR SURV. LIMIT. THE PROCEDURE INVOLVED HAS BEEN CORRECTED. THIS IS A FINAL REPORT.

[211] GRAND GULF 1 DOCKET 50-416 LER 83-179
DIESEL GENERATOR INOPERABLE TWICE DUE TO PERSONNEL ERRORS.
EVENT DATE: 110583 REPORT DATE: 120683 NSSS: GE TYPE: BWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
VENDOR: DE LAVAL TURBINE, INC.

(NSIC 187877) ON 11/5/83 DURING A 7-DAY MAINTENANCE RUN, THE DIV. II DIESEL GENERATOR WAS SHUT DOWN UPON DISCOVERY OF A FUEL OIL RETURN LINE LEAK. UPON RESTART, AFTER REPAIR OF THE FUEL LEAK, THE DIESEL GENERATOR TRIPPED DUE TO ISOLATION OF FUEL SUPPLY VALVE F016B. PER R.G. 1.108, THESE WERE NOT VALID FAILURES BECAUSE THE DIESEL RAN FOR LONGER THAN 1 HOUR AT GREATER THAN 50% LOAD AND DUE TO OPERATOR ERROR. THE REQUIREMENTS OF TECH SPEC 3.8.1.1 WERE MET. THIS IS REPORTED PURSUANT TO TECH SPEC 4.8.1.1.3. THIS IS AN INTERIM REPORT. THE CAUSE OF THE FUEL LINE LEAK WAS DUE TO PHYSICAL DAMAGE TO THE TUBING BY PERSONNEL. THE BROKEN FUEL LINE WAS REPLACED WITH NEW TUBING AND FITTINGS. THE

CAUSE OF THE ISOLATION OF VALVE F016B WAS DUE TO PERSONNEL ERROR. PLANT STAFF IS STILL EVALUATING THIS EVENT TO DETERMINE THE NECESSARY CONTROLS TO PREVENT RECURRENCE.

[212] GRAND GULF 1 DOCKET 50-416 LER 83-180
 DRYWELL SUMP DRAINED BELOW LEVEL INSTRUMENT RANGE.
 EVENT DATE: 110783 REPORT DATE: 120783 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187878) ON NOVEMBER 7, 1983, THE DRYWELL FLOOR DRAIN SUMP LEVEL AND FLOW MONITORING LEAK DETECTION SYSTEM WAS DECLARED INOPERABLE WHEN THE LEVEL AND FLOW RATE INDICATION DROPPED DOWNSCALE FOLLOWING A PUMP DOWN OF THE SUMP. AN LCO WAS ENTERED PURSUANT TO TECH SPEC 3.4.3.1. THE PUMP NORMALLY STOPS AT A LEVEL OF 4 INCHES ABOVE INSTRUMENT 0. INSTRUMENT 0 IS 6 INCHES ABOVE THE BOTTOM OF THE SUMP. AN INFLOW RATE CANNOT BE DETERMINED BELOW INSTRUMENT 0. THE PLANT ENTERED COLD SHUTDOWN ON 11/9. MAINTENANCE INVESTIGATED THE INSTRUMENT LOOP INCLUDING LEVEL SWITCHES AND FOUND NO DISCREPANCIES. THE INCIDENT COULD NOT BE DUPLICATED. READINGS TAKEN IMMEDIATELY FOLLOWING THE EVENT INDICATE THAT THE PUMP DID DRAW THE LEVEL BELOW INSTRUMENT 0. THIS IS AN INTERIM REPORT. AN UPDATE SHOULD BE EXPECTED BY FEBRUARY 15, 1984.

[213] GRAND GULF 1 DOCKET 50-416 LER 83-178
 DIESEL GENERATOR AIR START VALVE OVERHEATS.
 EVENT DATE: 110883 REPORT DATE: 120883 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION

(NSIC 187876) ON NOVEMBER 8, 1983, AT 0420 HOURS DIESEL GENERATOR 12 WAS SHUT DOWN AFTER 70 HOURS OF CONTINUOUS OPERATION TO REPLACE THE NO. 1 LEFT BANK AIR START VALVE. AN LCO WAS ENTERED UNDER TECH SPEC 3.8.1.1 FOR 2.6 HOURS. THE D/G WAS RESTARTED AT 0600 HOURS AND DECLARED OPERABLE AT 0700 HOURS. THE FAILURE IS CONSIDERED NONVALID PURSUANT TO REGULATORY POSITION C.2.E(3) OF R.G. 1.108. AT THIS TIME TESTING FREQUENCY IS ONCE PER 14 DAYS DUE TO 2 PREVIOUS FAILURES. THIS EVENT DOES NOT INCREASE TESTING FREQUENCY. THE CAUSE OF THE VALVE FAILURE IS ATTRIBUTED TO FOREIGN MATERIALS IN THE STARTING AIR LINE. A SIMILAR INCIDENT WAS REPORTED IN LER 83-082 FOR D/G 11. A WORK AUTHORIZATION WAS INITIATED AT THAT TIME TO INSPECT AND PERFORM MAINTENANCE ON THE D/G 12 STARTING AIR SYSTEM. THIS WORK HAD NOT BEEN PERFORMED BUT IS SCHEDULED TO BE PERFORMED DURING THE PRESENT OUTAGE.

[214] HATCH 1 DOCKET 50-321 LER 83-066
 RCIC SYSTEM INOPERABLE.
 EVENT DATE: 062983 REPORT DATE: 072183 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: VALVES
 VENDOR: FISHER FLOW CONTROL DIV (ROCKWELL INT)

(NSIC 184618) DURING PERFORMANCE OF THE "ECCS STATUS CHECK" PROCEDURE, IT WAS NOTED THAT THE INDICATION LIGHTS FOR 1E51-F004 AND 1E51-F025 WERE NOT LIT. DURING PERFORMANCE OF THE "RCIC STEAM LINE DELTA P INSTRUMENT FT&C" PROCEDURE, THE RCIC TRIP AND THROTTLE VALVE WOULD NOT TRIP AUTOMATICALLY OR MANUALLY. THESE EVENTS ARE CONTRARY TO TECH SPECS SECTION 3.5.E.1.A.(2). THIS REPETITIVE EVENT WAS LAST REPORTED ON LER 50-321/1983-056. THESE EVENTS WERE CAUSED BY STEAM LEAKS AND LOOSE BOLTS ON THE HALF COUPLING ON THE TRIP AND THROTTLE VALVE STEM TO VALVE OPERATOR. REPAIRS WERE PERFORMED. RCIC WAS THEN SATISFACTORILY FUNCTIONALLY TESTED AND RETURNED TO SERVICE ON 06/30.

[215] HATCH 1 DOCKET 50-321 LER 83-093
 HIGH PRESSURE COOLANT INJECTION FAILS.
 EVENT DATE: 082483 REPORT DATE: 092283 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: TURBINES
 VENDOR: TERRY STEAM TURBINE COMPANY

(NSIC 186174) WHILE STARTING HPCI PER "HPCI PUMP OPERABILITY" PROCEDURE (HNP-1-3303), THE "HPCI TURBINE BEARING OIL PRESSURE LOW" ALARM WAS RECEIVED. HPCI WAS MANUALLY TRIPPED. A SECOND ATTEMPT WAS MADE TO RUN HPCI, AND THE SAME PROBLEMS WERE ENCOUNTERED. HPCI WAS DECLARED INOPERABLE WHICH IS CONTRARY TO THE REQUIREMENTS OF TECH SPEC 3.5.D.1.A.2. THE REDUNDANT SYSTEMS REQUIRED BY TECH SPEC 3.5.D.2 WERE OPERABLE EXCEPT RCIC. THE CAUSE OF THIS EVENT IS PERSONNEL ERROR. THE HPCI TURBINE FAILED TO OPERATE PROPERLY DUE TO MISPOSITIONED BEARING OIL SUPPLY VALVES. THE VALVES WERE REPOSITIONED BY PLANT PERSONNEL AND OIL PRESSURES ON THE HPCI TURBINE ADJUSTED TO DESIGN SPECS. THE HPCI TURBINE WAS SATISFACTORILY TESTED PER HNP-1-3303.

[216] HATCH 1 DOCKET 50-321 LER 83-101
 SETPOINT DRIFT OF RADIATION MONITOR POWER SUPPLY.
 EVENT DATE: 093083 REPORT DATE: 102783 NSSS: GE TYPE: BWR
 SYSTEM: AREA MONITORING SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186856) ON 09/30/83, DURING PERFORMANCE OF THE "LOGARITHMIC RADIATION MONITOR" PROCEDURE (HNP-1-5100), IT WAS DETERMINED THAT MAIN STEAM LINE RADIATION MONITOR 1D11-K603D WAS OUT OF CALIBRATION PER PROCEDURE TOLERANCES, WHICH RENDERED THE MONITOR INOPERABLE. THIS IS CONTRARY TO THE REQUIREMENTS OF TECH SPECS TABLE 3.1-1, ITEM 9. THE CAUSE OF THIS EVENT WAS SETPOINT DRIFT OF THE MONITOR'S (1D11-K603D) POWER SUPPLY VOLTAGES. THE MONITOR WAS IMMEDIATELY CALIBRATED PER THE "LOGARITHMIC RADIATION MONITOR" PROCEDURE (HNP-1-5100) AND SATISFACTORILY RETURNED TO SERVICE ON 9/30/83.

[217] HATCH 1 DOCKET 50-321 LER 83-100
 MSIV CLOSES TOO QUICKLY.
 EVENT DATE: 100983 REPORT DATE: 102083 NSSS: GE TYPE: BWR
 SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVES
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186855) DURING PERFORMANCE OF THE "MAIN STEAM LINE ISOLATION VALVE TRIP TEST" PROCEDURE (HNP-1-3111), THE "A" OUTBOARD MSIV (1B21-F028A) WAS FOUND TO CLOSE IN 2.8 SECS. THIS EVENT IS CONTRARY TO TECH SPECS TABLE 3.7-1 (I.E., MUST CLOSE WITHIN 3 TO 5 SECS.). THE "A" INBOARD MSIV (1B21-F022A) REMAINED OPERABLE DURING THIS EVENT. PLANT OPERATION CONTINUED UNDER A LCO AS PER TECH SPECS SECTION 3.7.D.2. THIS EVENT IS THE RESULT OF THE ACTUATOR'S FLOW CONTROL NEEDLE VALVE (FCNV) BEING OUT OF ADJUSTMENT. THE FCNV WAS READJUSTED AND THE MSIV WAS FUNCTIONALLY TESTED SATISFACTORILY AS PER THE HNP-1-3111 PROCEDURE. THE LCO WAS CLEARED AND THE PLANT RETURNED TO NORMAL OPERATION ON 10/09/83.

[218] HATCH 1 DOCKET 50-321 LER 83-103
 DRYWELL AIR PARTICULATE MONITOR DECLARED INOPERABLE.
 EVENT DATE: 102583 REPORT DATE: 111783 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187551) ON 10/28/83, WHILE PERFORMING DAILY ROUNDS, TECHNICIANS DETERMINED THAT THE DRYWELL AIR PARTICULATE MONITOR'S (1D11-K631) FILTER PAPER WOULD NOT ADVANCE. THE MONITOR WAS DECLARED INOPERABLE AND AN LCO WAS ESTABLISHED. THIS EVENT IS CONTRARY TO TECH SPECS SECTION 3.6.G.2.A WHICH REQUIRES THAT MONITOR

1D11-K631 BE OPERABLE. AN INVESTIGATION SHOWED THAT THIS EVENT WAS CAUSED BY A TEAR IN THE MONITOR'S FILTER PAPER. THE FILTER PAPER WAS ADVANCED BEYOND THE TORN PORTION OF THE FILTER PAPER, AND RE-THREADED. PROPER OPERATION WAS VISUALLY CONFIRMED, AND THE MONITOR WAS RETURNED TO SERVICE ON 10/29/83 AT 0200 HOURS.

[219] HATCH 1 DOCKET 50-321 LER 83-106
HPCI DECLARED INOPERABLE DUE TO WATER IN LUBE OIL.
EVENT DATE: 110283 REPORT DATE: 112283 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187522) DURING NORMAL PLANT OPERATION, A HIGH LEVEL ALARM IN THE HPCI OIL TANK WAS RECEIVED. THE LAB WAS NOTIFIED TO PULL A SAMPLE FROM THE HPCI LUBE OIL SYSTEM TO CHECK FOR WATER IN THE OIL. THE LAB SAMPLE REVEALED 1.3 PERCENT WATER IN THE OIL. THE MANUFACTURER'S SPECIFICATION FOR THE ALLOWABLE WATER CONTENT IN THE HPCI LUBE OIL IS .5 PERCENT MAXIMUM. HPCI WAS DECLARED INOPERABLE. THIS IS CONTRARY TO TECH SPEC 3.5.D.1.A. THE CAUSE OF THIS EVENT IS DUE TO HIGH HUMIDITY IN THE HPCI PUMP ROOM CAUSING CONDENSATION TO FORM IN THE HPCI OIL TANK. THE WATER-CONTAMINATED OIL WAS REMOVED FROM THE HPCI LUBE OIL TANK AND WAS REPLACED WITH NEW OIL. THE HPCI PUMP WAS SATISFACTORILY FUNCTIONALLY TESTED PER PROCEDURE AND WAS RETURNED TO OPERABLE STATUS ON 11/03/83.

[220] HATCH 1 DOCKET 50-321 LER 83-107
CORE SPRAY FLOW TRANSMITTER FAILS.
EVENT DATE: 110283 REPORT DATE: 120183 NSSS: GE TYPE: BWR
SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187793) ON 11/02/83, DURING PERFORMANCE OF THE "CORE SPRAY PUMP OPERABILITY" PROCEDURE (HNP-1-3201), SURVEILLANCE PERSONNEL NOTED THE FLOW INDICATOR (1E21-R601B) FOR THE "B" LOOP OF CORE SPRAY WAS INDICATING AT 4400 GPM. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPEC SECTION 4.5.A.1.6. ADS, RCIC, LPCI MODE OF RHR AND THE "A" LOOP OF CORE SPRAY REMAINED OPERABLE DURING THIS EVENT. THIS EVENT IS THE RESULT OF THE FLOW INDICATOR'S TRANSMITTER (1E21-N003B) BEING OUT OF CALIBRATION. THE TRANSMITTER WAS REPLACED, CALIBRATED AND FUNCTIONALLY TESTED SATISFACTORILY. THE "B" LOOP OF CORE SPRAY WAS THEN FUNCTIONALLY TESTED SATISFACTORILY PER HNP-1-3201 AND RETURNED TO SERVICE ON 11/21/83.

[221] HATCH 1 DOCKET 50-321 LER 83-111
RCIC MANUAL CONTROL FAILS.
EVENT DATE: 110583 REPORT DATE: 120283 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187794) ON 11/05/83 DURING A SCRAM, OPERATING PERSONNEL DETERMINED THAT REACTOR CORE ISOLATION COOLING (RCIC) COULD NOT BE CONTROLLED MANUALLY. THE RCIC CONTROLLER WAS PLACED IN THE AUTOMATIC MODE AND IT FUNCTIONED PROPERLY. WHEN RCIC WAS RETURNED TO STANDBY CONDITION, THE RCIC GOVERNOR VALVE GAVE A DOUBLE POSITION INDICATION. THESE EVENTS ARE CONTRARY TO TECH SPEC SECTION 3.5.E.1.A.(2). THE FIRST EVENT WAS CAUSED BY A SEPARATED SOLDERED JOINT ON THE MANUAL AMPLIFIER CIRCUIT BOARD (1E51-K615). THE JOINT WAS RESOLDERED. THE SECOND EVENT'S CAUSE HAS NOT YET BEEN DETERMINED, BUT IT WILL BE RESOLVED PRIOR TO REACTOR STARTUP. RCIC WILL BE SATISFACTORILY FUNCTIONALLY TESTED WHEN A STEAM SUPPLY IS AVAILABLE.

[222] HATCH 2 DOCKET 50-366 LER 82-039 REV 1
 UPDATE ON FAILURE OF HYDROGEN/OXYGEN ANALYZER.
 EVENT DATE: 062882 REPORT DATE: 102883 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: PUMPS
 VENDOR: DELPHI INDUSTRIES

(NSIC 187075) ON JUNE 28, 1982, WITH UNIT 2 OPERATING STEADY-STATE AT 99% POWER, THE CONTROL ROOM OPERATOR RECEIVED A H2O2 ANALYZER FAILURE ALARM ON "B" PRIMARY CONTAINMENT HYDROGEN/OXYGEN ANALYZER. THIS IS CONTRARY TO TECH SPECS 3.3.6.4.A WHICH REQUIRES TWO OPERATIONAL ANALYZERS. THE REDUNDANT "A" ANALYZER WAS OPERATIONAL. THIS IS A REPETITIVE EVENT AS LAST REPORTED ON LER 50-366/1982-007. THE CAUSE OF THIS EVENT WAS A WORN-OUT DIAPHRAGM ON THE "B" SAMPLE PUMP. THE DIAPHRAGM WAS REPLACED AND THE SYSTEM WAS TESTED SATISFACTORILY. THE ANALYZER WAS RETURNED TO SERVICE WITHIN THE TIME REQUIREMENT OF TECH SPECS 3.3.6.4.1. A NEW ANALYZER AND ITS ASSOCIATED SAMPLE PUMP IS NOW SCHEDULED TO BE INSTALLED DURING THE 1984 UNIT 2 OUTAGE.

[223] HATCH 2 DOCKET 50-366 LER 83-015 REV 1
 UPDATE ON HPCI PIPE SUPPORTS DAMAGED BY WATER HAMMER.
 EVENT DATE: 042783 REPORT DATE: 080483 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS

(NSIC 185469) ON 4/27/83, WHILE PERFORMING THE "INSERVICE INSPECTION VISUAL EXAMINATION ON SURVEILLANCE PROCEDURE FOR CLASS 1, 2, AND 3 PIPE SUPPORTS" (HNP-907), INSPECTING PERSONNEL DISCOVERED NUMEROUS DAMAGED PIPE SUPPORTS ON THE HPCI PUMP DISCHARGE LINE. DAMAGE VARIED FROM BROKEN SUPPORT PLATE WELDS TO ANCHOR BOLTS PULLING OUT OF CONCRETE. THIS EVENT IS REPORTABLE PER TECH SPECS SECTION 6.9.1.8.I. THE ARCHITECT-ENGINEER HAS DETERMINED THAT THIS EVENT WAS CAUSED BY WATER HAMMER WHICH OCCURRED WHEN HPCI DISCHARGE CHECK VALVE SLAMMED CLOSED FOLLOWING A HPCI TRIP. ALL HPCI DISCHARGE PIPE SUPPORTS HAVE BEEN MODIFIED PER A DESIGN CHANGE REQUEST AS RECOMMENDED BY THE A.E. ALL AFFECTED SUPPORTS WERE SATISFACTORILY EXAMINED PRIOR TO REACTOR STARTUP.

[224] HATCH 2 DOCKET 50-366 LER 83-046 REV 2
 UPDATE ON MISSING PIPE RESTRAINTS.
 EVENT DATE: 062283 REPORT DATE: 111083 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187609) THE PLANT WAS NOTIFIED BY THE ARCHITECT/ENGINEER ON JUNE 22, 1983, THAT THE CONTROL ROD DRIVE SYSTEM, REACTOR WATER CLEANUP SYSTEM, REACTOR CORE ISOLATION SYSTEM AND AUXILIARY STEAM SYSTEM DID NOT HAVE THE HIGH ENERGY LINE BREAK RESTRAINTS INSTALLED AS REQUIRED IN THE FINAL SAFETY ANALYSIS REPORT (FSAR) SUPPLEMENT 15A. THIS REPORT IS REQUIRED BY TECH SPEC SECTION 6.9.1.8.I. THE CAUSE OF THIS EVENT WAS DUE TO PERSONNEL ERROR. THE HIGH ENERGY LINE BREAK RESTRAINTS WERE OMITTED FROM FOUR PLANT SYSTEMS DURING CONSTRUCTION DUE TO ARCHITECT/ENGINEER DESIGN OVERSIGHT. THE PLANT WILL CORRECT THIS PROBLEM AS DETAILED IN THE ATTACHED NARRATIVE. THIS EVENT IS A DEFECT SO IT THEREFORE MEETS THE REPORTING REQUIREMENTS OF 10CFR21.

[225] HATCH 2 DOCKET 50-366 LER 83-055 REV 1
 UPDATE ON RCIC LOW PUMP FLOW.
 EVENT DATE: 071383 REPORT DATE: 120583 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WOODWARD GOVERNOR COMPANY

(NSIC 187864) ON 7/13/83 AND 7/21/83, DURING PERFORMANCE OF THE "RCIC PUMP OPERABILITY" PROCEDURE (HNP-2-3405), SURVEILLANCE PERSONNEL NOTED THAT THE REACTOR CORE ISOLATION COOLING (RCIC) PUMP (2E51-C002) WOULD NOT DELIVER THE

REQUIRED FLOW OF 400 GPM AS REQUIRED BY TECH SPECS SECTION 4.7.3.B. THE HPCI SYSTEM WAS PROVEN OPERABLE FOR THE DURATION OF THESE EVENTS WHEN REACTOR PRESSURE WAS GREATER THAN 150 PSIG. PLANT OPERATION CONTINUED UNDER A 14 DAY LCO. THESE EVENTS WERE THE RESULT OF THE ELECTRICAL GOVERNOR REMOTE (EGR) ACTUATOR'S BEING OUT OF ADJUSTMENT WHICH CAUSED THE GOVERNOR VALVE NOT TO OPEN FULLY. THE EGR WAS ADJUSTED TO ALLOW THE GOVERNOR VALVE TO OPEN FULLY. RCIC WAS FUNCTIONALLY TESTED SATISFACTORILY PER THE HNP-2-3405 PROCEDURE AND RETURNED TO SERVICE ON 7/21/83.

[226] HATCH 2 DOCKET 50-366 LER 83-091 REV 1
 UPDATE ON FAILURE TO ESTABLISH FIREWATCH.
 EVENT DATE: 082283 REPORT DATE: 111783 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187611) DURING A PROCEDURE REVIEW OF THE COMPLETED DATA PACKAGE FOR HNP-2-3357, REVIEW PERSONNEL NOTED THAT NO FIREWATCH HAD BEEN ESTABLISHED UPON DETERMINATION BY SURVEILLANCE PERSONNEL THAT THE FIRE PROTECTION SYSTEM'S ALARMS FOR THE TURBINE LUBE OIL RESERVOIR AND WEST CABLEWAY WERE INOPERABLE. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPECS SECTION 3.7.6.1, ACTION A. THIS EVENT IS THE RESULT OF PERSONNEL ERROR. WHEN THE PROCEDURE FAILED, THE PERSONNEL NOTIFIED THE SHIFT SUPERVISOR VERBALLY, AND HE FAILED TO TAKE THE REQUIRED ACTION. ALSO, THE PERSONNEL FAILED TO NOTIFY THE SHIFT SUPERVISOR IN WRITING AS REQUIRED BY HNP-425. THE RESPONSIBLE PERSONNEL WILL BE COUNSELED AS TO THE IMPORTANCE OF PROPER ACTIONS.

[227] HATCH 2 DOCKET 50-366 LER 83-088
 TWO INSTRUMENT AIR VALVES NOT LOCKED IN POSITION.
 EVENT DATE: 092283 REPORT DATE: 101783 NSSS: GE TYPE: BWR
 SYSTEM: COMPRESSED AIR SYSTEMS & CONT COMPONENT: VALVES
 VENDOR: CONTROMATICS CORP.

(NSIC 186269) DURING PERFORMANCE OF THE "CONTROL OF LOCKED VALVES" PROCEDURE (HNP-514), SURVEILLANCE PERSONNEL NOTED THAT THE NON-INTERRUPTABLE INSTRUMENT AIR SUPPLY'S VALVES (2P52-F459 AND F460) WERE NOT LOCKED. THIS IS CONTRARY TO THE REQUIREMENTS OF HNP-514. PLANT OPERATION WAS NOT AFFECTED. THIS EVENT IS THE RESULT OF PERSONNEL ERROR DUE TO PERSONNEL FAILING TO INSTALL THE LOCKING DEVICES ON THE VALVES. THE VALVES WERE CHAINED AND LOCKED IN THEIR AS FOUND CORRECT POSITION IMMEDIATELY UPON DISCOVERY.

[228] HATCH 2 DOCKET 50-366 LER 83-099
 HYDROGEN/OXYGEN ANALYZER SAMPLE PUMP FAILS.
 EVENT DATE: 092583 REPORT DATE: 101783 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: PUMPS
 VENDOR: DELPHI INDUSTRIES

(NSIC 186270) WHILE PERFORMING (HNP-2-3882) THE "CONSIP DELPHI MODEL K-IV HYDROGEN AND OXYGEN ANALYZER FT&C" PROCEDURE, IT WAS DETERMINED THAT THE "A" HYDROGEN ANALYZER WOULD NOT CALIBRATE. THE "A" HYDROGEN/OXYGEN ANALYZER PANEL (2P33-P001A) AND DRYWELL & TORUS HYDROGEN/OXYGEN RECORDER (2P33-R601A) WERE DECLARED INOPERABLE. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPEC TABLE 3.3.6.4-1 ITEM 9. UNIT 2 WAS PLACED IN A 30-DAY LCO PER TECH SPEC 3.3.6.4, ACTION A. THE CAUSE OF THIS EVENT IS COMPONENT FAILURE. THE SAMPLE PUMP DIAPHRAGMS WERE FOUND TO BE WORN. THE SAMPLE PUMP DIAPHRAGMS WERE REPLACED AND THE PUMP HEADS WERE CLEANED. THE "A" HYDROGEN/OXYGEN ANALYZER WAS SATISFACTORILY FUNCTIONALLY TESTED PER PROCEDURE (HNP-2-3882) AND WAS RETURNED TO OPERABLE STATUS ON 10/01/83.

[229] HATCH 2 DOCKET 50-366 LER 83-119
 TORUS WATER LEVEL AND DRYWELL PRESSURE RECORDER GIVES ERRONEOUS SIGNAL.
 EVENT DATE: 102583 REPORT DATE: 111783 NSSS: GE TYPE: BWR
 SYSTEM: OTHER AUX WATER SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: LEEDS & NORTHRUP CO.

(NSIC 187430) ON 10/25/83, OPERATIONS PERSONNEL DETERMINED THE "A" CHANNEL OF THE TORUS WATER LEVEL AND DRYWELL PRESSURE RECORDER (2T48-R607A) INOPERABLE DUE TO ITS GIVING A FALSE TORUS HIGH WATER LEVEL ALARM. THIS IS CONTRARY TO THE REQUIREMENTS OF TECH SPEC SECTION 3.5.4. REDUNDANT RECORDER 2T48-R607B REMAINED OPERABLE DURING THIS EVENT. PLANT OPERATION CONTINUED UNDER A 30-DAY-LCO PERMITTED BY TECH SPEC SECTION 3.5.4, ACTION C. THIS EVENT IS THE RESULT OF THE RECORDER'S CHANNEL "A" PEN BINDING WHICH PREVENTED THE PEN FROM TRACKING CORRECTLY, THUS VOIDING ITS CALIBRATION. THE RECORDER WAS REPAIRED BY ADJUSTING THE PEN CARRIAGE. 2T48-R607A WAS RECALIBRATED PER "L & N SPEEDOMAX M CALIBRATION PROCEDURE" (HNP-2-5602), FUNCTIONALLY TESTED SATISFACTORILY AND RETURNED TO SERVICE ON 10/26/83.

[230] HATCH 2 DOCKET 50-366 LER 83-118
 DIESEL GENERATORS FAIL TO START.
 EVENT DATE: 102683 REPORT DATE: 111783 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: VALVES

(NSIC 187429) WHILE PERFORMING ROUTINE DIESEL GENERATOR (D/G) SURVEILLANCE PER THE "DIESEL GENERATOR MANUAL START" PROCEDURE (HNP-2-3801), PERSONNEL RECEIVED A START FAILURE ON THE "2C" D/G. WHILE PERFORMING THE REQUIRED SUBSEQUENT SURVEILLANCE PER HNP-2-3801 FOR D/G "1B" (SHARED DIESEL), IT WAS DISCOVERED THAT THE D/G VOLTAGE COULD NOT BE ADJUSTED MANUALLY. BOTH THESE EVENTS ARE CONTRARY TO TECH SPEC 3.8.1.1.B. THE CAUSE OF THE "2C" D/G FAILURE WAS A LEAKING INLINE CHECK VALVE. THE CHECK VALVE WAS REPLACED. THE APPARENT CAUSE OF THE "1B" D/G FAILURE WAS DIRTY CONTACTS ON THE UNIT 2 SIDE OF THE LOCAL UNIT 1 & UNIT 2 MODE SELECT SWITCH. THE CONTACTS WERE CLEANED. THE "2C" AND "1B" D/G WERE SATISFACTORILY FUNCTIONALLY TESTED AND RETURNED TO OPERABLE STATUS 10/26/83.

[231] HATCH 2 DOCKET 50-366 LER 83-112
 RHR TESTABLE CHECK VALVE FAILS TO CLOSE.
 EVENT DATE: 102883 REPORT DATE: 111783 NSSS: GE TYPE: BWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
 VENDOR: ROCKWELL-INTERNATIONAL

(NSIC 187428) ON 10/28/83, DURING PERFORMANCE OF THE "RHR VALVE OPERABILITY" PROCEDURE (HNP-2-3164), OPERATIONS PERSONNEL NOTED THAT THE "B" RHR TESTABLE CHECK VALVE (2E11-F050B) WAS OPEN AND WOULD NOT CLOSE. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPEC SECTION 3.5.3.2.B. THE REDUNDANT "A" LOOP OF RHR REMAINED OPERABLE DURING THIS EVENT. AN LCO WAS INITIATED AND THE REQUIREMENTS OF TECH SPEC SECTION 3.5.3.2, ACTION B WERE MET. THIS IS A NON-REPETITIVE EVENT. THIS EVENT IS THE RESULT OF PERSONNEL ERROR. AN INVESTIGATION BY PLANT PERSONNEL REVEALED THAT DURING PERFORMANCE OF CORRECTIVE MAINTENANCE ON 2E11-F050B ON 06/10/83, THE AIR SUPPLY LINES FOR THE VALVE'S OPERATOR WERE REINSTALLED BACKWARDS. THE LINES WERE CORRECTED AND 2E11-F050B WAS FUNCTIONALLY TESTED SATISFACTORILY AND RETURNED TO SERVICE ON 10/28/83.

[232] HATCH 2 DOCKET 50-366 LER 83-121
 CORE POWER LIMIT EXCEEDED.
 EVENT DATE: 110483 REPORT DATE: 111783 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187612) ON NOVEMBER 4, 1983, IT WAS DETERMINED BY A P1 TEST THAT THE CORE

MAXIMUM FRACTION OF LIMITING POWER DENSITY (CMFLPD) HAD EXCEEDED FRACTION OF RATED THERMAL POWER (FRTF) BY .4%. THUS, THE PLANT WAS NOT MEETING THE REQUIREMENTS OF TECH SPECS SECTION 3.2.2. THE PLANT THEN PERFORMED THE REQUIRED TECH SPEC SECTION 3.2.2, ACTION. THIS REPETITIVE EVENT WAS LAST REPORTED BY LER 50-366/1983-068. THE CAUSE OF THIS EVENT WAS ATTRIBUTED TO A HIGH CORE FLUX PEAK DURING A CONTROL ROD PATTERN ADJUSTMENT. APRM'S WERE ADJUSTED SO FRTF WOULD BE EQUAL TO OR GREATER THAN CMFLPD WITHIN THE TWO HOUR LIMIT OF TECH SPEC SECTION 3.2.2, ACTION.

[233] HATCH 2 DOCKET 50-366 LER 83-126
RELIEF VALVE TAILPIPE TEMPERATURE RECORDER FAILS.
EVENT DATE: 111383 REPORT DATE: 120583 NSSS: GE TYPE: BWR
SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187748) ON 11/13/83, IT WAS DETERMINED THAT SAFETY RELIEF VALVE TAILPIPE TEMPERATURE RECORDER 2B21-R614 WAS STAMPING ERRATICALLY. THE RECORDER RECEIVES ITS INPUTS FROM TEMPERATURE ELEMENTS 2B21-K004 A-H, AND K-M; THEREFORE, THE RECORDER WAS DECLARED INOPERABLE. THIS EVENT IS CONTRARY TO THE REQUIREMENTS OF TECH SPECS TABLE 3.3.6.4-1, ITEM 10.B. THIS EVENT IS THE RESULT OF COMPONENT FAILURE. THE RECORDER'S ADVANCING MECHANISM SOLENOID AND ITS ARM AND HUB ASSEMBLY WERE REPLACED BECAUSE THEY WERE WORN. PROPER RECORDER OPERATION WAS CONFIRMED PER THE "GENERAL ELECTRIC TYPE HG MULTIPOINT RECORDER" PROCEDURE (HNP-2-5264), AND SATISFACTORILY RETURNED TO SERVICE ON 11/13/83 AT 2130 HOURS.

[234] INDIAN POINT 2 DOCKET 50-247 LER 83-035
6.9 KV CIRCUITS INTERRUPTED.
EVENT DATE: 100483 REPORT DATE: 110383 NSSS: WE TYPE: PWR
SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: RELAYS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187379) WHILE IN THE HOT SHUTDOWN CONDITION, A BRIEF INTERRUPTION IN THE 6.9 KV ELECTRICAL POWER WAS EXPERIENCED. THE REACTOR WAS MAINTAINED IN A SAFE SHUTDOWN CONDITION USING NATURAL CIRCULATION COOLING UNTIL RESTORATION OF 6.9 KV POWER. ALL REQUIRED SAFEGUARDS EQUIPMENT FUNCTIONED CORRECTLY. A WESTINGHOUSE TYPE PMG-13 PILOT WIRE MONITORING AND TRANSFER TRIPPING RELAY'S TRANSFER TRIP SECTION MALFUNCTIONED CAUSING THE OPENING OF THE SITE 6.9 KV SUPPLY BREAKERS. AFTER APPROXIMATELY 11 MINUTES THE BREAKERS WERE RE-CLOSED AND NORMAL SERVICE RESTORED.

[235] INDIAN POINT 2 DOCKET 50-247 LER 83-040
LOW CST LEVEL.
EVENT DATE: 102683 REPORT DATE: 112583 NSSS: WE TYPE: PWR
SYSTEM: CONDENSATE & FEEDWTR SYS & CONT COMPONENT: ACCUMULATORS
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 187500) DURING PLANT START-UP FOLLOWING A MAINTENANCE OUTAGE THE VOLUME OF WATER IN THE CONDENSATE STORAGE TANK (CST) WAS REDUCED BELOW THE QUANTITY REQUIRED BY TECH SPECS (3.4.A.3) ON TWO DIFFERENT OCCASIONS. THE VOLUME WAS RESTORED ABOVE MINIMUM WITHIN THE TIME LIMIT PERMITTED (3.4.B). PREVIOUS EVENTS AO 75-10, RO 76-16, 76-17, LER 78-29, 79-10, 79-22, & LER 82-50. THE REDUCED VOLUME IN CST BELOW THE TECH SPEC WAS THE RESULT OF EFFORTS REQUIRED TO MAINTAIN CONCENTRATIONS OF SODIUM CHLORIDE WITHIN LIMITS IN THE STEAM GENERATORS. THIS EFFORT INVOLVED DISCHARGING HOTWELL CONDENSATE AND SUPPLYING MAKE-UP WATER FROM CST. AFTER THESE EFFORTS THE CST LEVEL WAS RETURNED TO NORMAL.

[236] INDIAN POINT 2 DOCKET 50-247 LER 83-041
 HIGH CHLORIDE CONCENTRATION IN REACTOR COOLANT SYSTEM.
 EVENT DATE: 102983 REPORT DATE: 112883 NSSS: WE TYPE: PWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: DEMINERALIZERS

(NSIC 187501) WHILE OPERATING AT FULL POWER FOLLOWING A MAINTENANCE OUTAGE, REACTOR COOLANT CHEMICAL ANALYSIS INDICATED A CHLORIDE CONCENTRATION OF 200 PPB. TECH SPEC 3.1.E.1 SPECIFIES A MAXIMUM ALLOWABLE STEADY STATE CHLORIDE CONCENTRATION OF 150 PPB. PREVIOUS SIMILAR EVENT RO 76-14. AN UNFLUSHED ANION DEMINERALIZER HAD BEEN PLACED INTO SERVICE CAUSING A QUANTITY OF CHLORIDE LADEN WATER TO BE INTRODUCED INTO THE REACTOR COOLANT SYSTEM. THE FEED AND BLEED METHOD WAS EMPLOYED TO RESTORE CHLORIDE CONCENTRATION WITHIN THE TECH SPECS TIME PERMITTED.

[237] INDIAN POINT 3 DOCKET 50-286 LER 83-006
 SEISMIC COLLARS MISSING FROM SERVICE WATER PUMPS.
 EVENT DATE: 101783 REPORT DATE: 103183 NSSS: WE TYPE: PWR
 SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 VENDOR: LAYNE-BOWLER, INC.

(NSIC 187414) WITH THE PLANT IN THE COLD SHUTDOWN CONDITION, IT WAS ESTABLISHED THAT SOME OF THE STEEL PLATES HOLDING THE SEISMIC RESTRAINT COLLARS ON SERVICE WATER PUMPS NOS. 31, 32 AND 36 WERE NOT IN PLACE. A PRELIMINARY SEISMIC ANALYSIS, ASSUMING THE WORST-CASE CONDITION WITH ALL FOUR PLATES REMOVED, HAS INDICATED THAT MATERIAL ALLOWANCE FOR THE PUMPS WILL BE EXCEEDED DURING A DESIGN BASIS SEISMIC EVENT AT THE BASE PLATE AND DISCHARGE THRUST PAD. SUBSEQUENT INVESTIGATION HAS INDICATED THAT THE MISSING PLATES WERE REMOVED DURING MAINTENANCE OF THE SERVICE WATER PUMPS AND NOT REPLACED. THIS SITUATION WILL BE REMEDIATED BY THE REPLACEMENT OF THE MISSING PIECES. NO SIMILAR EVENTS HAVE BEEN REPORTED TO DATE.

[238] KEWAUNEE DOCKET 50-305 LER 83-024
 SERVICE WATER PUMP INOPERABLE.
 EVENT DATE: 102083 REPORT DATE: 111883 NSSS: WE TYPE: PWR
 SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: MOTORS
 VENDOR: ALLIS CHALMERS

(NSIC 187540) DURING FULL POWER OPERATION, A TECHNICAL REVIEW OF MAINTENANCE WORK REQUESTS (MWR'S) DISCLOSED THAT THE 1B2 SERVICE WATER PUMP HAD BEEN REMOVED FROM SERVICE ON 9/14/83 TO PERFORM CORRECTIVE MAINTENANCE. WITH SW PUMP 1B2 OUT OF SERVICE THE PLANT WAS IN AN LCO PER TECH SPEC 3.3.D.2.A WHICH IS REPORTABLE PER TECH SPEC 6.9.2.B.(2) AS OPERATION IN A DEGRADED MODE PERMITTED BY AN LCO. THE OTHER THREE SW PUMPS WERE OPERABLE. THE PUMP WAS REMOVED FROM SERVICE DUE TO A NOISY MOTOR. THE MOTOR WAS REMOVED AND REPLACED WITH AN IN-STOCK SPARE. THE PUMP WAS TESTED AND PLACED BACK IN SERVICE THAT SAME DAY. FURTHER INSPECTION OF THE MOTOR REVEALED THAT THE OUTPUT RADIAL GUIDE BEARING WAS FAULTY DUE TO A LACK OF GREASE. THE RADIAL GUIDE BEARING WAS REPLACED USING AN APPROVED MAINTENANCE PROCEDURE.

[239] KEWAUNEE DOCKET 50-305 LER 83-026
 RHR PUMP STATUS LIGHT FAILS.
 EVENT DATE: 102583 REPORT DATE: 112383 NSSS: WE TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187539) DURING FULL POWER OPERATION, WHILE PERFORMING THE MONTHLY PUMP AND VALVE SURVEILLANCE TEST, THE STATUS LIGHT ON THE 1A RHR PUMP FAILED TO LIGHT WHEN THE PUMP WAS STARTED. THE PUMP WAS REMOVED FROM SERVICE TO PERFORM CORRECTIVE

MAINTENANCE. THIS PLACED THE PLANT IN AN LCO PER TECH SPEC 3.3.A.2.B WHICH IS REPORTABLE PER TECH SPEC 6.9.2.B(2) AS OPERATION IN A DEGRADED MODE PERMITTED BY AN LCO. THE REDUNDANT PUMP WAS OPERABLE. THE STATUS LIGHT DID NOT COME ON BECAUSE THE STATIONARY AUX SWITCH IN THE BREAKER FAILED TO FULLY CLOSE. THE PIVOT ARM ON WHICH THE SWITCH IS MOUNTED WAS FOUND TO BE CRACKED. THE PIVOTAL ARM WAS CLEANED AND REWELDED. IN ADDITION, THE PIVOT ARM BUSHINGS WERE REPLACED. THE PUMP WAS RETESTED, WITH THE LIGHT RESPONDING SATISFACTORILY AND PLACED BACK IN SERVICE WITHIN THE TECH SPEC TIME LIMIT. A P.M. PROCEDURE TO INSPECT SAFEGUARDS BREAKERS IS PERFORMED DURING REFUELING TO HELP SPOT MECHANICAL LINKAGE FAILURE; NO FURTHER ACTION REQUIRED.

[240] KEWAUNEE DOCKET 50-305 LER 83-029
 AUXILIARY FEEDWATER FLOW CONTROL VALVE FAILS TO FULLY OPEN.
 EVENT DATE: 111183 REPORT DATE: 120983 NSSS: WE TYPE: PWR
 SYSTEM: ULTIMATE HEAT SINK FACILITIES COMPONENT: VALVE OPERATORS

(NSIC 187785) DURING FULL POWER OPERATION THE 1A AFW PUMP WAS PLACED IN PULL OUT FOR MAINTENANCE WORK ON THE CONTROLLER OF AFW-2A, THE 1A DISCHARGE FLOW CONTROL VALVE. THE OPERABILITY OF THE PUMP WAS NOT EFFECTED AND IT COULD HAVE BEEN PLACED BACK IN SERVICE IF REQUIRED. THIS EVENT PLACED THE PLANT IN AN LCO PER TECH SPEC 3.4.B AND IS REPORTABLE PER TECH SPEC 6.9.2.B.(2) AS OPERATION IN A DEGRADED MODE PERMITTED BY AN LCO. THE 1B PUMP AND THE TURBINE DRIVEN AFW PUMP WERE IN SERVICE. LOCAL CONTROL OF AFW-2A WOULD NOT ALLOW THE VALVE TO OPEN GREATER THAN 90%. THE VOLUME BOOSTER WHICH AIDS THE SOLENOID WAS RECALIBRATED AND THE VALVE WAS SATISFACTORILY TESTED IN BOTH LOCAL AND REMOTE CONTROL. THE 1A AFW PUMP WAS RETESTED AND PLACED BACK IN SERVICE WITHIN TECH SPEC LIMITS. AFW-2A AND ITS REDUNDANT VALVE ARE TESTED AND CALIBRATED ANNUALLY. THIS IS THE FIRST TIME INSTRUMENT DRIFT HAS BEEN A PROBLEM.

[241] KEWAUNEE DOCKET 50-305 LER 83-031
 DRIFT OF ROD POSITION INDICATOR.
 EVENT DATE: 112183 REPORT DATE: 122183 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187849) DURING FULL POWER OPERATION THE IRPI CHANNEL FOR ROD J-10 WAS REMOVED FROM SERVICE FOR MAINTENANCE. TECH SPEC 3.10.F.1.A ALLOWS OPERATION BETWEEN 50 AND 100 PERCENT POWER WITH AN RPI CHANNEL OUT OF SERVICE PROVIDED THAT THE RCC POSITIONS ARE CHECKED INDIRECTLY EVERY SHIFT OR SUBSEQUENT TO ROD MOTION EXCEEDING 24 STEPS. THIS IS REPORTABLE PER TECH SPEC 6.9.2.B(2) AS OPERATION IN A DEGRADED MODE PERMITTED BY AN LCO. RPI WAS AVAILABLE ON THE PLANT PROCESS COMPUTER. INSTRUMENT MAINTENANCE WAS REQUIRED BECAUSE THE IRPI FOR ROD J-10 HAD FAILED HIGH. INVESTIGATION REVEALED THAT THE CONDITIONING MODULE WAS GOOD, BUT THE REMOTE INDICATOR SPAN HAD DRIFTED HIGH. THE INDICATOR SPAN WAS RECALIBRATED AND THE MODULE RETURNED TO SERVICE. A SPOT CHECK ON THE CALIBRATION POINTS WAS PERFORMED WITH ACCEPTABLE RESULTS. NO FURTHER ACTION IS REQUIRED.

[242] KEWAUNEE DOCKET 50-305 LER 83-032
 CONTAINMENT SPRAY PUMP BREAKER FAILS TO CLOSE.
 EVENT DATE: 120183 REPORT DATE: 123083 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: ALLIS CHALMERS

(NSIC 187850) DURING FULL POWER OPERATION, THE 1B CONTAINMENT SPRAY PUMP BREAKER FAILED TO CLOSE WHEN CALLED UPON DURING THE MONTHLY PUMP AND VALVE SURVEILLANCE TEST. THIS PLACED THE PLANT IN AN LCO PER TECH SPEC 3.3.B.2.B AND IS REPORTABLE PER TECH SPEC 6.9.1.B.(2) AS OPERATION IN A DEGRADED MODE PERMITTED BY AN LCO. THE 1A CONTAINMENT SPRAY PUMP HAD ALREADY BEEN DEMONSTRATED OPERABLE. THE PLANT

ELECTRICIANS VISUALLY INSPECTED THE PUMP MOTOR AND BREAKER AND FOUND NO EVIDENCE OF DAMAGE. OPERATIONS THEN STARTED THE PUMP FROM THE CONTROL ROOM WITH CURRENTS, VIBRATIONS, AND FLOW READINGS ALL ACCEPTABLE. THIS APPEARS TO BE AN ISOLATED FAILURE; THE PUMP WILL CONTINUE TO BE MONITORED AS A PART OF THE EXISTING SP AND PM PROGRAM. NO FURTHER ACTION IS REQUIRED.

[243] LA SALLE 1 DOCKET 50-373 LER 83-005 REV 1
 UPDATE ON TEMPERATURE SWITCHES OUT OF SPECIFICATION.
 EVENT DATE: 020783 REPORT DATE: 061683 NSSS: GE TYPE: BWR
 SYSTEM: OTHER SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: RILEY COMPANY, THE - PANALARM DIVISION

(NSIC 184627) AT 1500 HOURS, WHILE IN COLD SHUTDOWN, ON FEBRUARY 7, 1983, IT WAS DETERMINED THAT SEVERAL TEMP. SWITCHES, MANUFACTURED BY PANALARM DIVISION OF THE RILEY COMPANY, WERE OUT OF SPECIFICATION PER TECH SPEC 3/4.3.2. AN INVESTIGATION OF THE ISOLATION CIRCUITRY SHOWED THAT FOR EACH OF THE SYSTEMS AT LEAST ONE GOOD TEMPERATURE SWITCH WOULD HAVE CAUSED AN ISOLATION AT THE DESIRED TRIP POINT. SAFE OPERATION OF THE PLANT WAS MAINTAINED AT ALL TIMES. THE PROBLEM WAS CAUSED BY A CALIBRATION BETWEEN THE RILEY MODULES AND THE COMMON INDICATOR METER AND AN INPUT BIAS CURRENT CAUSING AN OFFSET VOLTAGE/TEMPERATURE INDICATION. MODULES FROM UNIT 2 WERE OBTAINED, TESTED FOR SATISFACTORY OPERATION AND USED TO REPLACE THE QUESTIONABLE MODULES. ALL CALIBRATIONS WERE PERFORMED AND RILEY HAS SUPPLIED A CALIBRATION PROCEDURE CHANGE TO CORRECT THE OFFSET TEMPERATURE INDICATION.

[244] LA SALLE 1 DOCKET 50-373 LER 83-026 REV 1
 UPDATE ON INOPERABLE RADWASTE RADIATION MONITOR.
 EVENT DATE: 032183 REPORT DATE: 100383 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186723) ON MARCH 21, 1983, WITH UNIT 1 AT APPROXIMATELY 65% POWER, THE RADWASTE DISCHARGE RADIATION MONITOR (PRM) WAS DECLARED INOPERABLE. THE RADIATION/CHEMISTRY DEPARTMENT WAS DOUBLE SAMPLING EACH BATCH DISCHARGE PER TECH SPEC 3.3.7.10. THE CAUSE OF THE PRM'S INOPERABLE STATUS WAS DUE TO A HIGH FIXED LEVEL OF BACKGROUND RADIATION. A TASK FORCE HAS BEEN FORMED TO RESOLVE THE RECURRING PROBLEMS ASSOCIATED WITH THE LIQUID RADWASTE PRM. CHANGES IN THE EQUIPMENT'S DESIGN AND LOCATION ARE BEING INVESTIGATED.

[245] LA SALLE 1 DOCKET 50-373 LER 83-033 REV 1
 UPDATE ON INOPERABLE RADWASTE LIQUID EFFLUENT MONITOR.
 EVENT DATE: 040283 REPORT DATE: 060683 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 184601) ON APRIL 2, 1983, WITH UNIT ONE IN HOT SHUTDOWN, THE RADWASTE EFFLUENT MONITOR WAS DECLARED INOPERABLE. THE RAD/CHEM DEPARTMENT WAS DOUBLE SAMPLING EACH BATCH DISCHARGE IN ACCORDANCE WITH TECH SPEC 3.3.7.10. THE CAUSE OF THE PRM'S INOPERABLE STATUS WAS DUE TO A HIGH FIXED LEVEL OF BACKGROUND RADIATION. THE LIQUID RADWASTE PRM'S INNER CHAMBER SURFACE WAS COATED WITH AN ACRYLIC RESIN, EXPERIMENTALLY, TO DETERMINE IF THE BUILDUP IN THE LEVEL OF BACKGROUND RADIATION COULD BE STOPPED. THE LIQUID RADWASTE PRM WAS RETURNED TO SERVICE AND IS PRESENTLY FUNCTIONING PROPERLY.

[246] LA SALLE 1 DOCKET 50-373 LER 83-042 REV 1
 UPDATE ON LEAKING INBOARD MSIV'S.
 EVENT DATE: 042383 REPORT DATE: 062183 NSSS: GE TYPE: BWR
 SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: VALVES

VENDOR: ROCKWELL-INTERNATIONAL

(NSIC 184602) DURING THE PERFORMANCE OF LTS-100-3, MAIN STEAM ISOLATION VALVE LOCAL LEAK-RATE TEST, THE INBOARD MSIV'S (1B21-F022A/B/C/D) WERE FOUND TO BE EXCEEDING THE ALLOWABLE LEAK-RATE OF 25 SCFH. BOTH INBOARD AND OUTBOARD MSIV'S WERE FUNCTIONAL AND ANY RELEASE WOULD HAVE BEEN LIMITED BY THE OUTBOARD MSIV'S (1B21-F028A//D). ANY LEAKAGE BY THE INBOARD MSIV'S WOULD HAVE BEEN CONTROLLED BY THE LEAKAGE CONTROL SYSTEM. THE REASON FOR THE MAIN STEAM ISOLATION VALVES FAILING TO PASS THE ALLOWABLE LEAKRATE OF 25 SCFH IS DUE TO LESS THAN PERFECT SEATING OF DISC AND SEAT SURFACES. THE INBOARD MSIV'S DISCS AND SEATS WERE LAPPED AND MACHINED, REINSTALLED AND SATISFACTORILY TESTED ON MAY 15, 1983. THE VALVES ARE MADE BY ROCKWELL INTERNATIONAL.

[247] LA SALLE 1 DOCKET 50-373 LER 83-052 REV 1
 UPDATE ON MSIV POSITION SWITCH FAILURE.
 EVENT DATE: 051683 REPORT DATE: 100383 NSSS: GE TYPE: BWR
 SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 186724) DURING LES-MS-01, THE OUTBOARD MAIN STEAM ISOLATION VALVE 1B21-F028C REACTOR PROTECTION SYSTEM TRIP CHANNEL A2 LIMIT SWITCH FAILED TO OPERATE PROPERLY. TECH SPEC 2.2.1 ALLOWABLE VALUE OF EQUAL TO OR LESS THAN 12% OF MSIV CLOSURE WAS NOT MET. A REDUNDANT RPS TRIP CHANNEL A2 LIMIT SWITCH ON INBOARD MSIV 1B21-F022C WAS FOUND WITHIN TECH SPEC LIMITS. THIS SWITCH WOULD HAVE CAUSED REACTOR AUTO-SCRAM TRIP LOGIC B1 TO INITIATE HAD A MSIV CLOSURE OCCURRED. THE LIMIT SWITCH ACTUATING ARM ON 1B21-F028C FAILED TO MAKE A PROPER CONTACT WITH THE LIMIT SWITCH. THE CAUSE FOR THE MISALIGNMENT COULD NOT BE DETERMINED. THE LIMIT SWITCH WAS READJUSTED TO ACTUATE THE TECH SPEC TRIP SETPOINT OF EQUAL TO OR LESS THAN 8% MSIV CLOSURE AT 2100 HOURS ON 5/16/83.

[248] LA SALLE 1 DOCKET 50-373 LER 83-073
 REACTOR LEVEL SWITCH HAS SWITCHED LEADS.
 EVENT DATE: 071483 REPORT DATE: 072583 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 184604) THE -129" REACTOR WATER LEVEL (RWL) DIV 1 ECCS INITIATION SWITCH FAILED ITS SURVEILLANCE BECAUSE IT FAILED TO START THE DIV 1 ECCS PUMPS. INVESTIGATION REVEALED THAT 2 LEADS HAD BEEN SWITCHED WHICH EFFECTIVELY PLACED HI DRYWELL (DW) PRESSURE IN SERIES WITH THE -129" SIGNAL. THIS MEANT THAT AN ECCS DIV 1 INITIATION SOLELY FROM -129" WOULD NOT HAVE OCCURRED, HOWEVER, HI DW PRESSURE, PROPER COMBINATION OF HI DW PRESSURE AND -129" RWL AND MANUAL INITIATION WERE STILL FUNCTIONAL. THE SURVEILLANCE WAS SATISFACTORY ON 6/17/83 SO THIS IS THE WORST CASE DATE OF INOPERABILITY. HPSCS WAS INOPERABLE FOR 13 DAYS OF THIS TIME, HOWEVER, AVAILABLE ECCS WOULD HAVE PROTECTED THE REACTOR. THE CAUSE WAS UNKNOWN. AN EXTENSIVE INVESTIGATION DID NOT INDICATE WHEN THE LEADS MAY HAVE BEEN SWITCHED. THE LEADS WERE LANDED CORRECTLY AND THE SURVEILLANCE WAS PERFORMED SATISFACTORILY. AN HOURLY SECURITY PATROL OF ECCS INSTRUMENT PANELS ON THE 761 ELEVATION WAS INSTITUTED UNTIL LEADED SEAL WIRES COULD BE INSTALLED ON THE PANEL JUNCTION BOXES. THE WIRING IN THESE PANELS WAS VERIFIED SATISFACTORILY AGAINST "AS BUILT" DRAWINGS. THE EFFECTIVENESS OF THE SEAL WIRES WILL BE EVALUATED IN 30 DAYS.

[249] LA SALLE 1 DOCKET 50-373 LER 83-083
 SBTG RADIATION MONITOR FUSE FAILS.
 EVENT DATE: 071783 REPORT DATE: 081083 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: OTHER COMPONENTS

(NSIC 184728) ON JULY 17, 1983 AT 2000 HOURS WITH UNIT 1 IN STARTUP, THE SBTG VENT WIDE RANGE GAS MONITOR SHOWED NO FLOW PASSING THROUGH ITS SYSTEM. THE

OPL58JA/B PANELS WERE OPERATING AND HAD SBTG INITIATED, SO MONITORING AS WELL AS SAMPLING PARTICULATES, NOBLE GAS, AND IODINE ACTIVITY FOR LABORATORY ANALYSIS WAS POSSIBLE. THE CAUSE OF THIS OCCURRENCE WAS A BLOWN FUSE. THIS IS CONSIDERED AN ISOLATED INCIDENT. THE FUSE WAS PROPERLY REPLACED UNDER W.R. #26044 AND PRESENTLY FUNCTIONS PROPERLY.

[250] LA SALLE 1 DOCKET 50-373 LER 83-100
 SUPPRESSION POOL NITROGEN MAKEUP ISOLATION VALVE FAILS TO CLOSE.
 EVENT DATE: 081983 REPORT DATE: 091383 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: VALVE OPERATORS
 VENDOR: LIMITORQUE CORP.

(NSIC 186204) ON 8/11/83 WHILE LSCS WAS OPERATING AT 940 MWE, A DRYWELL/SUPPRESSION POOL NITROGEN MAKEUP TEST WAS CONDUCTED. WHILE SECURING FROM THE TEST, IT WAS FOUND THAT THE SUPPRESSION POOL NITROGEN MAKEUP DOWNSTREAM ISOLATION VALVE #1VQ050 WOULD NOT CLOSE. THE VALVE WAS DECLARED INOPERABLE. TECH SPEC 3.6.3 REQUIRES THAT PRIMARY CONTAINMENT ISOLATION VALVES BE OPERABLE DURING CONDITIONS 1, 2, AND 3. THE UPSTREAM ISOLATION VALVE #1VQ051 REMAINED FULLY OPERABLE THUS PROVIDING CONTAINMENT ISOLATION CAPABILITIES. ALSO, MANUAL ISOLATION OF THE DOWNSTREAM ISOLATION VALVE #1VQ050 WAS STILL POSSIBLE. ISOLATION VALVE #1VQ050 WOULD NOT CLOSE DUE TO DIRTY TORQUE SWITCH CONTACTS. THIS PREVENTED THE CLOSING DIRECTION CIRCUIT FROM COMPLETING AND RESULTED IN INTERMEDIATE POSITIONING. ISOLATED VALVE #1VQ050 WAS MANUALLY CLOSED AND TAKEN OUT-OF-SERVICE. THE "CLOSING DIRECTION" TORQUE SWITCH CONTACTS WERE CLEANED AND THE LIMITORQUE HOUSING GASKET WAS REPLACED TO SEAL THE ELECTRICAL COMPONENTS.

[251] LA SALLE 1 DOCKET 50-373 LER 83-114
 SETPOINT DRIFT OF REACTOR WATER LEVEL SWITCH.
 EVENT DATE: 092183 REPORT DATE: 101483 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: ITT-BARTON

(NSIC 186271) DURING THE PERFORMANCE OF TEST LIS-NB-01, DIFFERENTIAL PRESSURE INDICATING SWITCH 1B21-N024B REACTOR WATER LEVEL SWITCH SETPOINT WAS FOUND TO EXCEED TECH SPEC 3.3.2 ALLOWABLE VALUE BY 2.5 INCHES. AT THE TIME THE REACTOR WAS IN CONDITION 4, COLD SHUTDOWN. THE LEVEL SWITCH OPERATED PROPERLY AND WOULD HAVE INITIATED REACTOR AUTO-SCRAM TRIP LOGIC B1 AT A VESSEL LEVEL SLIGHTLY LOWER THAN THE TECH SPEC. THE OTHER THREE 1B21-N024 SWITCH SETPOINTS WERE WITHIN TOLERANCE. THE CAUSE FOR THE INSTRUMENT SETPOINT DRIFT COULD NOT BE DETERMINED. THE SWITCH WAS FOUND IN PROPER WORKING ORDER. SWITCH 1B21-N024B WAS IMMEDIATELY RECALIBRATED PER LIS-NB-01 AND RETURNED TO SERVICE ON 9-21-83.

[252] LA SALLE 1 DOCKET 50-373 LER 83-116
 CONTROL ROD UNCOUPLED DURING STARTUP.
 EVENT DATE: 092683 REPORT DATE: 101783 NSSS: GE TYPE: BWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL ROD DRIVE MECHANISMS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186273) CONTROL ROD DRIVE (CRD) AT CORE LOCATION 30-19 INDICATED OVERTRAVEL WHEN WITHDRAWN TO THE "FULL OUT" POSITION FOR REACTOR STARTUP. AT THE TIME OF THE OCCURRENCE LA SALLE UNIT 1 WAS IN PLANT CONDITION 2 OPERATING SUPERCRITICAL. CONSEQUENCES OF THE EVENT WERE MINIMAL DUE TO ADHERENCE TO BANK POSITION WITHDRAWAL SEQUENCE AND TECH SPEC 4.1.3.6.B. IT WAS CONCLUDED THAT CRD 30-19 BECAME UNCOUPLED AS A RESULT OF INNER FILTER RETAINER SPRING DAMAGE CAUSED BY EXCESSIVE CRUD BUILDUP. CRD 30-19 WAS WITHDRAWN TO POSITION "48" AND VERIFIED COUPLED. CRD 30-19 WAS SCHEDULED FOR INSPECTION DURING THE NEXT REFUEL OUTAGE.

[253] LA SALLE 1 DOCKET 50-373 LER 83-115
 SETPOINT DRIFT OF TWO REACTOR WATER LEVEL SWITCHES.
 EVENT DATE: 092783 REPORT DATE: 101483 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: ITT-BARTON

(NSIC 186272) DURING LIS-NB-04, REACTOR VESSEL LOW-LOW WATER LEVEL RCIC INITIATION, LOW-LOW-WATER LEVEL LPCS/RHR INITIATION, AND ADS PERMISSIVE CALIBRATION AND FUNCTIONAL TEST, DIFFERENTIAL PRESSURE INDICATING SWITCHES 1B21-N037B AND 1B21-N037D SWITCH SETPOINTS WERE FOUND TO EXCEED TECH SPEC 3.3.5 ALLOWABLE VALUES SLIGHTLY. THE INITIATION SETPOINTS WERE EXCEEDED BY A MAXIMUM OF 1.24 INCHES REACTOR LEVEL. THE SWITCHES WERE FOUND TO OPERATE PROPERLY. SIMILAR REPORT LER 83-91. THE CAUSE OF THE INSTRUMENT SETPOINT DRIFT COULD NOT BE DETERMINED. THE SWITCHES ARE BARTON MODEL 288A. THE SWITCH SETPOINTS WERE IMMEDIATELY RECALIBRATED PER LIS-NB-04.

[254] LA SALLE 1 DOCKET 50-373 LER 83-129
 REACTOR FLOW INSTRUMENT TEST INTERVAL EXCEEDED.
 EVENT DATE: 101883 REPORT DATE: 111683 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187625) LIS-RR-01 CALIBRATION EXCEEDED ITS CRITICAL DATE BY ONE DAY. FREQUENCY WAS CHANGED FROM 18 MONTHS TO 3 MONTHS AND WAS NOT ENTERED ON THE COMPUTER. THE PROBABLE CONSEQUENCE WAS THAT POWER TO FLOW SCRAMS COULD OCCUR (DUE TO INCORRECT FLOW INDICATION) IN THE NON-CONSERVATIVE DIRECTION. THE CAUSE OF THE OVERDUE SURVEILLANCE WAS PERSONNEL ERROR OF NOT ENTERING THE SURVEILLANCE CHANGE INTO THE COMPUTER. WHEN THE ERROR WAS DISCOVERED THE SURVEILLANCE WAS COMPLETED AND HAS BEEN PERFORMED QUARTERLY EVER SINCE.

[255] LA SALLE 1 DOCKET 50-373 LER 83-131
 JET PUMP OPERABILITY CRITERIA INCORRECT.
 EVENT DATE: 101983 REPORT DATE: 111783 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR VESSEL INTERNALS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187627) ON 10-19-83 AT 0400 HOURS THE DAILY SURVEILLANCE DATA INDICATED THAT THE REACTOR RECIRCULATION SYSTEM JET PUMPS DID NOT MEET THE OPERABILITY CRITERIA AS REQUIRED BY TECH SPEC 3/4.4.1.2. IT WAS CONCLUDED THAT THE JET PUMP OPERABILITY BASELINE DATA WHICH WAS COLLECTED AT THE PRESENT POWER AND CORE FLOW CONDITIONS WAS APPLICABLE RATHER THAN DATA COLLECTED AT 65% POWER. THE NEW JET PUMP OPERABILITY DATA INDICATED ALL JET PUMPS WERE OPERABLE.

[256] LA SALLE 1 DOCKET 50-373 LER 83-125
 ROD BLOCK MONITOR CHANNEL FAILS.
 EVENT DATE: 102183 REPORT DATE: 111483 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187622) ON OCT. 21, 1983 AT 2100 HOURS DURING CONTROL ROD MOVEMENTS, IT WAS OBSERVED THAT ROD BLOCK MONITOR CHANNEL A GENERATED INOPERABLE AND ROD BLOCK ALARMS INTERMITTENTLY WHEN A CONTROL ROD WAS SELECTED. AT THE TIME OF THE OCCURRENCE, LA SALLE UNIT 1 WAS OPERATING AT 1106 MWE. THE REACTOR WAS NOT OPERATING ON A LIMITING CONTROL ROD PATTERN AND ROD BLOCK MONITOR CHANNEL B WAS OPERABLE. THE RBM WAS INOPERABLE DUE TO A FAILED COMPONENT ON THE RECEIVER LOGIC CARD. THE COMPONENT FAILED DUE TO NORMAL USAGE AND OPERATIONAL CONDITIONS. RBM CHANNEL A WAS DECLARED INOPERABLE AND TRIPPED WITHIN 24 HOURS PER TECH SPEC 3.1.4.3.A. THE RECEIVER LOGIC CARD WAS REPLACED WITHIN AN EQUIVALENT.

[257] LA SALLE 1 DOCKET 50-373 LER 83-130
 RADIATION MONITOR AUTOMATIC CHECK SOURCE MECHANISM FAILS.
 EVENT DATE: 102183 REPORT DATE: 111683 NSSS: GE TYPE: BWR
 SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ATOMIC CO.

(NSIC 187626) ON OCTOBER 21, 1983, A STACK WIDE RANGE GAS MONITOR ALARMED. THE MONITOR WAS DECLARED INOPERABLE. ACTION STATEMENT OF TECH SPEC 3.3.7.11 WAS ENTERED. GRAB SAMPLES WERE TAKEN ON A PERIODIC BASIS. THE CAUSE WAS DUE TO THE CHECKSOURCE NOT REMAINING LONG ENOUGH AT THE DETECTOR WINDOW FOR THE DETECTOR TO RESPOND. THE MID-RANGE DETECTOR WAS MANUALLY SOURCE CHECKED AND RETURNED TO OPERATION. THIS APPEARS TO BE AN ISOLATED CASE.

[258] LA SALLE 1 DOCKET 50-373 LER 83-133
 BOTH PERSONNEL AIRLOCK DOORS OPEN.
 EVENT DATE: 102483 REPORT DATE: 112183 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187629) ON OCT. 24, 1983 AT 0515 HOURS WITH THE UNIT IN HOT SHUTDOWN BOTH PERSONNEL ACCESS DOORS WERE OPENED AT THE SAME TIME FOR ABOUT 90 SECONDS TO ALLOW SEVERAL PLANT PERSONNEL TO EXIT THE DRYWELL. THE INTERLOCK MECHANISM FOR THE ACCESS DOORS WAS DEFEATED BY THE OPERATING DEPARTMENT. THE PLANT PERSONNEL INSIDE THE DRYWELL COULD NOT GET THE OUTER AIRLOCK DOOR OPEN BECAUSE OF A SLIPPED CAM. TWO SET SCREWS WERE FOUND LOOSE, ALLOWING A CAM TO SLIDE DOWN THE SHAFT AND ACT AS A BLOCK TO AN ADJACENT CAM LOCATED ON A SEPARATE SHAFT. THE MAINTENANCE DEPARTMENT MOVED THE CAM BACK TO ITS NORMAL POSITION AND TIGHTENED THE SET SCREWS.

[259] LA SALLE 1 DOCKET 50-373 LER 83-136
 ROD WORTH MINIMIZER FAILS TO OPERATE.
 EVENT DATE: 102683 REPORT DATE: 112183 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187632) ON OCTOBER 26, 1983 AT 0330 HOURS, ROD WORTH MINIMIZER (RWM) FAILED TO INITIALIZE AND FUNCTION FOR UNIT STARTUP. AT THE TIME OF THE OCCURRENCE, LASALLE UNIT 1 WAS IN HOT SHUTDOWN, OPERATING SUBCRITICAL. CONSEQUENCES OF THE EVENT WERE MITIGATED DUE TO TECH SPEC 3.1.4.1.A WHICH REQUIRES A SECOND LICENSED OPERATOR TO VERIFY CONTROL ROD MOVEMENTS. ALSO, RSCS WAS OPERABLE. RWM WAS INOPERABLE DUE TO A FAILURE IN THE COMPUTER DIGITAL SCAN PROGRAM. COGNIZANT TECHNICAL STAFF ENGINEER WAS NOTIFIED AND THE PROGRAM WAS RE-INITIALIZED.

[260] LA SALLE 1 DOCKET 50-373 LER 83-134
 BLOWDOWN FLOW RECORDER FAILS DOWNSCALE.
 EVENT DATE: 102883 REPORT DATE: 112183 NSSS: GE TYPE: BWR
 SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: DIETERICH STANDARD CORP.

(NSIC 187630) ON OCTOBER 28, 1983 THE BLOWDOWN RECORDER FAILED DOWNSCALE; INSTRUMENTATION FAILED ALSO IN THE RAD WASTE CONTROL ROOM. ACTION STATEMENT OF TECH SPEC 3.3.7.10 WAS ENTERED. THERE WAS NO RADIOACTIVE RELEASE IN PROGRESS AT THE TIME OF THE OCCURRENCE. TECH SPEC 3.3.7.10 ACTION STATEMENT 102 ALLOWS RADIOACTIVE RELEASE UP TO 30 DAYS PROVIDED FLOWRATE IS ESTIMATED EVERY 4 HOURS DURING THE RELEASE. THE CAUSE FOR THE FAILURE APPEARS TO BE DUE TO LARGE CONCENTRATIONS OF SHAD ENTERING THE BLOWDOWN LINE AND EVENTUALLY PLUGGING THE SENSING PORTS. THE PROBE WAS REPAIRED UNDER WORK REQUEST (L29065) AND COMPLETED ON NOVEMBER 11, 1983. MODIFICATION M-1-1-82-125 IS IN PROGRESS AND ONCE IMPLEMENTED, SHOULD ELIMINATE OCCURRENCES OF THIS TYPE. THE ANNUBAR PROBE IS MADE BY DIEDERICH STANDARDS CORP.

[261] LA SALLE 1 DOCKET 50-373 LER 83-135
 SBTG WIDE RANGE GAS MONITOR CIRCUIT OVERLOADED.
 EVENT DATE: 102883 REPORT DATE: 112183 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE
 VENDOR: GA ENVIRONMENTAL SYSTEMS DIV

(NSIC 187631) ON OCTOBER 28, 1983 THE STANDBY GAS TREATMENT (SBGT) WIDE RANGE GAS MONITOR (WRGM) BECAME INOPERABLE WHEN POWER WAS LOST TO THE OPLD2J DETECTOR SKID WHILE POWERING UP A TRITIUM SAMPLING CART NEARBY. PERIODIC GRAB SAMPLES WERE TAKEN BY THE RADIATION/CHEMISTRY DEPARTMENT FOR NOBLE GAS PER TECH SPEC 3.3.7.11. TECH SPEC 3.3.7.5 WAS ALSO BEING COMPLIED WITH. THE CAUSE WAS DUE TO POWERING UP THE TRITIUM PORTABLE SAMPLER FROM THE OPLD3J PANEL; EXCEEDING THE OPLD2J SKIDS POWER CAPABILITIES WITH SUBSEQUENT BLOWING OF THE POWER FUSE. WORK REQUEST (L29057) WAS WRITTEN, THE POWER FUSE REPLACED AND DATA BASE VERIFIED INTACT. THE VENDOR FOR THIS EQUIPMENT IS G. A. TECHNOLOGIES. NAMEPLATES WILL BE ADDED TO CAUTION AGAINST USING LARGE LOADS WITH THESE OUTLETS.

[262] LA SALLE 1 DOCKET 50-373 LER 83-138
 DIESEL GENERATOR INOPERABLE.
 EVENT DATE: 110183 REPORT DATE: 113083 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: BLOWERS

(NSIC 187818) AT 1530 ON NOVEMBER 1, 1983, THE AIR RECEIVER PRESSURE FOR THE 2A DIESEL GENERATOR DROPPED BELOW 200 PSIG. THE 2A DIESEL GENERATOR WAS THEN DECLARED INOPERABLE PURSUANT TO TECH SPEC 4.8.1.1.2.A.7. THE 1A DIESEL GENERATOR WAS TESTED SATISFACTORILY AS REQUIRED BY TECH SPEC 3.8.1.1. OFFSITE POWER WAS AVAILABLE DURING THE EVENT. THE "B" AIR COMPRESSOR WAS OUT-OF-SERVICE FOR MAINTENANCE DURING THE EVENT. THE "A" AIR COMPRESSOR FAILED APPARENTLY DUE TO A FAULTY HYDRAULIC UNLOADER ASSEMBLY. THE COMPRESSOR WAS REPLACED UNDER WORK REQUEST L29196. THE NEW "A" COMPRESSOR WAS RUN SATISFACTORILY AND THE 2A DIESEL WAS OPERABLE AT 0455 ON 11-2-83.

[263] LA SALLE 1 DOCKET 50-373 LER 83-139
 SBTG SAMPLING MODIFICATION NOT PROPERLY DOCUMENTED.
 EVENT DATE: 110283 REPORT DATE: 113083 NSSS: GE TYPE: BWR
 SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187883) TWO PIPING Y'S WERE DESIGNED AND INSTALLED ON STANDBY GAS TREATMENT (SBGT) WIDE RANGE SAMPLE SYSTEM SUCTION PIPING PER MODIFICATION. MATERIAL, WELD, AND NDE DOCUMENTATION WAS LOST. SYSTEM HAD BEEN RESTORED TO SERVICE. LINE IS OPERATED AT NEAR ATMOSPHERIC PRESSURE BUT WAS CODE PIPING. Y'S WERE REPLACED WITH ONES WITH PROPER DOCUMENTATION. OPERATING PERSONNEL WILL BE TRAINED TO ENSURE EQUIPMENT WILL NOT BE RETURNED TO SERVICE UNTIL MODIFICATION PAPER WORK IS AUTHORIZED COMPLETE.

[264] LA SALLE 1 DOCKET 50-373 LER 83-141
 BOTH OFF-GAS HYDROGEN ANALYZERS FAIL.
 EVENT DATE: 110283 REPORT DATE: 120283 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187868) ON 11/2/83 THE OFF-GAS "A" HYDROGEN ANALYZER WAS OBSERVED TO REMAIN IN THE CALIBRATE MODE, FAILING PROPER AUTOMATIC SAMPLING SEQUENCE. THE "B" ANALYZER WAS ALSO INOPERATIVE. TECH SPEC 3.3.7.11 ACTION STATEMENT WAS ENTERED AND RAD/CHEM WAS NOTIFIED TO COLLECT GRAB SAMPLES FOR ANALYSIS. THE REACTOR WAS IN THE RUN MODE PRODUCING 1556 MWTH, 484 MWE. THE OFF-GAS CATALYTIC HYDROGEN RECOMBINER OPERATED AS DESIGNED THROUGHOUT THE EVENT. DURING AUTOMATIC SAMPLING SEQUENCE OF THE ANALYZERS, LOW SAMPLE FLOW TRIPS THE HIGH VACUUM SWITCH, RESETS

THE CALIBRATION, AND PURGE TIMERS. THE ANALYZERS THEN START THE AUTOMATIC SEQUENCE AGAIN AND TRIP ON LOW SAMPLE FLOW AGAIN. THE LOW FLOW IS CAUSED BY FOREIGN DEBRIS ENTERING THE FINE MESH INLET FILTERS. INVESTIGATION IS UNDERWAY TO PLACE A MOISTURE/CYCLONE SEPARATOR IN THE INLET LINE OF THE ANALYZERS.

[265] LA SALLE 1 DOCKET 50-373 LER 83-142
NO RHR FLOW WHEN ISOLATION VALVE FAILS TO OPEN.
EVENT DATE: 110483 REPORT DATE: 120283 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV. SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
VENDOR: ANCHOR/DARLING VALVE CO.

(NSIC 187869) ON 11/4/83 AT 0315 WITH THE UNIT IN MODE 3, HOT SHUTDOWN, THE RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SUCTION INBOARD ISOLATION VALVE, 1E12-F009, FAILED TO OPEN EITHER BY THE MOTOR OPERATOR OR MANUALLY. THE UNIT WAS SHUTTING DOWN FOR PLANNED MAINTENANCE. THE SUBJECT VALVE WAS OPENED AND THE UNIT WAS IN MODE 4, COLD SHUTDOWN, BY 11/5/83 AT 1913. ALTERNATE METHODS OF DECAY HEAT REMOVAL WERE AVAILABLE AND USED, THE SAFETY OF THE UNIT WAS MAINTAINED. THE 1E12-F009 VALVE IS A FLEX WEDGE GATE VALVE MANUFACTURED BY ANCHOR DARLING CO. THE VALVE WAS MANUALLY SEATED WITH THE UNIT IN MODE 1, RUN, TO ELIMINATE SMALL LEAKAGE THROUGH THE VALVE. THE CLOSING OF THE VALVE WHEN HOT AND SUBSEQUENT COOLING RESULTED IN THERMAL STRESSES PINCHING THE WEDGE IN VALVE SEAT. OPERATING DEPT. PERSONNEL WILL BE TRAINED ON THIS PHENOMENON. LAP 1600-2, CONDUCT OF OPERATIONS, WILL BE REVISED TO CAUTION OPERATING ABOUT CLOSING GATE VALVES WHEN HOT.

[266] LA SALLE 1 DOCKET 50-373 LER 83-137
DRYWELL ISOLATION VALVE BLOCKED OPEN.
EVENT DATE: 111383 REPORT DATE: 112383 NSSS: GE TYPE: BWR
SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187633) DURING PREPARATION FOR LST 83-224 ENG. SAFETY FEATURE RESET TEST, THE DRYWELL PNEUMATIC SYSTEM SUCTION DOWNSTREAM ISOLATION VALVE (1IN001B) WAS FOUND MANUALLY BLOCKED OPEN. AT THE TIME OF THE EVENT UNIT 1 WAS IN COLD SHUTDOWN, AND THE REDUNDANT VALVE (1IN001A) OPERATED SATISFACTORILY. CONSEQUENCES WERE MINIMAL SINCE THERE WAS NO ISOLATION SIGNAL AND THE REDUNDANT VALVE WAS OPERABLE. AT THIS TIME THE EXACT CAUSE HAS NOT BEEN DETERMINED. THE VALVE WAS IMMEDIATELY REPOSITIONED. ALL OPERATORS ARE BEING INTERVIEWED, AND THIS AND ALL SIMILAR VALVES WILL HAVE THEIR HANDWHEELS REMOVED.

[267] LA SALLE 1 DOCKET 50-373 LER 83-140
ONE SBTG AUTOMATIC STARTUP CHANNEL BYPASSED.
EVENT DATE: 112383 REPORT DATE: 120283 NSSS: GE TYPE: BWR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187867) AN INCORRECT JUMPER INSTALLATION WAS IDENTIFIED. THIS JUMPER PREVENTED AN AUTOMATIC START OF THE STANDBY GAS TREATMENT SYSTEM (SBGT) FROM A UNIT 1, DIVISION 1 INITIATION SIGNAL. THE STANDBY GAS TREATMENT SYSTEM WOULD HAVE AUTOMATICALLY STARTED ON A UNIT 1 DIVISION II INITIATION SIGNAL. JUMPER WAS INSTALLED ON SEPT. 15, 1983. ELECTRICIAN INSTALLING JUMPER PLACED JUMPER IN PANEL 2PA14J. JUMPER SHOULD HAVE BEEN IN PANEL 1PA14J. OPERATOR VERIFYING JUMPER INSTALLATION FAILED TO NOTE THE "1" ON THE PANEL EPN. JUMPER WAS IMMEDIATELY REMOVED UPON DISCOVERY.

[268] LACROSSE DOCKET 50-409 LER 83-008
ALTERNATE CORE SPRAY AND POST ACCIDENT SAMPLING CHECK VALVES LEAK.
EVENT DATE: 111083 REPORT DATE: 112883 NSSS: AC TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES

VENDOR: POWELL, WILLIAM COMPANY, THE
NUPRO COMPANY

(NSIC 187569) 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. TYPE A TEST WAS ACCEPTABLE. FIRST TIME ACS CHECK VALVES OR PASS CHECK VALVE EXHIBITED LEAKAGE. 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 WILL BE REPAIRED. CAUSE OF FAILURE OF PASS CHECK VALVE UNKNOWN. VALVE WILL BE REPAIRED OR REPLACED. LINES OTHERWISE ISOLATED FOR FUEL HANDLING.

[269] MAINE YANKEE DOCKET 50-309 LER 83-017
COOLING WATER OUTLET STOP VALVE TO RHR HX FAILS TO OPEN.
EVENT DATE: 050983 REPORT DATE: 060883 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: LIMITORQUE CORP.

(NSIC 183248) ON MAY 9, 1983, DURING STEADY-STATE FULL POWER OPERATION, AND AGAIN ON MAY 17 AND 18, PCC-M-43, A COOLING WATER OUTLET STOP VALVE TO THE RESIDUAL HEAT REMOVAL (RHR) HEAT EXCHANGER FAILED TO OPEN FROM THE MAIN CONTROL BOARD (MCB) DURING QUARTERLY VALVE TESTS. THE VALVE IS NORMALLY CLOSED AND OPENS ON A RECIRCULATION ACTUATION SIGNAL (RAS) TO ALLOW PRIMARY COMPONENT COOLING FLOW THROUGH E-3A, THE A TRAIN (SUBSYSTEM) RHR HEAT EXCHANGER. WITHIN 20 MINUTES THE VALVE WAS MANUALLY OPENED ONE QUARTER TURN AND SUCCESSFULLY OPERATED FROM THE MCB. ON MAY 17, 1983, PCC-M-43 AGAIN FAILED TO OPEN REMOTELY UNTIL IT WAS MANUALLY AIDED. ECCS TRAIN A WAS AGAIN DETERMINED TO BE INOPERABLE. ON MAY 18, 1983, PCC-M-43 AGAIN FAILED TO OPEN REMOTELY FROM THE MCB. MISADJUSTED VALVE MOTOR OPERATOR TORQUE SETTINGS WERE DETERMINED TO BE THE CAUSE OF THE REPEATED VALVE FAILURES. DURING REPAIR OF PCC-M-43, IT WAS FOUND THAT THE CLOSING TORQUE SETTING WAS SIGNIFICANTLY GREATER THAN THE OPENING TORQUE SETTING. WHEN THE VALVE CLOSED, THE WEDGE SEATED SUCH THAT AFTER SEVERAL HOURS OF INACTIVITY, THE OPENING TORQUE SETTING WAS NOT ENOUGH TO UNSEAT THE VALVE.

[270] MAINE YANKEE DOCKET 50-309 LER 83-030
HIGH PRESSURE SAFETY INJECTION PUMP FAILS TO START.
EVENT DATE: 081983 REPORT DATE: 092183 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 186158) THE P-14S CHARGING PUMP, WHICH DOUBLES AS A HPSI PUMP, FAILED TO START FOLLOWING REALIGNMENT OF THE "A" TRAIN HPSI PUMP. THE P-14A PUMP HAD BEEN LINED UP AS THE "A" TRAIN HPSI PUMP TO CONDUCT A PERFORMANCE TEST SUBSEQUENT TO MAJOR MAINTENANCE WORK. FOLLOWING THE TEST, THE P-14S PUMP WAS REALIGNED AS THE "A" PUMP BUT FAILED TO START WHEN TESTED, FORCING OPERATION IN A DEGRADED MODE WITH ONE OPERABLE ECCS TRAIN AVAILABLE AS ALLOWED BY TECH SPEC 3.6. INVESTIGATION REVEALED THAT A P-14A BREAKER CUBICLE INTERLOCK REMAINED ENGAGED WHEN THE P-14A BREAKER WAS NOT FULLY RACKED DOWN DURING THE PROCESS OF REALIGNING P-14S. THE PROBLEM WAS CORRECTED AND P-14S TESTED OPERABLE WITHIN TWO HOURS. LER-83-009 ALSO INVOLVED THE HPSI PUMP BREAKER CUBICLE INTERLOCK, HOWEVER THE CAUSES AND CONSEQUENCES OF THE PREVIOUS EVENT DIFFER SIGNIFICANTLY FROM THOSE OF THIS EVENT.

[271] MAINE YANKEE DOCKET 50-309 LER 83-031
HPSI LOOP INJECTION STOP VALVES LEAK.
EVENT DATE: 083083 REPORT DATE: 092983 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES

VENDOR: VELAN VALVE CORP.

(NSIC 185986) WHILE AT STEADY STATE FULL POWER OPERATION, EXCESSIVE PACKING LEAKAGE WAS DISCOVERED IN THE HIGH PRESSURE SAFETY INJECTION (HPSI) LOOP INJECTION STOP VALVES. THE WORK REQUIRED TO REPACK ONE OF THESE VALVES WHILE AT POWER RENDERS THE ASSOCIATED EMERGENCY CORE COOLING SYSTEM (ECCS) TRAIN (SUBSYSTEM) INOPERABLE. THE MAINTENANCE WAS COMPLETED WHILE OPERATION CONTINUED IN A DEGRADED MODE AS ALLOWED BY THE REMEDIAL ACTION OF TECH SPEC 3.6.C.2. UNLESS THE HPSI SYSTEM IS DEPRESSURIZED AND DRAINED, THE HPSI LOOP INJECTION STOP VALVES CAN ONLY BE REPACKED WHILE THEY ARE BACKSEATED. REPACKING THESE VALVES WAS NECESSARY TO LIMIT A POTENTIAL POST ACCIDENT EXPOSURE SOURCE. THIS ENSURES ENTRY INTO THE AREA AROUND THE VALVES FOR A LARGER RANGE OF SEVERE ACCIDENT CONDITIONS. THIS IS THE FIRST TIME THESE VALVES HAVE NEEDED REPACKING IN TEN YEARS OF PLANT OPERATION. EFFORTS WILL BE MADE TO REPACK THESE VALVES ON A PERIODIC BASIS DURING SCHEDULED OUTAGE PERIODS.

[272] MAINE YANKEE DOCKET 50-309 LER 83-033
RESIDUAL HEAT REMOVAL HEAT EXCHANGER COOLING WATER STOP VALVE FAILS TO OPEN.
EVENT DATE: 090683 REPORT DATE: 100683 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: WALWORTH COMPANY

(NSIC 186159) A COOLING WATER OUTLET STOP VALVE SCC-M-165, TO THE RESIDUAL HEAT REMOVAL (RHR) HEAT EXCHANGER, FAILED TO OPEN BY USE OF THE CONTROL SWITCH FROM THE MAIN CONTROL BOARD (MCB) DURING HOT MONTHLY ECCS TESTING. THE VALVE IS NORMALLY CLOSED DURING POWER OPERATIONS AND OPENS ON A RECIRCULATION ACTUATION SIGNAL (RAS) TO ALLOW SECONDARY COMPONENT COOLING FLOW THROUGH THE B TRAIN RHR HEAT EXCHANGER SUBSYSTEM. THE RHR HEAT EXCHANGER SUBSYSTEM IS REQUIRED TO BE OPERABLE AS PART OF THE B TRAIN OF THE EMERGENCY CORE COOLING SYSTEM (ECCS). SCC-M-165 WAS DECLARED OPERABLE AND RETURNED TO SERVICE WITHIN 54 HOURS. THE ENTIRE A TRAIN ECCS WAS OPERABLE DURING THE PERIOD. SIMILAR OCCURRENCES ARE 83-017, 82-018, 80-009 AND 79-006. AN INITIAL INVESTIGATION INDICATED THAT THE MOTOR OPERATOR WAS TRIPPED BY THERMAL OVERLOAD PROTECTION. THE THERMAL OVERLOAD DEVICE WAS RESET BUT TRIPPED ON A SECOND ATTEMPT TO OPEN THE VALVE. AMPERAGE READINGS PROVED THAT THE THERMAL OVERLOAD DEVICE WAS WORKING PROPERLY. THE DISK ASSEMBLY WAS MANUALLY MOVED OFF ITS SEAT AND THE VALVE THEN OPERATED PROPERLY WHEN SWITCHED FROM THE MCB. FURTHER EXAMINATION REVEALED THAT THE VALVE SEAT TORQUE SETTINGS WERE WITHIN PRESCRIBED LIMITS. THE CAUSE IS NOT YET KNOWN. IT IS THEORIZED THAT AFTER A LONG PERIOD OF INACTIVITY, THE WEDGE MAY OCCASIONALLY STICK IN THE SEATED POSITION AND FAIL TO OPEN FROM THE MCB. THE VALVE HAS BEEN OPERATED SUCCESSFULLY OVER THE PAST SEVERAL MONTHS.

[273] MCGUIRE 1 DOCKET 50-369 LER 83-048
THERMOSTAT FOR CONTROL AREA VENTILATION SYSTEM SET TOO LOW.
EVENT DATE: 062483 REPORT DATE: 072783 NSSS: WE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 184597) WHILE IN MODE 1 (UNIT 1) AND MODE 5 (UNIT 2), CONTROL AREA VENTILATION SYSTEM (VC) TRAIN B WAS DECLARED INOPERABLE FOLLOWING A LOW REFRIGERANT TEMPERATURE ALARM TRIP OF CONTROL ROOM CHILLER B. THIS VIOLATES TECH SPEC 3.7.6 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO-369/81-44. BECAUSE OF REDUNDANT TRAINS, THE LOSS OF TRAIN B DID NOT COMPROMISE THE ABILITY OF THE VC SYSTEM TO MAINTAIN THE CONTROL ROOM OR CONTROL ROOM AREA AT PERMISSIBLE TEMPERATURES. THE CHILLED WATER THERMOSTAT HAD BEEN ADJUSTED LOWER TO OFFSET THE ACCUMULATION OF FOULING IN THE CONDENSER OVER A PERIOD OF YEARS. DUE TO AN INCREASE IN CONDENSER BACKPRESSURE THE CONDENSER TUBES WERE CLEANED. AFTER THIS WAS DONE THE INCREASED HEAT TRANSFER CAUSED THE REFRIGERANT LOW TEMPERATURE CUTOFF SWITCH TO TRIP. THE CUTOFF SWITCH WAS RESET,

AND A PROCEDURE CHANGE WILL INCLUDE A STEP TO EVALUATE THE NECESSITY OF ADJUSTING THE THERMOSTAT FOLLOWING MAINTENANCE.

[274] MCGUIRE 1 DOCKET 50-369 LER 83-050
ONE CONTROL AREA VENTILATION SYSTEM TRAIN DECLARED INOPERABLE.
EVENT DATE: 062983 REPORT DATE: 072983 NSSS: WE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 184599) WHILE IN MODE 1, CONTROL AREA VENTILATION SYSTEM (VC) TRAIN B WAS DECLARED INOPERABLE DUE TO AN AUTOMATIC RESET PREHEATER OVERTEMPERATURE CUTOFF SWITCH FAILURE IN OUTSIDE AIR PRESSURE FILTER TRAIN B. THIS VIOLATES TECH SPEC 3.7.6 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(B). CONSTANT FILTER PACKAGE OPERATION WITHOUT PREHEATERS FOR THE MAXIMUM TIME SPAN SINCE THE LAST PREHEATER OPERABILITY TEST (1 WEEK) WOULD NOT APPRECIABLY "WEATHER" OR DETERIORATE THE CARBON ABSORBER. REDUNDANT VC TRAIN A WAS OPERABLE DURING THIS TIME. ONE OF THE 5 OVERTEMPERATURE CUTOFF SWITCHES (DIATEMP MODEL 106Y, CAT. 25020) WAS OPEN, HAVING FAILED TO RESET (WITH THE FANS OFF, THE HEATERS CONTINUED TO RADIATE HEAT AND MAY HAVE EXCEEDED THE TEMP. SETPOINT). THE FAILED CUTOFF SWITCH WAS JUMPED OUT, AND THE TRAIN DECLARED OPERABLE. A REPLACEMENT SWITCH IS BEING OBTAINED AND WILL BE INSTALLED. FURTHER MODIFICATIONS PLANNED INCLUDE DELETION OF THE MANUAL RESET SWITCHES FOR BOTH OAPFTS IN RESPONSE TO NRC INFO. NOTICE 83-25.

[275] MCGUIRE 1 DOCKET 50-369 LER 83-078
FIRE DETECTION ZONE HAS FALSE ALARM.
EVENT DATE: 090683 REPORT DATE: 100683 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: HONEYWELL CORP.

(NSIC 186201) WHILE IN MODE 3, AN INVALID FIRE ALARM ON FIRE DETECTION ZONE EPA-152 WAS RECEIVED IN THE CONTROL ROOM WHICH WOULD NOT RESET. EPA-152 WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE FIRE DETECTION INSTRUMENTATION (TECH SPEC 3.3.3.7) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO'S 369/83-40, 83-52, 83-64, 83-66, AND 370/83-13, 83-24, 83-30, 83-37. HOURLY CONTAINMENT TEMPERATURE MONITORING WAS INITIATED DURING THE TIME THE ZONE WAS INOPERABLE IN ACCORDANCE WITH THE TECH SPEC ACTION STATEMENTS. IT COULD NOT BE DETERMINED WHAT CAUSED THE ALARM. EPA-152 PROVIDES PROTECTION FOR THE AREA IN CONTAINMENT NEAR THE B PURGE FILTER BED. IT APPEARS THAT SOMETHING IN THE AREA MAY HAVE CAUSED ONE OR MORE OF THE IONIZATION FIRE DETECTORS TO ACTUATE. THE ALARM WAS RESET THE NEXT DAY WITH THE UNIT AT POWER (NO MAINTENANCE WORK WAS PERFORMED), AND THE ZONE DECLARED OPERABLE.

[276] MCGUIRE 1 DOCKET 50-369 LER 83-084
CONTAINMENT SPRAY SYSTEM DECLARED INOPERABLE.
EVENT DATE: 092983 REPORT DATE: 101483 NSSS: WE TYPE: PWR
SYSTEM: OTHER SYSTEMS COMPONENT: OTHER COMPONENTS

(NSIC 186466) ON 9/28/83 CONTAINMENT SPRAY SYSTEM (NS) TRAIN "B" WAS DECLARED INOPERABLE DUE TO A LOSS OF POWER INDICATION TO THE CONTAINMENT PRESSURE CONTROL SYSTEM (CPCS) PRESSURE TRANSMITTER. ON 9/29/83 (WITH NS TRAIN B STILL OUT) NUCLEAR SERVICE WATER (RN) TRAIN A WAS DECLARED INOPERABLE DUE TO WATER IN THE OIL RESERVOIR OF RN PUMP 1A. THESE CONSTITUTE DEGRADED MODES PER TECH SPEC 3.6.2 AND 3.7.4. SINCE RN IS REQUIRED FOR NS OPERABILITY, BOTH NS TRAINS WERE INOPERABLE. THIS IS REPORTABLE PER TECH SPEC 6.9.1.10(B). ALTHOUGH STILL CAPABLE OF LIMITED OPERATION, THE NS SYSTEM WAS NOT REQUIRED DURING THIS INCIDENT. THE POWER SUPPLY FOR THE CONTAINMENT PRESSURE CONTROL SYSTEM FAILED AND WAS SUBSEQUENTLY REPLACED. THE DRAIN LINE FOR RN PUMP 1A SEAL CATCH BASIN WAS CLOGGED, ALLOWING WATER TO BACK UP AND ENTER THE OUTBOARD BEARING. THE OIL RESERVOIR WAS REFILLED. THE FAILURE TO IDENTIFY THE IMPACT OF RN TRAIN A ON NS

TRAIN A'S OPERABILITY IS ATTRIBUTED TO PERSONNEL ERROR. APPROPRIATE PERSONNEL WERE COUNSELED AND TECH SPEC REFERENCE MANUAL REVISED.

[277] MCGUIRE 1 DOCKET 50-369 LER 83-105
 SUBCOOLING MARGIN MONITOR FAILURE.
 EVENT DATE: 101883 REPORT DATE: 111783 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187433) WHILE IN MODE 1, THE REACTOR COOLANT SYSTEM SUBCOOLING MARGIN MONITOR WAS DECLARED INOPERABLE PER TECH SPEC 3.3.3.6. WHEN THE SUBCOOLING MARGIN WAS INCORRECT DUE TO THE FAILURE OF THE THERMAL OUTPUTS COMPUTER PROGRAM WHICH IS USED TO CALCULATE THE SUBCOOLING MARGIN AND REACTOR THERMAL POWER. THIS IS REPORTABLE PER TECH SPEC 6.9.1.11(B). THIS MONITOR IS PART OF THE POST ACCIDENT MONITORING INSTRUMENTATION. FAILURE OF THIS CAUSED INVALID INDICATIONS TO BE DISPLAYED; HOWEVER, MANUAL CALCULATIONS WERE MADE HOURLY. THE SUSPECTED CAUSE OF INOPERABILITY WAS AN ERROR IN THE THERMAL OUTPUTS COMPUTER PROGRAM WHICH CAUSED THE PROGRAM TO STOP. OPERATORS IDENTIFIED THE PROBLEM DURING A POWER REDUCTION. INSTRUMENTATION TECHNICIANS RESTARTED THE PROGRAM. THE SUSPECTED PROGRAM ERROR WAS CORRECTED. AS A CHECK ON THIS CORRECTIVE ACTION, LOGIC CONDITIONS HAVE BEEN SET UP TO STOP THE COMPUTER IN THE EVENT THE TRUE PROBLEM WAS NOT IDENTIFIED AND CORRECTED.

[278] MCGUIRE 1 DOCKET 50-369 LER 83-108
 SOLID STATE PROTECTION SYSTEM LOGIC CARD FAILS.
 EVENT DATE: 110383 REPORT DATE: 120283 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187817) WHILE IN MODE 1, DURING PERIODIC TESTING OF THE SOLID STATE PROTECTION SYSTEM TRAIN "A", A BAD UNIVERSAL LOGIC CARD WAS FOUND WHICH WOULD NOT HAVE PROVIDED FEEDWATER ISOLATION OF A LOW T(AVE) SIGNAL AFTER A REACTOR TRIP (FROM TRAIN A). THIS CONSTITUTES A DEGRADATION OF THE REACTOR TRIP SYSTEM INSTRUMENTATION (TECH SPEC 3.3.1) AND ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (TECH SPEC 3.3.2) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.11(B). THE TRAIN B LOGIC CIRCUITRY WAS SATISFACTORILY TESTED AND WOULD HAVE BEEN CAPABLE OF PROVIDING FEEDWATER ISOLATION IF REQUIRED. THIS IS ATTRIBUTED TO COMPONENT FAILURE DUE TO A FAILED TWO-OUT-OF-FOUR LOGIC CIRCUIT FOUND ON A UNIVERSAL LOGIC CARD. THE UNIVERSAL LOGIC CARD WAS REPLACED, SSPS TRAIN A SATISFACTORILY TESTED AND DECLARED OPERABLE. TROUBLESHOOTING, REPAIR, AND TESTING EXCEEDED THE TWO HOUR LIMIT THAT TECH SPEC ACTION STATEMENTS PERMIT FOR 1 TRAIN TO BE BYPASSED, THEREFORE LOAD REDUCTION WAS COMMENCED UNTIL TRAIN A WAS DECLARED OPERABLE (1 HOUR LATER AT 93% POWER).

[279] MCGUIRE 1 DOCKET 50-369 LER 83-107
 CONTAINMENT INTEGRITY VIOLATED.
 EVENT DATE: 111183 REPORT DATE: 112383 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN

(NSIC 187435) WHILE IN MODE 1, INSTRUMENTATION AND ELECTRICAL TECHNICIANS ATTEMPTING TO REPAIR LOWER PERSONNEL AIR LOCK (PAL) DOOR PINS INADVERTENTLY DEFLATED THE DOOR SEALS ON THE REACTOR BUILDING SIDE DOOR WHILE THE AUXILIARY BUILDING SIDE DOOR WAS OPEN. (ANNULUS DOOR WAS CLOSED.) THIS VIOLATES TECH SPEC 3.6.1.3 AND IS REPORTABLE PER TECH SPEC 6.9.1.10.(B). RECENT CHANGES ON THE PAL'S ALLOW SEAL DEFLATION IF INTERLOCKING DEVICES CHANGE STATE AFTER THE DOORS ARE CLOSED. THIS CHANGE REQUIRES POWER REMOVAL PRIOR TO WORK ON CLOSED DOORS; HOWEVER, THE TECHNICIANS WERE UNAWARE OF THIS. THIS INCIDENT OCCURRED DUE TO A PROCEDURAL DEFICIENCY. WHEN THE TECHNICIAN REALIZED CONTAINMENT INTEGRITY HAD BEEN LOST, HE LEFT THE PAL AND CLOSED AND SEALED THE OUTER DOOR, REESTABLISHING

INTEGRITY. THE LOSS OF CONTAMINATED AIR FROM CONTAINMENT WAS INSIGNIFICANT. A PROCEDURAL STEP WAS ADDED TO REQUIRE ONE PAL DOOR TO BE SEALED BY REMOVING POWER WHEN WORK IS DONE ON THE OTHER DOOR WITH THE UNIT ABOVE MODE 5.

[280] MCGUIRE 2 DOCKET 50-370 LER 83-008
UPPER AND LOWER PERSONNEL AIRLOCKS INOPERABLE.
EVENT DATE: 041883 REPORT DATE: 060383 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN

(NSIC 183389) THE UPPER PERSONNEL AIRLOCK (PAL) WAS DECLARED INOPERABLE UPON DISCOVERY OF A BLOWN INNER (LARGE) SEAL ON THE AUXILIARY BUILDING DOOR. THE LOWER PAL WAS DECLARED INOPERABLE WHEN THE OUTER (SMALL) SEAL ON THE AUXILIARY BUILDING DOOR WAS DISCOVERED RUPTURED (CONTAINMENT INTEGRITY WAS ALSO VIOLATED FOR APPROXIMATELY 1 MINUTE DUE TO DOOR BEING OPENED WITH OTHER DOOR AJAR). THIS VIOLATES TECH SPEC 3.6.1.3 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(D) AND SIMILAR TO RO'S 369/82-81 AND 82-74. NO ACTIVITY WAS PRESENT IN CONTAINMENT, AND CONTAINMENT INTEGRITY WAS QUICKLY RESTORED. THESE INCIDENTS ARE ATTRIBUTED TO DESIGN DEFICIENCY, DUE TO THE APPLICATION OF A WIDE DEAD-BAND UNIT SWITCH TO SENSE THE POSITION OF THE HYDRAULICALLY-DRIVEN PAL DOORS (ALLOWING SEAL INFLATION WITH DOORS NOT COMPLETELY CLOSED). THE SEALS (SEALMASTER CORP. AND PRESRAY CORP.) WERE REPLACED, THE PALS TESTED AND DECLARED OPERABLE. MODIFICATIONS WILL BE PERFORMED DURING THE JUNE 1983 OUTAGE TO CORRECT DESIGN DEFICIENCIES.

[281] MCGUIRE 2 DOCKET 50-370 LER 83-045
CONTAINMENT SUMP LEVEL RECORDER READS HIGH.
EVENT DATE: 090783 REPORT DATE: 100783 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: PARKER HANNIFIN CORP.
ITT-BARTON

(NSIC 186202) WHILE IN MODE 1, DURING PERFORMANCE OF THE MONTHLY MAIN CONTROL BOARD INSTRUMENTATION CHECKLIST, IT WAS NOTICED THAT CONTAINMENT SUMP LEVEL WIDE RANGE CHANNEL B INCORRECTLY INDICATED 2 FEET OF WATER IN THE CONTAINMENT SUMP (CHANNEL A INDICATED ZERO FEET). CHANNEL B WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF ACCIDENT MONITORING INSTRUMENTATION (TECH SPEC 3.3.3.6) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO-369/82-55. DURING THE TIME CHANNEL B WAS INOPERABLE, REDUNDANT CHANNEL A WAS OPERABLE. THE LOW SIDE HOUSING BELLOWS ON THE LEVEL TRANSMITTER (I.T.T. BARTON MODEL 386A) WAS INSTALLED WITH PARKER HANNIFIN COMPRESSION TUBING FITTINGS, PERMITTING POSSIBLE LEAKS. THE LOW SIDE CAPILLARY HAD AN INSUFFICIENT FILL OF FLUID, PREVENTING SATISFACTORY CALIBRATION. THE LOW PRESSURE SENSOR BELLOWS AND DIFFERENTIAL PRESSURE UNIT HOUSING WERE REPLACED AND THE CHANNEL TESTED AND DECLARED OPERABLE. THE PRESENT SYSTEM WILL BE CHANGED TO A NON-FILLED SYSTEM.

[282] MCGUIRE 2 DOCKET 50-370 LER 83-049
STEAMLINE RADIATION MONITOR DECLARED INOPERABLE.
EVENT DATE: 091683 REPORT DATE: 101483 NSSS: WE TYPE: PWR
SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: TGM DETECTORS, INC.

(NSIC 186203) WHILE IN MODE 1, INVESTIGATION OF A "CABINET TROUBLE" ALARM REVEALED THAT THE "OPERATE" LIGHT FOR STEAM LINE 2A RADIATION MONITOR 2EMP-10 (STEAM RELIEF-HIGH RANGE) HAD GONE OUT AND COULD NOT BE RESTORED. THE RADIATION MONITOR WAS THUS DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF ACCIDENT MONITORING INSTRUMENTATION (TECH SPEC 3.3.3.6) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO'S 370/83-16 AND 369/83-79. HAD A RELEASE FROM A RELIEF VALVE FOR STEAM GENERATOR 2A OCCURRED DURING THE TIME THAT 2EMP-10 WAS INOPERABLE OTHER MONITORS WOULD HAVE DETECTED ACTIVITY IN THE SECONDARY

SYSTEM. THIS INCIDENT IS ATTRIBUTED TO COMPONENT FAILURE DUE TO THE FAILURE OF THE GEIGER-MUELLER (GM) DETECTOR TUBE IN THE MONITOR (IT WOULD NOT RESPOND TO THE CHECK SOURCE). THE GM TUBE (TGM MODEL N115-S) WAS REPLACED, AND THE EMF CHECKED FOR OPERABILITY. THE MONITOR WAS RETURNED TO SERVICE WITHIN THE 48 HOUR TIME PERIOD REQUIRED BY THE TECH SPEC ACTION STATEMENT.

[283] MCGUIRE 2 DOCKET 50-370 LER 83-068
PRESSURIZER LEVEL CHANNEL DECLARED INOPERABLE.
EVENT DATE: 102583 REPORT DATE: 112383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187434) WHILE IN MODE 1, PRESSURIZER LEVEL INSTRUMENTATION CHANNEL II WAS DECLARED INOPERABLE WHEN IT EXCEEDED THE MAXIMUM ALLOWED TOLERANCE OF 4%. THIS VIOLATES TECH SPEC 3.3.1 WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11.(A). THE LOOP WAS PLACED IN THE "TRIP" CONDITION PER TECH SPEC ACTION STATEMENT. THIS INCIDENT WAS IN THE CONSERVATIVE DIRECTION BY PLACING CHANNEL II IN THE "TRIP" CONDITION (GIVING A ONE-OUT-OF-TWO TRIP LOGIC). THE CAUSE OF THIS INCIDENT IS COMPONENT FAILURE. THE PARKER HANNIFIN COMPRESSION FITTINGS ON THE INSTRUMENT IMPULSE LINES WERE LEAKING. THE LEAKS WERE REPAIRED BY TIGHTENING THE FITTINGS ON THE IMPULSE LINES. PRESSURIZER LEVEL INSTRUMENT CHANNEL II WAS DECLARED OPERABLE.

[284] MCGUIRE 2 DOCKET 50-370 LER 83-069
ICE CONDENSER DOOR POSITION ALARM FAILS.
EVENT DATE: 102583 REPORT DATE: 120983 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: ANNUNCIATOR MODULES
VENDOR: BETA CORP.

(NSIC 187865) WHILE IN MODE 1, DURING PERFORMANCE OF A ROUTINE TEST OF THE CONTROL BOARD ANNUNCIATORS, ANNUNCIATOR A-5 (ICE CONDENSER LOWER INLET DOOR OPEN) FAILED TO ALARM AND WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTED A DEGRADATION OF THE ICE CONDENSER INLET DOOR POSITION MONITORING SYSTEM (TECH SPEC 3.6.5.4) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(D). WHILE THE CONTROL ROOM ALARM WAS INOPERABLE THE ICE BED TEMPERATURE WAS MONITORED AND MAINTAINED BELOW 27 F PER TECH SPEC ACTION STATEMENTS. ADDITIONALLY, THE LOCAL "DOOR OPEN" ALARMS WERE OPERABLE. THIS IS ATTRIBUTED TO COMPONENT FAILURE. TROUBLESHOOTING IDENTIFIED A FAILED LOGIC CARD IN THE ANNUNCIATOR CIRCUIT. FAILURES OF ANNUNCIATOR LOGIC CARDS OCCUR OCCASIONALLY BUT ARE NOT CONSIDERED ATTRIBUTAL TO GENERIC PROBLEMS. THE FAILED CARD (BETA PRODUCTS, #304328) WAS REPLACED, THE ANNUNCIATOR TESTED AND DECLARED OPERABLE.

[285] MCGUIRE 2 DOCKET 50-370 LER 83-071
SETPPOINT DRIFT OF MAIN STEAM SAFETY RELIEF VALVE.
EVENT DATE: 102683 REPORT DATE: 120983 NSSS: WE TYPE: PWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: VALVES
VENDOR: CORSEY VALVE & GAGE CO.

(NSIC 187882) WHILE IN MODE 3, DURING A POST-TRIP REVIEW, ALARM TYPER AND TRANSIENT MONITOR PRINTOUTS INDICATED THAT DURING THE REACTOR TRIP TRANSIENT MAIN STEAM CODE SAFETY RELIEF VALVE 2SV-8 LIFTED AT 1194 PSIG (REQUIRED LIFT SETPOINT IS 1170 PSIG + OR - 1%). THE VALVE WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE TURBINE CYCLE SAFETY VALVES (TECH SPEC 3.7.1.1) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.11(B) AND SIMILAR TO RO'S 369/83-37 AND 370/83-12. THERE WERE STILL 4 OPERABLE CODE SAFETY VALVES, AND 2SV-8 WAS FUNCTIONALLY CAPABLE OF RELIEVING PRESSURE. THIS IS ATTRIBUTED TO COMPONENT MALFUNCTION DUE TO DRIFT OF THE VALVE'S (CROSBY NOZZLE TYPE C SAFETY VALVE, STYLE HA-65W) SETPOINT FROM ITS ORIGINAL SETTING OF 1163 PSIG. MINOR SETPOINT DRIFT HAS OCCURRED PREVIOUSLY ON VALVES OF THIS TYPE (POSSIBLY DUE TO

HEAT AND VIBRATION). THE POWER RANGE NEUTRON FLUX HIGH TRIP SETPOINT WAS ADJUSTED PER THE TECH SPEC ACTION STATEMENT. THE RELIEF SETPOINT WAS ADJUSTED AND THE VALVE DECLARED OPERABLE.

[286] MCGUIRE 2 DOCKET 50-370 LER 83-075
CONTAINMENT PURGE VALVE LEAKS.
EVENT DATE: 102783 REPORT DATE: 112883 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: VALVES
VENDOR: FISHER FLOW CONTROL DIV (ROCKWELL INT)

(NSIC 187753) WHILE IN MODE 5, DURING PERFORMANCE OF ISOLATION VALVE LEAK RATE TESTING, MECHANICAL PENETRATION M456 (CONTAINMENT PURGE VALVES 2VP-8 AND 9) FAILED TO MEET THE LEAKAGE CRITERIA OF TECH SPEC 4.6.1.9.3. ALTHOUGH IDENTIFIED WHILE IN MODE 5, THIS CONDITION MAY HAVE EXISTED DURING OPERATION IN HIGHER MODES. THIS CONSTITUTES A DEGRADATION OF THE CONTAINMENT VENTILATION SYSTEM (TECH SPEC 3.6.1.9) WHICH IS REPORTABLE PURSUANT TO TECH SPEC 3.6.1.9 AND SIMILAR TO RO-370/83-43. REDUNDANT ISOLATION VALVE 2VP-9'S SEAL WAS UNCOMPROMISED. THIS IS ATTRIBUTED TO DESIGN DEFICIENCY DUE TO THE POOR SEALING CHARACTERISTICS OF THE TWO BUTTERFLY VALVES INSTALLED IN THE PENETRATION. A LEAKAGE PATH WAS FOUND IN 2VP-8 (FISHER TYPE 9220. 24" BUTTERFLY) ALONG THE CIRCUMFERENCE OF THE BUTTERFLY DISC, POSSIBLY AS A RESULT OF HEAT CYCLING. THIS CRACK WAS CLOSED BY ADJUSTING THE T-RING AND TAPPING THE BUTTERFLY DISC - ENHANCING THE "MATING" OF THE SEALS. THE PENETRATION WAS THEN RETESTED SATISFACTORILY.

[287] MCGUIRE 2 DOCKET 50-370 LER 83-076
UPPER HEAD INJECTION LEVEL SWITCH FOUND OUT OF TOLERANCE.
EVENT DATE: 103183 REPORT DATE: 113083 NSSS: WE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 187620) WHILE IN MODE 5, CALIBRATIONS PERFORMED ON 10/31/83 REVEALED THAT 1 OF THE 4 UHI LEVEL SWITCH'S SETPOINTS WAS OUT OF TOLERANCE (69.94 INCHES) (SWITCH ASSUMED TO HAVE BEEN OUT OF TOLERANCE DURING POWER OPERATION). THIS CONSTITUTES A DEGRADATION OF THE UPPER HEAD INJECTION SYSTEM (TECH SPEC 3.5.1.2) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(A) AND SIMILAR TO RO'S 369/82-38, 83-13, 83-67, AND 370/83-35. THE UHI WATER VOLUME UNCERTAINTY ANALYSIS ASSUMES ONE VALVE FAILS TO CLOSE. THE UHI SYSTEM WOULD THEREFORE HAVE FUNCTIONED WITHIN THE LIMITS OF THE SAFETY ANALYSIS. THIS IS ATTRIBUTED TO DESIGN DEFICIENCY, SINCE THERE IS EVIDENCE INDICATING THAT THE SWITCHES (BARTON MODEL 288A DIFFERENTIAL PRESSURE INDICATING SWITCHES) ARE NOT CAPABLE OF CONSISTENTLY ACTUATING WITHIN THE REQUIRED TOLERANCE. THE SWITCH WAS RECALIBRATED. INCREASED CALIBRATION FREQUENCY WILL BE MAINTAINED UNTIL A MODIFICATION TO REPLACE THE SWITCHES WITH TRANSMITTERS IS IMPLEMENTED (UNIT 2: 12/83 OUTAGE; UNIT 1: 2/84 REFUELING OUTAGE).

[288] MCGUIRE 2 DOCKET 50-370 LER 83-077
AUXILIARY BUILDING EXHAUST FAN FAILS.
EVENT DATE: 110983 REPORT DATE: 120983 NSSS: WE TYPE: PWR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: MOTORS
VENDOR: RELIANCE ELECTRIC & ENGINEERING

(NSIC 187866) WHILE IN MODE 1, THE FEEDER BREAKER TO UNIT 2 AUXILIARY BUILDING FILTERED EXHAUST FAN A TRIPPED OPEN AND COULD NOT BE MAINTAINED CLOSED. THE EXHAUST FAN WAS SUBSEQUENTLY DECLARED INOPERABLE. THIS CONSTITUTES A DEGRADATION OF THE AUXILIARY BUILDING FILTERED VENTILATION EXHAUST SYSTEM (TECH SPEC 3.7.7) WHICH IS REPORTABLE PER TECH SPEC 6.9.1.11(D). HAD A LOCA OCCURRED WHILE THE FAN WAS INOPERABLE, RADIOACTIVE MATERIAL IN THE AUX. BUILDING AIR WOULD HAVE BEEN REMOVED (ALTHOUGH AT A DECREASED RATE) AND THE AUX. BUILDING NEGATIVE PRESSURE

MAINTAINED. THIS IS ATTRIBUTED TO COMPONENT FAILURE BECAUSE THE FAN MOTOR WINDINGS WERE SHORTED TO GROUND. WINDING FAILURES OF THIS MOTOR (RELIANCE 40 HP) ARE NOT CONSIDERED TO BE GENERIC IN NATURE. A NEW MOTOR WAS INSTALLED, THE FAN SATISFACTORILY RETESTED PER THE "AUXILIARY BUILDING FILTERED EXHAUST SYSTEM OPERABILITY" TEST, AND THE EXHAUST SYSTEM DECLARED OPERABLE.

[289] MILLSTONE 1 DOCKET 50-245 LER 83-022
TIME DELAY RELAY EXCEEDS TRIP LIMIT.
EVENT DATE: 060383 REPORT DATE: 070183 NSSS: GE TYPE: BWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: RELAYS
VENDOR: AGASTAT RELAY CO.

(NSIC 184080) ON JUNE 3, 1983, AT 0945 HOURS, WHILE PERFORMING TURBINE CONTROL VALVE FAST CLOSURE FUNCTIONAL AND CALIBRATION TEST, TIME DELAY RELAY 590-125D, WHICH BYPASSES THE TURBINE CONTROL VALVE FAST CLOSURE SCRAM TRIP, TRIPPED AT 262 MILLISECONDS. TECH SPEC TABLE 3.1.1 REQUIRES AUTOMATIC BYPASS OF A SCRAM TRIP FOR A MAXIMUM OF 260 MILLISECONDS FOLLOWING INITIATION OF A LOAD REJECTION. THERE WERE NO CONSEQUENCES. SIMILAR OCCURRENCES: 82-31/3L, 83-15/3L, 83-11/3L, 81-30/3L, 78-19/3L, 78-3/1T. INVESTIGATION REVEALED THE TOLERANCE ESTABLISHED ON THE SURVEILLANCE DATA SHEETS WAS LESS THAN THE SETPOINT ACCURACY OF THE RELAYS. THIS PREVENTED THE RELAY FROM MAINTAINING A SETPOINT OF LESS THAN OR EQUAL TO 260 MILLISECONDS. THE TOLERANCE BAND ESTABLISHED ON THE SURVEILLANCE DATA SHEETS WAS INCREASED TO WITHIN THE MANUFACTURER'S SPECIFICATIONS. THE SETPOINTS WERE ALSO DECREASED.

[290] MILLSTONE 1 DOCKET 50-245 LER 83-030
STEAM LINE ISOLATION VALVE PACKING LEAKS.
EVENT DATE: 081683 REPORT DATE: 120183 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: VALVES

(NSIC 187718) ON AUG. 16, 1983, AT 1700 HOURS, PRIMARY CONTAINMENT MAIN STEAM LINE DRAIN VALVE, 1-MS-6, WAS OPENED AND BACKSEATED IN ORDER TO STOP A STEM PACKING LEAK. THE BREAKER WAS IMMEDIATELY TAGGED OPENED AND THE VALVE DECLARED INOPERABLE. ADDITIONALLY, UPSTREAM PRIMARY CONTAINMENT REDUNDANT ISOLATION VALVE WAS VERIFIED CLOSED PER TECH SPEC 3.7.D.2. TECH SPEC 3.7.1 REQUIRES PRIMARY CONTAINMENT MAIN STEAM LINE DRAIN VALVE, 1-MS-6, TO BE OPERABLE DURING REACTOR POWER OPERATION. THE VALVE WAS DECLARED INOPERABLE DUE TO A STEM PACKING LEAK THAT GREW PROGRESSIVELY WORSE AS STEAM DEGRADED THE STEM AND BONNET OF THE VALVE. THE VALVE WAS IMMEDIATELY OPENED AND BACKSEATED TO TEMPORARILY TERMINATE STEAM LEAKAGE. THE VALVE WAS REPACKED AND RETESTED NOV. 27, 1983.

[291] MILLSTONE 1 DOCKET 50-245 LER 83-027
SETPOINT DRIFT OF ISOLATION CONDENSER PRESSURE INSTRUMENT.
EVENT DATE: 082983 REPORT DATE: 092883 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 186134) ON AUGUST 29, 1983, AT 1515 HOURS AND ON SEPTEMBER 26, 1983 AT 0930 HOURS, WHILE PERFORMING ISOLATION CONDENSER PRESSURE ACTUATION INSTRUMENT FUNCTIONAL CALIBRATION, TIME DELAY RELAY 595-117A TRIPPED AT 16 SECONDS AND 15.3 SECONDS RESPECTIVELY. TECH SPEC, TABLE 3.2.2 REQUIRES THE ISOLATION CONDENSER PRESSURE ACTUATION TIME DELAY RELAY (TIMER) SETPOINT BE LESS THAN OR EQUAL TO 15 SECONDS. THERE WERE NO CONSEQUENCES. SIMILAR OCCURRENCE: 81-12/EL. FAILURE OF THE TIME DELAY RELAY TO TRIP AT ITS DESIRED SETPOINT ON BOTH OCCURRENCES IS ATTRIBUTABLE TO INSTRUMENT DRIFT. THE TIME DELAY RELAY WAS RESET TO ITS DESIRED SETPOINT AND SATISFACTORILY TESTED ON BOTH OCCURRENCES.

[292] MILLSTONE 1 DOCKET 50-245 LER 83-029
 SET POINT DRIFT OF DRYWELL PRESSURE SWITCHES.
 EVENT DATE: 110883 REPORT DATE: 112283 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 187378) ON NOVEMBER 8, 1983, AT 1500 HOURS, WHILE PERFORMING DRYWELL HIGH PRESSURE FUNCTIONAL AND CALIBRATION TEST, HIGH DRYWELL PRESSURE SWITCHES 1620B AND 1620C TRIPPED AT 2.07 AND 2.02 PSIG RESPECTIVELY. THIS RESULTED IN BOTH CHANNELS BEING DECLARED INOPERABLE. TECH SPEC 3.1 REQUIRES A HIGH DRYWELL PRESSURE TRIP LEVEL SETTING OF LESS THAN OR EQUAL TO 2 PSIG. THERE WERE NO CONSEQUENCES. SIMILAR OCCURRENCES: 78-24/3L. TESTING PERFORMED ON THE MICRO-SWITCHES FOR 1620B AND 1620C INDICATED AN UNUSUALLY HIGH RESISTANCE ACROSS THE CONTACTS. THIS RESISTANCE COULD RESULT IN SETPOINT DRIFT AND A SUBSEQUENT OUT OF CALIBRATION CONDITION. THE SWITCHES WERE RESET TO THEIR REQUIRED SETPOINT AND SATISFACTORILY TESTED. THE MICRO-SWITCHES WILL BE REPLACED WHEN SPARES BECOME AVAILABLE.

[293] MILLSTONE 2 DOCKET 50-336 LER 82-037 REV 1
 UPDATE ON RHR BLOCK VALVE FAILURE.
 EVENT DATE: 090282 REPORT DATE: 061783 NSSS: CE TYPE: PWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: VALVE OPERATORS
 VENDOR: LIMITORQUE CORP.
 VELAN VALVE CORP.

(NSIC 184749) WITH THE PLANT AT 100% POWER, A QUARTERLY SURVEILLANCE TEST REVEALED THAT BLOCKING VALVE 2-RC-403 WOULD NOT CLOSE. THE PLANT OPERATED IN ACCORDANCE WITH TECH SPEC ACTION STATEMENT 3.4.3.B. THE VALVE CLOSED WHEN THE TORQUE SWITCH ON THE MOTOR OPERATOR WAS OVERRIDDEN. THE VALVE WAS LEFT IN THE CLOSED POSITION WITH POWER REMOVED. SIMILAR EVENTS 81-40 1/5/82. THE CAUSE REMAINED UNKNOWN UNTIL COLD SHUTDOWN IN MARCH 1983. THE LIMITORQUE TYPE SMBOOO TORQUE SWITCH WAS FOUND TO BE OUT OF ADJUSTMENT. THE SWITCH WAS READJUSTED AND TIGHTENED. TO ENSURE THERE WAS NO ADDITIONAL CAUSE, A STROKE TEST WAS COMPLETED IN HOT STANDBY WITH THE VALVE AT OPERATIONAL TEMPERATURE AND PRESSURE. SMOOTH OPERATION OPEN AND CLOSED RESULTED, WITH NO EXCESSIVE MOTOR OPERATING CURRENT REQUIRED.

[294] MILLSTONE 2 DOCKET 50-336 LER 83-006
 ONLY ONE HPSI PUMP OPERABLE.
 EVENT DATE: 021983 REPORT DATE: 032183 NSSS: CE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PUMPS
 VENDOR: INGERSON-RAND CO.

(NSIC 183124) WHILE IN MODE 3, HOT STANDBY CONDITIONS, ONLY ONE HPSI PUMP WAS OPERABLE. A SECOND PUMP (A HPSI) WAS ALSO AVAILABLE AND HAD COMPLETED ALL SURVEILLANCES REQUIRED TO DEMONSTRATE OPERABILITY EXCEPT THE BALANCED FLOW TEST, WHICH WILL BE DONE AT THE NEXT REFUELING SHUTDOWN. THE PLANT OPERATED IN ACCORDANCE WITH TECH SPEC 3.5.2.A FOR 10 HOURS. SIMILAR LER'S: 82-052/03L-0. THE C SERVICE WATER PUMP WAS SHUTDOWN IN ORDER TO REPAIR A LEAK ON THE C STRAINER. TO MAINTAIN TWO SERVICE WATER PUMPS POWERED FROM SEPARATE EMERGENCY BUSES, THE SWING BUS, POWERING THE B HPSI AND SERVICE WATER PUMPS WAS LINED UP TO THE FACILITY II EMERGENCY BUS. THE FACILITY I EMERGENCY BUS POWERED THE A HPSI AND SERVICE WATER PUMPS. THE C SERVICE WATER STRAINER WAS REPAIRED AND THE C SERVICE WATER PUMP WAS RETURNED TO SERVICE.

[295] MILLSTONE 2 DOCKET 50-336 LER 83-019
 HIGH IODINE CONCENTRATION IN REACTOR COOLANT SYSTEM.
 EVENT DATE: 052883 REPORT DATE: 061883 NSSS: CE TYPE: PWR
 SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 183661) FOLLOWING A REACTOR TRIP FROM 40% POWER ON 28 MAY 1983, SURVEILLANCE TESTING INDICATED AN ACTIVITY OF >1.0 MICROCURIES PER GRAM DOSE EQUIVALENT IODINE - 131 (D.E. I-131) IN THE PRIMARY COOLANT. FOR APPROXIMATELY 24 HOURS, THE ACTIVITY WAS ABOVE THE LIMITS OUTLINED IN TECH SPEC 3.4.8.A, 1.0 MICROCURIES PER GRAM D.E. I-131. PREVIOUS SIMILAR LER'S 82-19, 82-28, 82-38, 82-50 AND 83-03. THE HIGHER THAN ALLOWABLE IODINE CONCENTRATION IS BELIEVED TO BE CAUSED BY A SMALL NUMBER OF DEGRADED FUEL PINS. DURING THE UPCOMING REFUELING OUTAGE, IT IS PLANNED TO SIP THE ENTIRE CORE AND ATTEMPT TO LOCATE AND REMOVE THE DEGRADED FUEL BEFORE START UP OF THE NEXT OPERATING CYCLE.

[296] MILLSTONE 2 DOCKET 50 336 LER 83 003E
 UNMONITORED LIQUID DISCHARGE OCCURS.
 EVENT DATE: 081783 REPORT DATE: 082683 NSSS: CE TYPE: PWR
 SYSTEM: PRCSS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187683) RADIATION MONITOR RECORDER FAILED. DURING REFUELING A LIQUID DISCHARGE FROM THE AERATED WASTE MONITOR TANK WAS MADE. DURING THE DISCHARGE, RADIATION MONITOR RECORDER RJR 9129 FAILED. THE RELEASE WAS NOT RECORDED FOR APPROXIMATELY 1 HOUR. THE PLANT WAS IN ETSAS 2.4.1.3.C FOR 3 HOURS WHILE THE RECORDER WAS FIXED. SIMILAR EVENTS: LER 83-001. VIBRATION OF THE RECORDER CAUSED AN AMPLIFIER CIRCUIT CARD TO BACK OUT OF ITS CONNECTOR. THE CARD BACKED OUT BECAUSE THE HOLDING SCREW HAD FALLEN OUT. THE CARD WAS INSERTED, THE HOLDING SCREW WAS TIGHTENED, AND THE UNIT WAS CALIBRATED AND RETURNED TO SERVICE.

[297] MILLSTONE 2 DOCKET 50-336 LER 83-028
 HEAVY LOAD PASSES OVER FUEL IN THE SPENT FUEL POOL.
 EVENT DATE: 102983 REPORT DATE: 112883 NSSS: CE TYPE: PWR
 SYSTEM: SPENT FUEL STORAGE FACILITIES COMPONENT: OTHER COMPONENTS

(NSIC 187811) WHILE AT 0% POWER, ROUTINE REFUEL OPERATIONS, THE SPENT FUEL POOL GATE, A LOAD OF APPROXIMATELY 4500 POUNDS, TRAVELED OVER IRRADIATED FUEL ASSEMBLIES IN THE SPENT FUEL POOL. THE GATE WAS BEING MOVED FROM THE TRANSFER CANAL TO THE CASK LAYDOWN PIT WHEN THE DISCOVERY WAS MADE. THE LOAD WAS THEN RETURNED OVER IRRADIATED FUEL TO A SAFE POSITION BY THE TRANSFER CANAL. THIS EVENT HAD NO IMPACT ON REFUEL OPERATIONS. SIMILAR LER'S: NONE. DUE TO PHYSICAL LIMITATIONS ON THE TRAVEL OF THE CRANE, THE LOAD COULD NOT BE POSITIONED OVER THE DESIGNATED SAFE LOAD PATH. WHEN IT WAS DISCOVERED THAT THE LOAD WAS OVER IRRADIATED FUEL ASSEMBLIES IT WAS MOVED TO A SAFE POSITION. TO PREVENT RECURRENCE SPECIAL RIGGING PROCEDURES HAVE BEEN INCORPORATED INTO THE CRANE TRAVEL PROCEDURE TO ALLOW THE GATE TO TRAVEL OVER THE DESIGNATED SAFE LOAD PATHS. NO FURTHER ACTION IS REQUIRED.

[298] MONTICELLO DOCKET 50-263 LER 83-020
 DIESEL GENERATOR INOPERABLE.
 EVENT DATE: 092083 REPORT DATE: 101983 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
 VENDOR: ELECTRO - MOTIVE DIV. OF GM

(NSIC 186264) DURING NORMAL PLANT OPERATION, #11 DIESEL GENERATOR BECAME INOPERABLE WHILE IN THE STANDBY CONDITION. FAILURE OF THE TURBOCHARGER AUXILIARY LUBE OIL PUMP MOTOR BEARING REQUIRED PLACING THE DIESEL IN PULL-TO-LOCK. REDUNDANT DIESEL #12 WAS AVAILABLE AND OPERABLE. NO PREVIOUS SIMILAR

OCCURRENCES. REPORT REQUIRED BY TECH SPEC 6.7.B.2.B. THE OIL PUMP MOTOR BEARING FAILED, RESULTING IN TRIPPING OF MOTOR THERMAL OVERLOADS. LOSS OF OIL PRESSURE ANNUNCIATED IN THE CONTROL ROOM. PUMP-MOTOR ASSEMBLY REPLACED. GM P/N 9524002. 3/4 HP, 3 GPM, 460 VAC, 60 HZ, 3 PH. DIESEL FUNCTIONALLY TESTED AFTER REPAIRS. PREVENTIVE MAINTENANCE PROCEDURE WILL BE REVISED TO INCLUDE PUMP-MOTOR ASSEMBLIES.

[299] MONTICELLO DOCKET 50-263 LER 83-021
SAFEGUARDS BUS RELAYS NOT TESTED IN ALLOTTED TIME.
EVENT DATE: 101983 REPORT DATE: 110383 NSSS: GE TYPE: BWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: RELAYS

(NSIC 187408) DURING NORMAL OPERATION, QUARTERLY SURVEILLANCE TO CALIBRATE SAFEGUARDS BUS DEGRADED VOLTAGE RELAYS AS REQUIRED BY TABLE 4.2.1 OF THE TECH SPEC WAS PERFORMED EIGHT DAYS BEYOND THE ALLOWABLE SCHEDULE DEVIATION. REPORTABLE UNDER TECH SPEC 6.7.B.2.C. NO SIGNIFICANT OCCURRENCE TOOK PLACE AS A RESULT OF THE EVENT. ALL REDUNDANT SYSTEMS WERE AVAILABLE AND OPERABLE. PREVIOUS EVENTS OF A SIMILAR NATURE ARE AO-36, AO-263-74-18, M-RO-76-23 AND M-RO-79-02. ENGINEERING PERSONNEL SCHEDULED SURVEILLANCE TEST TO BE PERFORMED ON A DATE OUTSIDE THE ALLOWABLE DEVIATION FROM THE SCHEDULED DATE. SURVEILLANCE TEST IMMEDIATELY PERFORMED UPON DISCOVERY OF ERROR. INVOLVED PERSONNEL INSTRUCTED ON SURVEILLANCE SCHEDULE REQUIREMENTS. SURVEILLANCE SCHEDULE FORM REVISED TO EXPLICITLY STATE ALLOWABLE DEVIATION. INSTRUCTIONS CONCERNING ALLOWABLE DEVIATION WILL BE PROVIDED TO OTHER APPROPRIATE PERSONNEL.

[300] MONTICELLO DOCKET 50-263 LER 83-023
SBGT HAS LOW FLOW.
EVENT DATE: 102683 REPORT DATE: 111583 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: DWYER, F.W. MFG CO., INC.

(NSIC 187510) 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 REQUIREMENT FLOW RATE OF 3150 CFM. MEASURED FLOW WAS 3050 CFM. FLOW THROUGH "A" TRAIN SBGT WAS ALSO REDUCED, BUT STILL ABOVE 3150 CFM. NO PREVIOUS EVENTS HAVE OCCURRED WITH A SIMILAR CAUSE. REPORTABLE PER TECH SPEC 6.7.B.2.B. STACK EXHAUST FLOW ADJUSTED INCORRECTLY DUE TO STACK MANOMETER NOT BEING CHECKED FOR ZERO ON A PERIODIC BASIS. STACK FLOW WAS CORRECTED AND 'B' TRAIN SBGT RETURNED TO OPERATION THE SAME DAY. INSTRUCTIONS FOR USE OF MANOMETER WHEN ADJUSTING STACK FLOW WILL BE POSTED. PROCEDURES WILL BE REVISED TO CHECK MANOMETER ZERO ON A PERIODIC BASIS.

[301] NINE MILE POINT 1 DOCKET 50-220 LER 83-024E
FISH SAMPLES DO NOT MEET LLD FOR SEVERAL RADIONUCLIDES.
EVENT DATE: 050183 REPORT DATE: 090983 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187684) CONVERSION OF TEST DATA FROM WET TO DRY. WHILE REVIEWING ENVIRONMENTAL RADIATION FISH ANALYSIS SAMPLE DATA, IT WAS DETERMINED THAT THE LOWER LIMIT OF DETECTION SENSITIVITY (LLD) WAS NOT MET FOR SEVERAL RADIONUCLIDES DURING ANALYSIS OF MAY FISH SAMPLES (ENV. TECH SPEC TABLE 3.2-1 APPLIES). LERS 81-10, 81-51, 82-07, 82-12 AND 83-03 REPORTED SIMILAR OCCURRENCES. THE STATION TECH SPECS SPECIFY RADIOLOGICAL FISH ANALYSIS LLD TO BE 80 PCI/KG DRY WEIGHT. WHEN LABORATORY TEST DATA IS CONVERTED FROM WET WEIGHT UNITS TO DRY WEIGHT UNITS, HIGHER LLD VALUES RESULTED. RADIOLOGICAL EFFLUENT TECH SPEC (RETS) ARE IN THE PROCESS OF BEING SUBMITTED TO UPDATE THIS PARAMETER TO THE CURRENT REGULATORY GUIDE VALUES; RECURRENCE OF THIS PROBLEM IS EXPECTED UNTIL THE RETS PROPOSAL IS APPROVED.

[302] NINE MILE POINT 1 DOCKET 50-220 LER 83-018
 ESF TIME DELAY RELAY ACTUATES TOO SLOWLY.
 EVENT DATE: 070983 REPORT DATE: 080183 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: RELAYS
 VENDOR: AGASTAT RELAY CO.

(NSIC 184750) DURING NORMAL OPERATIONS WHILE PERFORMING ROUTINE SURVEILLANCE TESTING, TIME DELAY RELAY 11K62A (AGASTAT RELAY COMPANY MODEL E7023AC002) FAILED TO TIME OUT AT THE CORRECT TIME AND INITIATE THE EMERGENCY COOLING SYSTEM. HOWEVER, DUE TO A MODIFICATION COMPLETED DURING THE LAST OUTAGE, THE TIME DELAY RELAYS NOW OPERATE ON A 1-OUT-OF-4 TAKEN TWICE LOGIC. BEFORE THE MODIFICATION, THEY OPERATED ON A 1-OUT-OF-2 TAKEN TWICE LOGIC. THEREFORE, THE EMERGENCY COOLING AUTO OPERATION WOULD HAVE STILL CARRIED OUT ITS INTENDED FUNCTION BY THE ACTIVATION OF EITHER TIME DELAY RELAY 11K62, 11K61 OR 11K61A, WHICH WERE PROVEN OPERABLE BY THE TEST. FAILURE WAS ATTRIBUTED TO A DIRTY TIMING ORIFICE WHICH DETERMINES THE LENGTH OF THE TIME DELAY BY THE ADJUSTMENT OF A CALIBRATED DIAL OR NEEDLE VALVE. THE NEEDLE VALVE WAS EXERCISED, AND THE TIMER WAS RESET TO THE CORRECT TIME INTERVAL AND RETESTED TO ASSURE OPERABILITY. THE SURVEILLANCE TEST FREQUENCY HAS BEEN INCREASED UNTIL REPLACEMENT ASSEMBLY IS AVAILABLE.

[303] NINE MILE POINT 1 DOCKET 50-220 LER 83-026
 MAIN STEAM SAFETY VALVE TAILPIPE TEMPERATURE SENSORS SETPOINTS DRIFT.
 EVENT DATE: 090983 REPORT DATE: 092883 NSSS: GE TYPE: BWR
 SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: PALL TRINITY MICRO CORP.

(NSIC 186785) DURING NORMAL OPERATIONS WHILE PERFORMING SURVEILLANCE TEST N1-ISP-RVT ON THE MAIN STEAM SAFETY VALVE TAILPIPE TEMPERATURE SENSORS, THE INPUTS INDICATED EXCESSIVE DRIFT ACROSS THERMOCOUPLE B410. THIS PLACES THE PLANT IN A LIMITING CONDITION FOR OPERATION OF TECH SPEC 3.6.11. THIS IS OF MINIMAL SAFETY CONCERN SINCE THE THERMOCOUPLES ACT AS BACKUP SENSORS TO THE PRIMARY ACOUSTIC SENSORS WHICH ARE CURRENTLY OPERABLE. SIMILAR PROBLEMS WERE REPORTED IN LERS 83-15 AND 81-52. THE CAUSE OF THE THERMOCOUPLES DRIFTING IS NOT KNOWN, HOWEVER, IT IS SUSPECTED THAT IT COULD BE ATTRIBUTED TO A POOR CONNECTION IN THE TERMINAL BOX. THE CORRECTIVE ACTION NECESSARY TO RESTORE THE THERMOCOUPLES TO NORMAL OPERATION WILL BE DETERMINED DURING THE NEXT COLD SHUTDOWN WHEN THERE IS ACCESS TO THE DRYWELL.

[304] NINE MILE POINT 1 DOCKET 50-220 LER 83-033
 SNUBBER RESERVOIR HAS LOW LEVEL.
 EVENT DATE: 101883 REPORT DATE: 111683 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 VENDOR: BERGEN-PATTERSON PIPE SUPPORT CORPORATI

(NSIC 187762) DURING NORMAL OPERATIONS, A VISUAL INSPECTION WAS PERFORMED ON SNUBBER 39-HS-21. IT WAS OBSERVED THAT THE OIL RESERVOIR INDICATED OFF-SCALE TOWARDS THE LOW END. THE SNUBBER WAS REMOVED ON OCT. 18 AT 1500 HRS. FOR AN OPERATIONAL TEST WHICH FOUND THE SNUBBER TO BE OPERABLE. UPON INTERNAL INSPECTION IT WAS DETERMINED THAT THE SNUBBER'S OPERABILITY COULD NOT BE INSURED FOR THE REMAINDER OF THE CYCLE, THEREFORE, THE SNUBBER WAS REPLACED ON OCT. 19 AT 1530 HRS. CONSEQUENCES WERE MINIMAL SINCE THE SNUBBER WAS FOUND OPERABLE AND REPLACED WELL WITHIN 72 HOURS FROM REMOVAL ALLOWED BY TECH SPEC 3.6.4.B. NO CORRECTIVE ACTION IS NECESSARY SINCE THE SNUBBER WAS PROVED TO BE OPERABLE.

[305] NINE MILE POINT 1 DOCKET 50-220 LER 83-028
 TWO SNUBBERS HAVE LOW OIL LEVELS.
 EVENT DATE: 102783 REPORT DATE: 112383 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS

VENDOR: BERGEN-PATTERSON PIPE SUPPORT CORPORATI

(NSIC 187494) DURING NORMAL OPERATIONS, A VISUAL INSPECTION OF SNUBBERS 39-HS-18 & 19 FOUND THE OIL RESERVOIR INDICATORS TO BE OFF-SCALE ON THE LOW END. THE SNUBBERS WERE REMOVED AND REPLACED WITH NEW ONES AT 1440 HRS. ON OCT. 27. THIS WAS COMPLETED AT 1800 HRS. ON OCT. 27. THE SNUBBERS WERE IMMEDIATELY TESTED AND FOUND TO BE OPERABLE. THE CONSEQUENCES WERE MINIMAL SINCE BOTH SNUBBERS WERE FOUND OPERABLE AND THEIR REPLACEMENT SNUBBERS WERE INSTALLED IN 3 HOURS AND 20 MINUTES, FAR LESS THAN THE 72 HOURS ALLOWED BY TECH SPEC 3.6.4.B. LER 83-33 REPORTED A SIMILAR OCCURRENCE. NO CORRECTIVE ACTION IS NECESSARY SINCE THE SNUBBERS WERE FOUND TO BE OPERABLE WHEN REMOVED.

[306] NINE MILE POINT 1 DOCKET 50-220 LER 83-034
 MAINTENANCE PERSONNEL OPEN BOTH REACTOR BUILDING AIRLOCK DOORS.
 EVENT DATE: 110183 REPORT DATE: 113083 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187496) DURING NORMAL OPERATIONS, WHILE PERFORMING MAINTENANCE WORK ON THE REACTOR BUILDING AIR LOCK DOORS, BOTH DOORS WERE OPEN SIMULTANEOUSLY SEVERAL TIMES BETWEEN 8:15 A.M. AND 10:06 A.M. ON NOV. 1, 1983. CONSEQUENCES WERE MINIMAL SINCE THIS CONDITION EXISTED FOR ONLY SEVERAL SECONDS EACH TIME TO ALLOW PERSONNEL TO PASS THROUGH. TWO GUARDS WERE POSTED, ONE ON EACH SIDE OF THE DOOR, TO ENSURE THAT ONE DOOR WOULD BE SHUT. SUPERVISORS OF INVOLVED DEPARTMENTS HELD MEETINGS WITH THEIR PEOPLE. LONG TERM CORRECTIVE ACTION WAS TAKEN IN THE FORM OF SPECIAL TRAINING THAT WAS DEVELOPED IN RESPONSE TO INSPECTION REPORT 83-17. ALSO, GENERAL EMPLOYEE TRAINING HAS BEEN REVISED TO INCORPORATE MORE INTENSE COVERAGE ON THE AIR LOCK PROCEDURES AND THE IMPORTANCE OF FOLLOWING THEM.

[307] NINE MILE POINT 1 DOCKET 50-220 LER 83-031
 TWO ATMOSPHERIC TEMPERATURE SENSORS OUT OF CALIBRATION.
 EVENT DATE: 110283 REPORT DATE: 112983 NSSS: GE TYPE: BWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: TELEDYNE-GEOTECH

(NSIC 187495) WHILE PERFORMING WEATHER STATION INSTRUMENT CALIBRATION PROCEDURE S-ICP-WS-1, THE DIFFERENTIAL TEMPERATURE OUTPUTS AT 200 AND 100 FT. WERE OUT OF CALIBRATION BY -1.29 F AND -0.44 F RESPECTIVELY. ENV. TECH SPEC SECTION 3.1 REQUIRES THAT THE 200 FT. OUTPUT BE WITHIN PLUS OR MINUS 0.2 F. IN THE EVENT OF AN ACCIDENTAL RADIOACTIVE RELEASE TO THE ATMOSPHERE, THIS ERROR WOULD PRODUCE A LESS CONSERVATIVE ESTIMATE OF DOSE RATE IN OUTLYING AREAS AND A MORE CONSERVATIVE ESTIMATE CLOSE TO THE PLANT. HOWEVER, THERE ARE TWO ALTERNATE METHODS OF ESTIMATING ATMOSPHERIC STABILITY AND DOSE RATE. IF THE DELTA T ESTIMATE WAS INCONSISTENT WITH THE OTHERS, IT WOULD NOT BE USED. THE CAUSE OF THE DEVIATION IS NOT KNOWN. PROCEDURAL AND/OR DESIGN PROBLEMS ARE SUSPECTED. IMMEDIATE ACTION WAS TO READJUST THE OUTPUTS. PROCEDURES HAVE BEEN MODIFIED AND THE FREQUENCY OF TESTING INCREASED TO HELP DETERMINE THE CAUSE OF THE PROBLEM. ALSO, THE SUPPLIER HAS BEEN NOTIFIED AND IS INVESTIGATING THE POSSIBILITY OF DESIGN PROBLEMS. PROCEDURES WILL BE MODIFIED TO REQUIRE COMPARISON OF ALTERNATE METHODS OF ESTIMATING ATMOSPHERIC STABILITY.

[308] NINE MILE POINT 1 DOCKET 50-220 LER 83-035
 HPCI PUMP DISCHARGE CHECK VALVE STICKS OPEN.
 EVENT DATE: 110583 REPORT DATE: 120583 NSSS: GE TYPE: BWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: PUMPS
 VENDOR: WORTHINGTON PUMP CORP.

(NSIC 187879) ON NOVEMBER 5 AT 1500 HOURS, FEEDWATER PUMP #12 (HPCI PUMP #12) WAS REMOVED FROM SERVICE DUE TO AN OVERHEATING BEARING. WHEN TAKEN OUT OF SERVICE,

THE PUMP'S DISCHARGE CHECK VALVE FAILED TO CLOSE, RESULTING IN REVERSE ROTATION OF THE PUMP. THE CONSEQUENCES INVOLVED DAMAGE TO THE SPEED INCREASER/PUMP AND REDUCED REDUNDANCY OF THE HPCI SYSTEM. AN OPERABILITY TEST OF THE REDUNDANT SYSTEM WAS PERFORMED AS WELL AS ADDITIONAL SURVEILLANCE TESTING PER TECH SPEC 3.1.8(B). DAMAGE TO THE SPEED INCREASER/PUMP CONSISTED OF SCORED BEARING INSERTS AND PINION GEAR SHAFT CAUSED BY THE PUMP RUNNING BACKWARDS. THE CHECK VALVE WAS SUCCESSFULLY SEATED AFTER SEVERAL ATTEMPTS AND THE DRIVE AND PINION GEARS AND BEARINGS WERE REPLACED.

[309] NINE MILE POINT 1 DOCKET 50-220 LER 83-036
FUEL ZONE WATER LEVEL RECORDER STOPS.
EVENT DATE: 110783 REPORT DATE: 120683 NSSS: GE TYPE: BWR
SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187763) ON NOV. 7 AT 0750 HRS. THE FUEL ZONE WATER LEVEL MONITORING SYSTEM (CHANNEL 11) ACCUREX SYSTEM WAS FOUND IN AN IDLE STATE. THE CONSEQUENCE OF THIS EVENT WAS REDUCED REDUNDANCY OF THE ACCIDENT MONITORING INSTRUMENTATION FOR A PERIOD OF LESS THAN 24 HRS. THE CAUSE OF THIS EVENT IS NOT KNOWN. HOWEVER, IT IS SUSPECTED THAT A STOP SIGNAL HAD BEEN RECEIVED, THUS STOPPING THE PROGRAM. THE ACCUREX LOGGER WAS RESTARTED IMMEDIATELY AND ADDITIONAL SURVEILLANCE IS BEING PERFORMED.

[310] NINE MILE POINT 1 DOCKET 50-220 LER 83-037
CORE SPRAY TOPPING PUMP VENT LINE LEAKS.
EVENT DATE: 111083 REPORT DATE: 120983 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: PIPES, FITTINGS

(NSIC 187764) ON NOVEMBER 10 AT 1145 HRS., WHILE PERFORMING ROUTINE SURVEILLANCE TESTING ON THE CORE SPRAY SYSTEM, LEAKAGE FROM A VENT LINE WAS OBSERVED ON CORE SPRAY TOPPING PUMP #121. THE COMPONENT WAS THEN ISOLATED AND DECLARED INOPERABLE RESULTING IN REDUCED REDUNDANCY OF THE CORE SPRAY SYSTEM. THEREFORE, SAFETY CONSEQUENCES WERE MINIMAL. LEAKAGE WAS CAUSED BY A CRACKED 3/4" DIAMETER NIPPLE ON THE #121 PUMP VENT LINE. THE NIPPLE WAS REPLACED AND AN OPERABILITY TEST WAS COMPLETED ON NOVEMBER 10 AT 1605 HRS, WHICH WAS WELL WITHIN THE 15 DAY TECH SPEC LIMITATION. A VISUAL INSPECTION OF THE VENT LINES TO THE REMAINING CORE SPRAY TOPPING PUMPS (111, 112, 122) FOUND NO FORM OF DEGRADATION OR CRACKING.

[311] NINE MILE POINT 1 DOCKET 50-220 LER 83-038
EMERGENCY CONDENSER ISOLATION VALVES IMPROPERLY TESTED.
EVENT DATE: 111083 REPORT DATE: 120983 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: VALVES
VENDOR: ATWOOD & MORRILL CO., INC.

(NSIC 187765) DURING NORMAL PLANT OPERATION, AN NRC RESIDENT INSPECTOR DISCOVERED THAT SINCE THE PLANT STARTUP IN JUNE, 1983 THE EMERGENCY CONDENSER ISOLATION VALVES HAVE NOT BEEN STROKE TIME-TESTED CORRECTLY. ACCORDING TO TECH SPEC 4.2.7A AND TABLE 3.2.7, THESE VALVES ARE TO BE TIMED FROM THE FULLY OPENED TO FULLY CLOSED POSITION. THE TEST PROCEDURE CALLED FOR THEM TO BE TESTED IN THE OPPOSITE DIRECTION. THESE VALVES ARE NORMALLY CLOSED AND UPON SYSTEM INITIATION THE VALVE IS REQUIRED TO OPEN, WHEN IN THE OPEN POSITION THEY ARE REQUIRED TO CLOSE UPON AN ISOLATION SIGNAL; THEREFORE, THEY SHOULD BE TESTED IN BOTH DIRECTIONS. EMERGENCY CONDENSER ISOLATION VALVE 39-06 WAS TESTED IN BOTH DIRECTIONS. THE CORRESPONDING VALVE IN EMERGENCY CONDENSER LOOP #11 (39-05) HAD BEEN TESTED AFTER THE PERFORMANCE OF MAINTENANCE WORK DURING THE LAST OUTAGE, AND HENCE DID NOT NEED TO BE RETESTED. THE TEST PROCEDURE HAS BEEN REVISED TO COMPLY WITH TECH SPEC 4.2.7A. THE TEST WAS COMPLETED AND EMERGENCY CONDENSER LOOP #12 WAS PUT BACK INTO SERVICE WITHIN THE 7 DAY PERIOD ALLOWED BY TECH SPEC 3.1.3C. A COMPLETE REVIEW OF TECH SPEC SURVEILLANCE REQUIREMENTS AND SURVEILLANCE TEST PROCEDURES

WILL BE PERFORMED TO ASSURE THAT ALL REQUIREMENTS AND SURVEILLANCE TEST PROCEDURES WILL BE PERFORMED TO ASSURE THAT ALL REQUIREMENTS ARE BEING MET. THIS REVIEW WILL BE PERFORMED BY AN INDEPENDENT ORGANIZATION ON AN EXPEDITED BASIS.

[312] NORTH ANNA 1 DOCKET 50-338 LER 83-059
PERSONNEL HATCH INNER SEAL LEAKS.
EVENT DATE: 091883 REPORT DATE: 101383 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: PENETRATIONS, PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 186183) ON SEPTEMBER 18, 1983, WITH UNIT 1 AT 100% REACTOR POWER, THE INNER SEAL ON THE CONTAINMENT PERSONNEL HATCH FAILED TO PASS ITS PERIODIC TEST FOLLOWING A CONTAINMENT ENTRY. THE OUTER SEAL REMAINED FUNCTIONAL AND THE INNER SEAL WAS REPAIRED WITHIN 2 HOURS. THIS EVENT IS CONTRARY TO TECH SPEC 3.6.1.3 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE INNER HATCH SEAL WAS TESTED FOLLOWING A CONTAINMENT ENTRY. THE TEST FAILED DUE TO DIRT BUILD UP ON THE SEAL. THE SEAL WAS CLEANED, RELUBRICATED AND SUBSEQUENTLY TESTED SATISFACTORILY. NO FURTHER CORRECTIVE ACTION IS REQUIRED. THERE ARE NO GENERIC IMPLICATIONS.

[313] NORTH ANNA 1 DOCKET 50-338 LER 83-063
REACTOR COOLANT SYSTEM HAS HIGH IODINE LEVEL.
EVENT DATE: 092883 REPORT DATE: 101983 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186461) ON SEPTEMBER 28, 1983, THE POST REACTOR SHUTDOWN SPECIFIC ACTIVITY SAMPLES OF THE REACTOR COOLANT SYSTEM INDICATED A DOSE EQUIVALENT I-131 LEVEL GREATER THAN THE LIMIT SPECIFIED BY TECH SPEC 3.4.8. THE HIGH IODINE LEVEL EXISTED FOR ONLY A SHORT TIME AND THE SPECIFIC ACTIVITY RETURNED TO WITHIN THE TECH SPEC 3.4.8 LIMIT. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.D AND THE SPECIAL REPORTING REQUIREMENTS OF TECH SPEC 6.9.2. THIS EVENT IS SIMILAR TO UNIT 1 LER 83-051/03L-0. THIS EVENT WAS CAUSED BY A KNOWN FUEL ELEMENT DEFECT IN THE REACTOR CORE. POST TRIP CONDITIONS IN THE CORE ENHANCED THE RELEASE OF FISSION FRAGMENTS TO THE REACTOR COOLANT SYSTEM WHICH CAUSED THE IODINE SPIKE. THE ACCELERATED SAMPLING FREQUENCY OF TECH SPEC 3.4.8 WAS IMPLEMENTED UNTIL THE RCS SPECIFIC ACTIVITY RETURNED TO LESS THAN THE TECH SPEC LIMIT.

[314] NORTH ANNA 1 DOCKET 50-338 LER 83-065
FIVE ISOLATION VALVES LEAK.
EVENT DATE: 092883 REPORT DATE: 101983 NSSS: WE TYPE: PWR
SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: OTHER COMPONENTS

(NSIC 186462) ON SEPTEMBER 28, 1983, WITH UNIT 1 IN MODE 3, THE REACTOR COOLANT SYSTEM UNIDENTIFIED LEAKAGE EXCEEDED 1 GPM. THE LEAKAGE WAS LOCATED AND QUANTIFIED TO REDUCE THE UNIDENTIFIED LEAKAGE TO LESS THAN 1 GPM. THIS EVENT IS IN ACCORDANCE WITH THE ACTION STATEMENT OF TECH SPEC 3.4.6.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THERE ARE NO GENERIC IMPLICATIONS ASSOCIATED WITH THIS EVENT. FIVE VALVES (FOUR INSIDE CONTAINMENT AND ONE OUTSIDE) HAD A TOTAL LEAKAGE OF 0.93 GPM. AFTER THIS LEAKAGE WAS QUANTIFIED AND VERIFIED TO NOT BE PRESSURE BOUNDARY LEAKAGE, THE UNIDENTIFIED LEAKAGE WAS DECREASED BY THIS AMOUNT AND THE IDENTIFIED LEAKAGE WAS INCREASED BY THE SAME AMOUNT. THE UNIDENTIFIED LEAKAGE WAS VERIFIED TO BE BELOW 1 GPM IN ACCORDANCE WITH TECH SPECS.

[315] NORTH ANNA 1 DOCKET 50-338 LER 83-066
ROD POSITION INDICATORS GIVE ERRONEOUS INDICATION.
EVENT DATE: 092983 REPORT DATE: 101983 NSSS: WE TYPE: PWR
SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 186463) ON SEPTEMBER 29, 1983, DURING A UNIT 1 STARTUP 6 INDIVIDUAL ROD POSITION INDICATORS (IRPI) DEVIATED FROM THE GROUP DEMAND POSITION AT VARIOUS TIMES BY GREATER THAN 12 STEPS. ON OCTOBER 3, 1983 WITH THE UNIT AT 100% POWER, ROD J-03 DEVIATED FROM GROUP DEMAND POSITION BY GREATER THAN 12 STEPS. THE APPROPRIATE ACTION STATEMENTS WERE SATISFIED. THESE EVENTS ARE REPORTABLE PURSUANT TO TECH SPEC 3.1.3.2, 3.0.3 AND 6.9.1.9.B. THE CAUSE OF THE INDICATOR DISAGREEMENT WAS INSTRUMENT DRIFT. THIS IS A RECURRING PROBLEM AND IS GENERIC TO WESTINGHOUSE ANALOG POSITION INDICATION SYSTEMS. THE ROD POSITION INDICATOR CHANNELS WERE PROPERLY RECALIBRATED AND RETURNED TO SERVICE. NO FURTHER CORRECTIVE ACTION IS REQUIRED.

[316] NORTH ANNA 1 DOCKET 50-338 LER 83-068
RCS TEMPERATURE DROPS BELOW LIMITS.
EVENT DATE: 093083 REPORT DATE: 102783 NSSS: WE TYPE: PWR
SYSTEM: TURBINE-GENERATORS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 186464) ON SEPTEMBER 30, 1983, WHILE ATTEMPTING TO INCREASE TURBINE SPEED FROM ZERO SPEED AT 120 RPM PER MINUTE, RCS TEMPERATURE FELL RAPIDLY TO 538 F AT WHICH TIME THE REACTOR WAS MANUALLY TRIPPED. THIS IS BELOW THE TECH SPEC MINIMUM TEMPERATURE OF 541 F WHICH IS SET TO ASSURE THAT THE REACTOR IS OPERATED WITHIN ANALYZED MODERATOR TEMPERATURE COEFFICIENT RANGE AND THE NORMAL OPERATING RANGE OF PROTECTION INSTRUMENTATION. THIS EVENT IS CONTRARY TO TECH SPEC 3.1.1.5 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. REACTOR COOLANT SYSTEM TEMPERATURE FELL BELOW 541 F DUE TO EXCESSIVE STEAM FLOW TO THE TURBINE GENERATOR WHEN THE TURBINE CONTROLLER MAIN SPEED SENSOR FAILED AND CAUSED A TURBINE ACCELERATION FROM 0 TO 1500 RPM IN APPROXIMATELY ONE MINUTE. THE SPEED SENSOR WAS SWAPPED WITH AN OPERABLE SENSOR AND SUBSEQUENTLY REPLACED DURING THE OCTOBER 1983 MAINTENANCE OUTAGE.

[317] NORTH ANNA 1 DOCKET 50-338 LER 83-074
SG LEVEL INSTRUMENT ROOT VALVE LEAKS.
EVENT DATE: 110683 REPORT DATE: 112383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: VALVES
VENDOR: VOGT, HENRY MACHINE COMPANY

(NSIC 187558) ON NOV. 6, 1983, WITH UNIT 1 AT 100 PERCENT THERMAL POWER, LI-1494, STEAM GENERATOR 'C' CHANNEL I LEVEL INDICATION DRIFTED HIGH OUT OF THE SPECIFIED TOLERANCE OF 5% FROM THE OTHER TWO CHANNELS. STEAM GENERATOR LEVEL INDICATION INPUTS SIGNALS TO THE REACTOR TRIP CIRCUITRY AND AUXILIARY FEEDWATER PUMP START LOGIC. THE CHANNEL WAS PLACED IN TRIP WITHIN ONE HOUR. THIS EVENT IS CONTRARY TO TECH SPEC 3.3.1.1 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CHANNEL FAILURE WAS CAUSED BY A BODY TO BONNET LEAK OF THE REFERENCE LEG ROOT VALVE, WHICH DECREASED PRESSURE ON THE REFERENCE LEG SIDE THUS CAUSING A HIGHER LEVEL INDICATION ON THE CHANNEL. THE VALVE LEAK WAS STOPPED. THERE ARE NO GENERIC IMPLICATIONS OF THIS EVENT.

[318] NORTH ANNA 1 DOCKET 50-338 LER 83-080
REACTOR COOLANT SYSTEM HAS HIGH IODINE LEVEL.
EVENT DATE: 111883 REPORT DATE: 120783 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187742) ON NOV 18, 1983, FOLLOWING A RAMPDOWN AND TRIP, THE I-131 DOSE EQUIVALENT SPECIFIC ACTIVITY EXCEEDED 1.0 MICROCURIE/GRAM. SAMPLES WERE TAKEN EVERY FOUR HOURS PER ITEM 4A OF TECH SPEC TABLE 4.4-4. THE HIGH IODINE LEVEL EXISTED FOR ONLY A SHORT TIME AND THE SPECIFIC ACTIVITY RETURNED TO WITHIN THE TECH SPEC 3.4.8 LIMIT. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B AND TECH SPEC 6.9.2. THIS EVENT WAS CAUSED BY KNOWN, BUT NOT SPECIFICALLY

IDENTIFIED, MINOR FUEL ELEMENT DEFECTS IN THE REACTOR CORE. POST TRIP CONDITIONS OF THE FUEL ENHANCE THE DIFFUSION OF IODINE INTO THE REACTOR COOLANT. 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.

[319] NORTH ANNA 1 DOCKET 50-338 LER 83-081
 ROD POSITION INDICATORS FAIL.
 EVENT DATE: 111883 REPORT DATE: 121483 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187858) INDIVIDUAL ROD POSITION INDICATION (IRPI) FOR CHANNELS M-10, F-06, AND L-11 DEVIATED FROM THE GROUP DEMAND POSITION BY GREATER THAN 12 STEPS ON NOV. 18, 1983 AT 1345 WHILE GOING CRITICAL. ON NOV. 20, 1983 IRPI CHANNEL J-03 DEVIATED FROM THE GROUP DEMAND POSITION BY GREATER THAN 12 STEPS WHILE UNIT 1 WAS AT 100% POWER. THESE EVENTS ARE CONTRARY TO TECH SPEC 3.1.3.2 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CAUSE OF THE INDICATOR DISAGREEMENT WAS INSTRUMENT DRIFT. THIS IS A RECURRING PROBLEM AND IS GENERIC TO WESTINGHOUSE ANALOG POSITION INDICATING SYSTEMS. THE ROD POSITION INDICATOR CHANNELS WERE PROPERLY RECALIBRATED AND RETURNED TO SERVICE.

[320] NORTH ANNA 1 DOCKET 50-338 LER 83-083
 FIRE BARRIER SEAL MISSING.
 EVENT DATE: 112283 REPORT DATE: 121483 NSSS: WE TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 187859) ON NOV. 22, 1983, WITH UNIT 1 AT 100 PERCENT POWER, AN OPEN PENETRATION WAS DISCOVERED BETWEEN THE SAFEGUARDS BUILDING AND THE QUENCH SPRAY PUMP HOUSE. THE PENETRATION WAS AN UNUSED PIPING PENETRATION FILLED WITH SILICON FOAM AND IT WAS FOUND WITH APPROXIMATELY A TWO INCH HOLE IN THE FOAM. A FIREWATCH WAS ESTABLISHED WITHIN 1 HOUR AS REQUIRED BY THE ACTION STATEMENT OF TECH SPEC 3.7.15. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. IT COULD NOT BE DETERMINED WHY OR HOW LONG THE BREACH IN THE FIRE BARRIER EXISTED BUT IT IS BELIEVED TO HAVE RESULTED FROM PERSONNEL ERROR. SEVERAL UNUSED PENETRATIONS EXIST IN THE SAME AREA AND ALL WERE VERIFIED TO BE INTACT. A CONTINUOUS FIREWATCH WAS POSTED IMMEDIATELY AND THE OPENING WAS FILLED WITHIN 3 HOURS.

[321] NORTH ANNA 2 DOCKET 50-339 LER 83-069
 ROD POSITION INDICATOR FOUND INDICATING HIGH.
 EVENT DATE: 091383 REPORT DATE: 101283 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 186195) ON SEPTEMBER 13, 1983 WITH UNIT 2 AT 100% POWER, THE INDIVIDUAL ROD POSITION INDICATOR (IRPI) FOR ROD K-02 IN CONTROL BANK "A" WAS FOUND TO BE OUT OF CALIBRATION AT THE ZERO STEP POSITION BY APPROXIMATELY 133 STEPS HIGH. THIS WOULD HAVE RESULTED IN AN INDICATED POSITION OF 133 STEPS WITH THE ROD FULLY INSERTED. THE INDICATOR WAS CALIBRATED WITHIN 8 HOURS AS REQUIRED BY THE ACTION STATEMENT OF TECH SPEC 3.1.3.2. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE CAUSE OF THE MISCALIBRATION IS SUSPECTED TO BE PERSONNEL ERROR DURING A PREVIOUS ADJUSTMENT. THE IRPI WAS PROPERLY CALIBRATED SATISFACTORILY AND RETURNED TO SERVICE. THIS IS AN ISOLATED EVENT; CONSEQUENTLY THERE ARE NO GENERIC IMPLICATIONS.

[322] NORTH ANNA 2 DOCKET 50-339 LER 83-073
 CONTAINMENT DOOR LEAKS.
 EVENT DATE: 110783 REPORT DATE: 112383 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 187560) ON NOV. 7 AND NOV. 14, 1983, WITH UNIT 2 IN MODE 1 AT 100% POWER, THE INNER PERSONNEL HATCH DOOR WAS FOUND TO HAVE AN UNACCEPTABLE LEAK RATE. THIS EVENT IS CONTRARY TO TECH SPEC 3.6.1.3 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THE OUTER PERSONNEL DOOR WAS PROPERLY SEALED. THERE ARE NO GENERIC IMPLICATIONS ASSOCIATED WITH THIS EVENT. UNIT 2 LER 83-057/03L-0 IS SIMILAR. THE DOOR SEALS WERE DIRTY FROM MULTIPLE CONTAINMENT ENTRIES. THE DOOR SEALS WERE CLEANED, LUBRICATED AND THE DOOR WAS SATISFACTORILY RETESTED.

[323] NORTH ANNA 2 DOCKET 50-339 LER 83-075
 STOP VALVE - GENERATOR TRIP LOGIC FAILS.
 EVENT DATE: 111283 REPORT DATE: 113083 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187423) ON NOV. 12, 1983, DURING MODE 1 OPERATION, THE SOLID STATE PROTECTION SYSTEM TRAIN A "STOP VALVE-GENERATOR TRIP" LOGIC FAILED TO MEET THE ACCEPTANCE CRITERIA OF 2-PT-36.1A. THE LOGIC WAS RESTORED WITHIN THE REQUIREMENTS OF THE TECH SPEC 3.3.1.1 ACTION STATEMENT. THIS ITEM IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9. THE LOGIC FAILURE WAS TRACED TO A FAULTY UNIVERSAL CARD (A404). THE CARD WAS REPLACED AND THE LOGIC CHANNEL RETURNED TO SERVICE AFTER CALIBRATION.

[324] NORTH ANNA 2 DOCKET 50-339 LER 83-076
 CONTAINMENT PERSONNEL HATCH NOT TESTED.
 EVENT DATE: 112183 REPORT DATE: 121483 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN

(NSIC 187860) ON NOV. 21, 1983, WITH UNIT 2 AT 100 PERCENT POWER, IT WAS DISCOVERED THAT THE LEAKAGE SURVEILLANCE TEST ON THE CONTAINMENT PERSONNEL HATCH AIR LOCK REQUIRED BY TECH SPEC 4.6.1.3.B WAS NOT PERFORMED WITHIN THE ALLOWABLE 6 MONTH TIME INTERVAL. THE LEAKAGE TEST WAS PERFORMED SATISFACTORILY WITHIN 24 HOURS. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 3.6.1.3 AND TECH SPEC 6.9.1.9.B. THE SURVEILLANCE TEST WAS SCHEDULED BY THE ENGINEERING DEPARTMENT AS BEING DUE BY NOV. 20, 1983. THE LAST DAY OF THE 6 MONTH INTERVAL. HOWEVER AS A RESULT OF PERSONNEL ERROR, THE TEST SCHEDULE POSTED IN THE CONTROL ROOM DID NOT INCLUDE THIS SURVEILLANCE TEST. THE ERROR WAS DISCOVERED ON NOV. 21, 1983, AND THE TEST WAS PERFORMED SATISFACTORILY ON NOV. 22, 1983.

[325] NORTH ANNA 2 DOCKET 50 339 LER 83-078
 OUTER CONTAINMENT DOOR LEAKS.
 EVENT DATE: 112283 REPORT DATE: 121483 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 187861) ON NOV. 22, 1983, WITH UNIT 2 AT 100 PERCENT POWER, WHILE PERFORMING A LEAK TEST ON THE EQUIPMENT HATCH ESCAPE LOCK, IT WAS DETERMINED THAT THE OUTER DOOR HAD AN UNACCEPTABLE LEAK RATE. THE INNER DOOR WAS PROPERLY SEALED. THIS EVENT IS CONTRARY TO TECH SPEC 3.6.1.3 AND REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9.B. THERE ARE NO GENERIC IMPLICATIONS ASSOCIATED WITH THE EVENT. THE SEAL GREASE HAD DRIED OUT ENOUGH TO PREVENT THE DOOR FROM SEALING PROPERLY AFTER IT HAD BEEN USED TO PERFORM SURVEILLANCE TESTING FOR TECH SPEC

4.6.1.3.B. AFTER THE DOOR SEALS WERE LUBRICATED AND THE DOOR HINGE ADJUSTED, THE LEAK RATE WAS REDUCED TO WITHIN ACCEPTABLE TECH SPEC LIMITS.

[326] OCONEE 1 DOCKET 50-269 LER 83-000S
STANDBY BUS DEENERGIZED.
EVENT DATE: 101683 REPORT DATE: 110183 NSSS: BW TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: TRANSFORMERS

(NSIC 187649) ON OCTOBER 15 AND 16, 1983, WITH KEOWEE UNIT 1 OUT OF SERVICE FOR PLANNED MAINTENANCE AND KEOWEE UNIT 2 AVAILABLE, LEE "6C" GAS TURBINE WAS BEING USED TO ENERGIZE BOTH OCONEE 4160V STANDBY BUSES AS REQUIRED BY TECH SPEC 3.7.4. AT 1449 AND 2156 HOURS ON OCTOBER 15, AND 0545 HOURS ON OCTOBER 16, STANDBY BUS 2 WAS DEENERGIZED TO ALLOW OPERABILITY VERIFICATION OF THE UNDERGROUND EMERGENCY POWER PATH IN ACCORDANCE WITH TECH SPEC 3.7.2. AT 1349 HOURS ON OCTOBER 15, 1983, CT-3 (UNIT 3 STARTUP TRANSFORMER) UNDERWENT A LOCKOUT. THE APPARENT CAUSE OF THE LOCKOUT WAS BAD INSULATORS IN A LOCATION WHICH MADE BOTH CT-3 AND AN ALTERNATE STARTUP TRANSFORMER UNAVAILABLE TO SUPPLY POWER TO THE UNIT 3 MAIN FEEDER BUSES.

[327] OCONEE 1 DOCKET 50-269 LER 83-000S
BOTH STANDBY BUSES DEENERGIZED.
EVENT DATE: 102883 REPORT DATE: 110283 NSSS: BW TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: TURBINES

(NSIC 187648) GAS TURBINE TRIP. WITH KEOWEE UNIT 1 OUT OF SERVICE FOR PLANNED MAINTENANCE AND KEOWEE UNIT 2 AVAILABLE, LEE "6C" GAS TURBINE WAS BEING USED TO ENERGIZE BOTH OCONEE 4160V STANDBY BUSES AS REQUIRED BY TECH SPEC 3.7.4. LEE "6C" TRIPPED OFF LINE AT 1750 HOURS THEREBY DEENERGIZING BOTH STANDBY BUSES AND PLACING THE TWO OPERATING OCONEE UNITS IN A DEGRADED MODE BEYOND THAT ALLOWED BY TECH SPEC 3.7.4.A. A SAFETY EVALUATION WAS PERFORMED PURSUANT TO TECH SPEC 3.7.9 AND THE DECISION WAS MADE THAT CONTINUED OPERATION OF THE UNITS WAS ALLOWED SINCE POWER FROM A LEE GAS TURBINE WOULD BE REGAINED IN A SHORT PERIOD OF TIME. LEE "5C" GAS TURBINE WAS PLACED ON LINE TO THE SYSTEM GRID AT 1801 HOURS, LEE "6C" GAS TURBINE WAS RESTARTED AND THE STANDBY BUSES WERE REENERGIZED. AT 1809 HOURS, THE TOTAL TIME THE STANDBY BUSES WERE UNAVAILABLE WAS 19 MINUTES. THE EXACT CAUSE OF THE LEE "6C" GAS TURBINE TRIP CANNOT BE DETERMINED AT THIS TIME.

[328] OCONEE 3 DOCKET 50-287 LER 83-011
EMERGENCY FEEDWATER PUMP REMOVED FROM SERVICE.
EVENT DATE: 101383 REPORT DATE: 111183 NSSS: BW TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVE OPERATORS
VENDOR: VALCOR ENGINEERING CORP.

(NSIC 187415) ON 10/13/83, IT WAS DISCOVERED THAT THERE WAS NO LOW PRESSURE SERVICE WATER FLOWING THROUGH THE OPERATING "3B" MDEFDPW PUMP. THE PUMP WAS SHUT DOWN AND DECLARED INOPERABLE. WHILE THE PUMP WAS INOPERABLE, THE MAIN FEEDWATER SYSTEM, THE "3A" MDEFDPW, AND THE TDEFDPW, AND EMERGENCY FEEDWATER FROM UNIT 1 WERE AVAILABLE. THE CAUSE OF THIS OCCURRENCE WAS COMPONENT FAILURE. THE PLUNGER TO VALVE OPERATOR 3SV-203 WAS STUCK, CAUSING THE MOTOR COOLER OUTLET VALVE NOT TO OPEN TO PROVIDE SERVICE WATER. THE FAILED VALVE WAS REPLACED AND TESTED. THE MOTOR COOLER FLOW COMPUTER POINTS WILL BE CHANGED TO PROVIDE AN ALARM IF FLOW IS LOW WHILE THE PUMP IS RUNNING.

[329] OYSTER CREEK DOCKET 50-219 LER 83-007 REV 1
UPDATE ON INOPERABLE STANDBY GAS TREATMENT TRAIN.
EVENT DATE: 041883 REPORT DATE: 111783 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT AIR PURI & CLEANUP SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

VENDOR: CAMBRIDGE FILTER CORP.

(NSIC 187761) DURING THE MONTHLY 10 HOUR OPERABILITY TEST OF STANDBY GAS TREATMENT SYSTEM (SGTS) II, A HIGH DIFFERENTIAL PRESSURE ACROSS BOTH HEPA FILTERS WAS OBSERVED. SGTS II WAS DECLARED INOPERABLE AND SGTS I WAS TESTED SATISFACTORILY. SAFETY SIGNIFICANCE IS MINIMAL AS THE REDUNDANT SYSTEM REMAINED FULLY OPERABLE. OPERATION IN DEGRADED MODE PER LCO IN TECH SPEC SECTION 3.5.B.3.B. REPORTABLE PER TECH SPEC 6.9.2.B.2. CAUSE WAS A LACK OF POST MAINTENANCE TESTING FOLLOWING CORRECTIVE MAINTENANCE ON THE SGTS FLOW SENSING PITOT TUBE. SGTS II HAS BEEN RETURNED TO SERVICE FOLLOWING SUCCESSFUL COMPLETION OF DOP TESTING, SGTS SURVEILLANCE PROCEDURES HAVE BEEN REVISED TO REFLECT PROPER FLOW CURVES FOR POSITION OF PITOT TUBE. NONCONTROLLED CURVE REMOVED FROM CONTROL ROOM.

[330] OYSTER CREEK DOCKET 50-219 LER 83-018
 REACTOR BUILDING VENTILATION ISOLATION VALVE FAILS TO CLOSE.
 EVENT DATE: 092203 REPORT DATE: 111883 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: NAMCO CONTROLS

(NSIC 187492) REACTOR BUILDING VENTILATION ISOLATION VALVE V-28-12 FAILED TO CLOSE WHEN ITS PILOT SOLENOID WAS DE-ENERGIZED. ALSO, A FAILED "CLOSE" POSITION SWITCH CAUSED FALSE CLOSURE INDICATION FOR V-28-12. SAFETY SIGNIFICANCE WAS MINIMAL AS REDUNDANT VALVE WAS OPERABLE. EVENT CONSTITUTES DEGRADATION OF SECONDARY CONTAINMENT INTEGRITY AS DEFINED IN THE TECH SPEC SECTION 1.14.C AND AS REQUIRED BY TECH SPEC 3.5.B.1. EVENT IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.2.B.2. FAILURE OF V-28-12 TO CLOSE WAS CAUSED BY SOLID DIRT BLOCKAGE OF THE AIR OPERATING CYLINDER CLOSURE PORT. A FAILED POSITION SWITCH CAUSED FALSE POSITION INDICATION. AIR OPERATOR WAS CLEANED, TESTED AND PUT BACK IN SERVICE. REPLACEMENT POSITION SWITCH HAS BEEN ORDERED. ALL POSITION SWITCHES IN SYSTEM WERE CHECKED. ALL AIR OPERATORS WILL BE INSPECTED.

[331] OYSTER CREEK DOCKET 50-219 LER 83-021
 LOSS OF MAIN BUS AND EMERGENCY BUSES.
 EVENT DATE: 101283 REPORT DATE: 111183 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ELECTRICAL CONDUCTORS
 VENDOR: ANACONDA WIRE AND CABLE CO.

(NSIC 187493) LOSS OF MAIN BUS 1A AND EMERGENCY BUS 1C RENDERED ONE STANDBY GAS TREATMENT SYSTEM TRAIN INOPERABLE. ALSO, STACK GAS SAMPLING CAPABILITY WAS LOST FOR APPROX. 3 HOURS AS A PUMP SHUT DOWN DUE TO LOSS OF POWER AND B PUMP TRIPPED DURING START ATTEMPT. SAFETY SIGNIFICANCE MINIMAL DUE TO PLANT CONDITIONS: REDUNDANT SGTS TRAIN OPERABLE, REACTOR SHUTDOWN, DEFUELED AND NO REFUELING WORK PERFORMED. LCOS PROVIDED BY TECH SPEC 3.5.B.3.B AND 3.6.A.3. REPORTABLE PER TECH SPEC 6.9.2.B.2. FAILURE OF POWER FEED FROM EMERGENCY DIESEL GENERATOR NO. 1 CAUSED LOSS OF MAIN BUS 1A AND EMERGENCY BUS 1C. B STACK GAS SAMPLE PUMP TRIP IS STILL UNDER INVESTIGATION. STACK GAS SAMPLE PUMP A WAS RESTARTED UPON RESTORATION OF POWER. FAILED CABLE WILL BE REPLACED. US2T TIEBREAKER WAS USED TO CONNECT UNIT SUBSTATION 1A2 TO RESTORE POWER.

[332] PALISADES DOCKET 50-255 LER 83-070
 NO OVERPRESSURE PROTECTION AVAILABLE FOR RCS.
 EVENT DATE: 081383 REPORT DATE: 112283 NSSS: CE TYPE: PWR
 SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187082) CONTRARY TO TECH SPEC 3.1.8, WITH SHUTDOWN COOLING SYSTEM (SCS) ISOLATION VALVES MOV-3015 AND MOV-3016 OPEN, NO OVERPRESSURE PROTECTION WAS PROVIDED. THE TWO PORV'S WHICH NORMALLY PROVIDE LOW TEMPERATURE OVERPRESSURE

PROTECTION (LTOP) DO NOT PROVIDE RELIEF WHEN COLD LEG TEMPERATURES ARE ABOVE 260 F. SINCE MOV-3015 AND MOV-3016 WERE OPENED AT APPROXIMATELY 325 F, THERE WAS NO OVERPRESSURE PROTECTION AT TEMPERATURES BETWEEN 325 F AND 260 F. REPORTABILITY PER TECH SPEFC 6.9.2.B(2) DETERMINED ON OCTOBER 24, 1983. CAUSE ATTRIBUTED TO PROCEDURAL INADEQUACY. OPERATING PROCEDURES DO NOT ADEQUATELY IMPLEMENT TECH SPEC AMENDMENT NO. 72 (DEC 21, 1982). THE LTOP SYSTEM WILL BE EVALUATED AND MODIFIED AS NECESSARY TO ALLOW PORV OPENING WHENEVER MOV 3015/3016 ARE OPEN. THE METHOD OF IMPLEMENTING TECH SPEC CHANGES WILL BE REVISED TO ENSURE ADEQUATE TECHNICAL AND OPERATIONAL REVIEW PRIOR TO IMPLEMENTATION.

[333] PALISADES DOCKET 50-255 LER 83-064
PRESSURIZER RELIEF VALVE OUT OF CALIBRATION.
EVENT DATE: 091683 REPORT DATE: 101783 NSSS: CE TYPE: PWR
SYSTEM: OTHER SYSTEMS COMPONENT: VALVES
VENDOR: CORSBY VALVE & GAGE CO.

(NSIC 186146) DURING A ROUTINE SURVEILLANCE TEST, THE AS-FOUND LIFT PRESSURE OF PRESSURIZED RELIEF VALVE RV-1039 WAS DETERMINED TO BE 2680 PSIG, WHICH EXCEEDS THE TEST ACCEPTANCE CRITERIA RANGE OF 2539 PSIG TO 2591 PSIG. IT IS BELIEVED THAT PLANT OPERATION WOULD NOT HAVE BEEN ADVERSELY AFFECTED AS A RESULT OF THE CONDITION, HOWEVER, INVESTIGATION IS CONTINUING. CONDITION REPORTABLE PER TECH SPEC 6.9.2.B(1). THE PLANT IS SHUTDOWN FOR REFUELING. CAUSE IS UNKNOWN, HOWEVER, THE CONDITION IS BELIEVED TO HAVE RESULTED FROM EITHER A SMALL CHANGE IN THE RELIEF VALVE'S SPRING CONSTANT OR A SLIGHT BINDING CONDITION. THE VALVE LIFT SETTING HAS BEEN ADJUSTED TO THE APPROPRIATE VALUE. SUBSEQUENTLY, THE VALVE HAS BEEN REPEATEDLY TESTED WITH CONSISTENTLY ACCEPTABLE RESULTS.

[334] PALISADES DOCKET 50-255 LER 83-071
REACTOR CAVITY BORON CONCENTRATION LOWER THAN LIMIT.
EVENT DATE: 092883 REPORT DATE: 112383 NSSS: CE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187768) DURING A RECENT REVIEW OF TECH SPECS, IT WAS DETERMINED THAT THE REQUIREMENTS FOR CONTAINMENT INTEGRITY PER TECH SPEC 3.6.1.B HAD NOT BEEN MET. ON SEPTEMBER 28, 1983 WITH THE REACTOR HEAD REMOVED, THE REACTOR CAVITY BORON CONCENTRATION BECAME LESS THAN REFUELING CONCENTRATION, WHILE VARIOUS PENETRATIONS WERE OPEN. THE REACTOR WAS COMPLETELY DE-FUELED AT THE TIME OF THE OCCURRENCE. THE BASIS FOR MAINTAINING A REFUELING BORON CONCENTRATION PER TECH SPEC 3.6.1(B) IS TO PREVENT CRITICALITY UNDER ANY CIRCUMSTANCES. SINCE ALL FUEL HAD BEEN REMOVED FROM THE REACTOR VESSEL, BORON CONCENTRATION AND CONTAINMENT INTEGRITY WERE NO LONGER CONSIDERED ITEMS OF CONCERN. IN THE FUTURE, TECH SPEC 3.6.1.(B) WILL BE INTERPRETED TO APPLY ONLY WHEN FUEL IS IN THE REACTOR.

[335] PALISADES DOCKET 50-255 LER 83-066
PENETRATIONS LEAK EXCESSIVELY.
EVENT DATE: 100583 REPORT DATE: 110383 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 186789) DURING PERFORMANCE OF LOCAL LEAK RATE TESTING OF CONTAINMENT PENETRATIONS, TOTAL "AS FOUND" LEAKAGE FROM PENETRATIONS AND ISOLATION VALVES EXCEEDED 0.60 LA. MAJOR CONTRIBUTORS TO THE EXCESSIVE LEAKAGE WERE THE NORTH SECONDARY MANWAYS ON BOTH A AND B STEAM GENERATORS, THE SOUTH ELECTRICAL PENETRATION, AND THE PERSONNEL AIR LOCK. REPORTABLE PER TECH SPEC 4.5.2(B) AND 6.9.2.B(2). PLANT IS SHUTDOWN FOR REFUELING. CAUSE PRIMARILY ATTRIBUTED TO DEGRADATION OF SEALS/GASKETS ON THE PENETRATION BOUNDARIES. THE CAUSE OF THE LEAKAGE FROM THE SOUTH ELECTRICAL PENETRATION IS STILL BEING EVALUATED. THE SEALING SURFACE OF THE S/G SECONDARY MANWAYS WILL BE INSPECTED AND REPAIRED AS

NECESSARY WITH REPLACEMENT OF DEGRADED GASKETS. THE PERSONNEL AIR LOCK SEALS WILL ALSO BE REPLACED.

[336] PALISADES DOCKET 50-255 LER 83-067
SAFETY INJECTION TANK FILL AND DRAIN PIPE DESIGN FOUND DEFICIENT.
EVENT DATE: 102483 REPORT DATE: 110383 NSSS: CE TYPE: PWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186790) ANALYSIS PERFORMED BY THE A/E (BECHTEL) HAS RESULTED IN THE DISCOVERY OF A DESIGN DEFICIENCY IN THE SUPPORT CONFIGURATION FOR THE ONE-HIGH DIAMETER FILL AND DRAIN PIPING TO T-82D (D SAFETY INJECTION TANK). THE SUPPORT CONFIGURATION FOR THIS RUN OF PIPING DOES NOT PROVIDE ADEQUATE VERTICAL AND LATERAL SUPPORT TO MEET FSAR SEISMIC CRITERIA FOR SSE AND OBE CONDITIONS. REPORTABLE PER TECH SPEC 6.9.2.A(9). PLANT IS SHUTDOWN FOR REFUELING. CAUSE ATTRIBUTED TO A DEFICIENCY IN THE ORIGINAL PLANT DESIGN. SUPPORT CONFIGURATION FOR THIS PIPING WILL BE REDESIGNED/INSTALLED DURING THE CURRENT REFUELING OUTAGE. ADDITIONALLY, EVALUATION OF SIMILAR PIPING ON THE REMAINING SAFETY INJECTION TANKS (T-82A, B, AND C) WILL BE CONDUCTED TO DETERMINE IF THE SAME CONDITION EXISTS. CORRECTIONS WILL BE MADE AS NECESSARY.

[337] PALISADES DOCKET 50-255 LER 83-072
DIESEL GENERATOR RELAYS FOUND NOT SEISMICALLY QUALIFIED.
EVENT DATE: 111583 REPORT DATE: 112983 NSSS: CE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: RELAYS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 187769) THE A/E (BECHTEL) HAS RECENTLY NOTIFIED CONSUMERS POWER COMPANY THAT THE GE HIGH SPEED DIFFERENTIAL RELAYS (MODEL 12CFD12B1A) USED FOR DIFFERENTIAL PROTECTION OF THE PALISADES EMERGENCY DIESEL GENERATORS (D/G) ARE NOT SEISMICALLY QUALIFIED WHEN IN THE DE-ENERGIZED STATE. WITH A D/G OPERATING, THE POTENTIAL EXISTS THAT A SEISMIC EVENT COULD CAUSE SPURIOUS OPERATION OF THE RELAYS RESULTING IN A TRIP OF THE D/G. CONDITION REPORTABLE PER TECH SPEC 6.9.2A(9). CAUSE ATTRIBUTED TO IMPROPER APPLICATION OF THE SUBJECT RELAYS IN THE ORIGINAL PLANT DESIGN. PALISADES PLANS TO REPLACE THE RELAYS WITH SEISMICALLY QUALIFIED RELAYS PRIOR TO RETURNING THE PLANT TO OPERATION FROM THE CURRENT REFUELING OUTAGE. THE D/G OUTPUT BREAKERS IN SWITCHGEAR ROOMS 1-C AND 1-D HAVE BEEN CAUTION TAGGED, IDENTIFYING THE POTENTIAL PROBLEM WITH THE RELAYS.

[338] PALISADES DOCKET 50-255 LER 83-073
TWO FIRE PROTECTION SYSTEM FLOW SWITCHES NOT TESTED AS REQUIRED.
EVENT DATE: 112183 REPORT DATE: 120283 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187509) DURING REVIEW OF THE FIRE PROTECTION SYSTEM AND THE ASSOCIATED TECH SPEC SURVEILLANCE PROCEDURE FOR FIRE DETECTOR INSTRUMENTATION, IT WAS DISCOVERED THAT THE TECH SPEC SURVEILLANCE PROCEDURE (S0-6) TESTS ONLY ONE OF THE THREE WATER FLOW SWITCH DETECTORS REQUIRED BY TECH SPEC TABLE 3.22.1 FOR SWITCHGEAR ROOM 1-D. HOURLY FIRE WATCH TOURS WERE ALREADY BEING MAINTAINED IN THE AREA PER TECH SPEC 3.22.5.1. THE TWO FLOW SWITCHES IN QUESTION WERE SUBSEQUENTLY TESTED AND THEIR OPERABILITY VERIFIED. CONDITION REPORTABLE PER TECH SPEC 3.22.1.1 AND 6.9.2A(6). CAUSE ATTRIBUTED TO PROCEDURAL INADEQUACY RESULTING FROM A MISLEADING STATEMENT IN THE PROCEDURE'S BASIS DOCUMENT WHICH IMPLIES THAT THE TECH SPEC REQUIREMENTS ARE FOR THE ALARM RATHER THAN THE INDIVIDUAL DETECTORS. THE TECH SPEC SURVEILLANCE PROCEDURE (S0-6) WILL BE REVISED TO INCORPORATE THE OMITTED REQUIREMENTS OF TECH SPEC TABLE 3.22.1. (S0-6) WILL BE RE-PERFORMED PRIOR TO START-UP.

[339] PEACH BOTTOM 2 DOCKET 50-277 LER 83-014
 EMERGENCY SWITCHGEAR SUPPLY VENT DUCT FIRE DAMPER NOT INSTALLED.
 EVENT DATE: 081283 REPORT DATE: 091483 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VALVES
 VENDOR: AIR BALANCE, INC.

(NSIC 186152) DURING VISUAL INSPECTIONS, THE CONTROL ROOM FIRE BARRIER WAS DISCOVERED WITHOUT A FIRE DAMPER IN ONE OF THE VENTILATION DUCT PENETRATIONS. INSPECTION OF DAMPERS IN FIRE BARRIERS WAS FIRST SPECIFIED IN A RECENT TECH SPEC. DURING THE FIRST VISUAL INSPECTION REQUIRED BY THE NEW SURVEILLANCE REQUIREMENT, IT WAS OBSERVED THAT AN INSPECTION OF THIS DUCT WAS PRECLUDED BY A LACK OF AN ACCESS DOOR. AN ACCESS DOOR WAS INSTALLED AND THE DEFICIENCY WAS IDENTIFIED. A FIRE WATCH WAS POSTED ON ONE SIDE OF THE BARRIERS. THE DAMPER WAS NOT INCORPORATED INTO THE ORIGINAL INSTALLATION OF THE VENTILATION SYSTEM. A NEW DAMPER IS ON ORDER AND ITS EXPECTED DELIVERY IS 9/23/83. THE FIREWATCH WILL REMAIN UNTIL THE DAMPER IS INSTALLED.

[340] PEACH BOTTOM 2 DOCKET 50-277 LER 83-021
 TURBOCHARGER FAILURE CAUSES FIRE IN DIESEL EXHAUST.
 EVENT DATE: 090783 REPORT DATE: 100783 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: ENGINES, INTERNAL COMBUSTION
 VENDOR: ELLIOTT CO.

(NSIC 186796) DURING SURVEILLANCE TESTING OF E-3 DIESEL, OPERATORS NOTED OUTPUT POWER WAS SWINGING AND EXHAUST TEMPERATURE WAS HIGH. INVESTIGATION REVEALED THAT THERE WAS A FIRE IN THE EXHAUST. REMAINING THREE DIESELS WERE OPERABLE. ONE UNIT WAS SHUTDOWN AND SECOND UNIT WAS AT LOW REACTOR POWER STARTING UP FROM EXTENDED MAINTENANCE OUTAGE. TECH SPEC 3.5.F.1 REQUIRES THAT ALL DIESELS BE OPERABLE DURING UNIT OPERATION OR SHUTDOWN BE INITIATED WITHIN SEVEN DAYS. IT WAS DETERMINED THAT ONE ELLIOTT TURBOCHARGER HAD FAILED CAUSING A POWER REDUCTION. THE GOVERNOR INCREASED THE FUEL FLOW AS A RESULT. EXCESS FUEL IGNITED IN THE EXHAUST. ONE BOLT OF STATIONARY BLADE HAD BACKED OUT AND REMAINING THREE BOLTS WERE SHEARED OFF. STATIONARY BLADING CONTACTED TURBINES. TURBOCHARGER WAS REPLACED AND FAILED PIECES ARE BEING ANALYZED.

[341] PEACH BOTTOM 2 DOCKET 50-277 LER 83-022
 INSTALLATION ERROR IN 4 AUTOMATIC SPRINKLER TRAINS.
 EVENT DATE: 090783 REPORT DATE: 101183 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
 VENDOR: GRINNELL FIRE PROTECTION

(NSIC 186797) DURING SURVEILLANCE TESTING, THE UNIT 3 RECIRCULATION M-G SET ROOM AND RECIRCULATION M-G SET LUBE OIL PUMP ROOM SPRINKLER SYSTEMS DID NOT AUTOMATICALLY ACTUATE BECAUSE THE SPRINKLER SYSTEM ACTUATING SOLENOID COILS FAILED TO ENERGIZE. FIREWATCHES WERE POSTED PER TECH SPEC 3.14.E.1. THE MANUAL ACTUATION OF EACH SYSTEM WAS TESTED AND FOUND OPERABLE. THE SAME TWO SPRINKLER SYSTEMS ON UNIT 2 WERE CHECKED AND FOUND TO HAVE THE IDENTICAL PROBLEM. INVESTIGATION OF EVENT DISCOVERED FAILED COIL TO BE AC (DESIGN REQUIRES DC COIL). THE FAILED AC COIL HAD PASSED PRE-OP TEST WHEN INSTALLED. PROPER DC COILS WERE INSTALLED, FUNCTIONALLY TESTED AND RETURNED TO SERVICE 9/23 (UNIT ?) AND 9/28 (UNIT 2). ALL OTHER SPRINKLER SYSTEMS ACTIVATED BY SOLENOID VALVES ARE BEING EXAMINED FOR SIMILAR CONDITION.

[342] PEACH BOTTOM 2 DOCKET 50-277 LER 83-023
 CONTAINMENT ISOLATION VALVE LEAKS.
 EVENT DATE: 110883 REPORT DATE: 112383 NSSS: GE TYPE: BWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES

(NSIC 187515) WITH UNIT 2 SHUTDOWN FROM MAINTENANCE SINCE JULY 4, 1983, SURVEILLANCE TESTING INDICATED THAT THE COMBINED LEAKAGE FROM TYPE B AND C TESTS EXCEEDED THE 10 CFR 50, APPENDIX J, SECTION III.C.3 LIMIT OF 0.61A. INBOARD CONTAINMENT ISOLATION VALVE MO-2-74 FAILED TO PASS A LOCAL LEAK RATE TEST. REDUNDANT ISOLATION VALVE MO-2-77 WAS REMOVED FROM SERVICE FOR MAINTENANCE AND HAD NOT YET BEEN TESTED FOR LEAK RATE AT THE TIME OF THE EVENT. FOLLOWING MAINTENANCE, THE MO-2-77 VALVE WAS TESTED AND HAD AN ACCEPTABLE LEAK RATE. CAUSE WAS DUE TO ABNORMAL WEAR OF VALVE INTERNALS. VALVE INTERNALS OF THE MO-2-74 VALVE WERE REPLACED AND THE VALVE WAS RETESTED WITH AN ACCEPTABLE LEAK RATE. A 30-DAY FOLLOW-UP REPORT WILL BE SUBMITTED FOLLOWING COMPLETION OF TYPE B AND C TESTING.

[343] PEACH BOTTOM 3 DOCKET 50-278 LER 83-015
HPCI DECLARED INOPERABLE.
EVENT DATE: 101383 REPORT DATE: 111083 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVES
VENDOR: SAGE ENGINEERING & VALVE COMPANY

(NSIC 187413) DURING TESTING OF THE HPCI SYSTEM FOLLOWING MODIFICATIONS, BOTH HPCI TURBINE EXHAUST RUPTURE DISCS FAILED DUE TO HIGH PRESSURE. HPCI WAS DECLARED INOPERABLE TO REPLACE THE RUPTURE DISCS AND TESTING OF BACKUP SYSTEMS WAS PERFORMED IN ACCORDANCE WITH TECH SPEC 4.5.C.2. PREVIOUS SIMILAR OCCURRENCE: LER 3-82-23/3L. WATER IN THE EXHAUST LINE DURING TURBINE START CAUSED INCREASED BACKPRESSURE RESULTING IN DISC FAILURE. DISCS WERE REPLACED, HPCI WAS TESTED AND DECLARED OPERABLE WITHIN 24 HRS. ENGINEERING DEPT. IS INVESTIGATING THE OCCURRENCE AND WILL INITIATE MODIFICATIONS TO PREVENT RECURRENCE. UNTIL MODIFICATIONS ARE COMPLETE, THE EXHAUST LINE WILL BE PERIODICALLY DRAINED.

[344] PEACH BOTTOM 3 DOCKET 50-278 LER 83-017
OFF-GAS RADIATION MONITORING SYSTEM DECLARED INOPERABLE.
EVENT DATE: 102083 REPORT DATE: 111883 NSSS: GE TYPE: BWR
SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187529) DURING POST-REFUELING OUTAGE STARTUP WITH THE UNIT AT LOW POWER, THE OFF-GAS RADIATION MONITORING SYSTEM WAS FOUND TO BE INOPERABLE WHILE PERFORMING SURVEILLANCE TESTING. INVESTIGATION REVEALED WATER IN THE MONITOR SAMPLE LINES. TEMPORARY RADIATION MONITORS WERE PLACED IN SERVICE AND RADIATION MEASUREMENTS WERE TAKEN ONCE PER HOUR. APPLICABLE TECH SPEC IS 3.2.D.1.C. CAUSE OF THE EVENT WAS DUE TO CONDENSATION IN THE OFF-GAS SAMPLE LINES FOLLOWING A REACTOR SCRAM AT LOW POWER. REACTOR STARTUP CONTINUED WITH THE TEMPORARY MONITORS REMAINING IN SERVICE UNTIL CONDENSER VACUUM WITHDREW THE WATER FROM THE SAMPLE LINES. THE MONITORS WERE TESTED FOR OPERABILITY AND RETURNED TO SERVICE.

[345] PEACH BOTTOM 3 DOCKET 50-278 LER 83-019
TWO FANS IN ONE CORE SPRAY PUMP ROOM FAIL TO START.
EVENT DATE: 103183 REPORT DATE: 113083 NSSS: GE TYPE: BWR
SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

(NSIC 187728) DURING NORMAL OPERATION, WHILE PERFORMING A SURVEILLANCE TEST OF THE UNIT 3 'D' CORE SPRAY PUMP ROOM, "G" AND "H" COOLING FANS FAILED TO AUTOMATICALLY START. THE 'D' CORE SPRAY PUMP WAS DECLARED INOPERABLE PER TECH SPEC 3.5.H. INVESTIGATION DISCOVERED THE CAUSE OF THE FAILURE TO BE A BLOWN 6-AMP FUSE WITHIN THE AUXILIARY CONTROL CIRCUITRY. THE FUSE WAS REPLACED, THE SURVEILLANCE TEST COMPLETED SATISFACTORILY AND THE CORE SPRAY PUMP RETURNED TO SERVICE WITHIN 1/2 HOUR. EACH OF THE OTHER UNIT 3 CORE SPRAY COOLING FANS PASSED SURVEILLANCE TESTING.

[346] PILGRIM 1 DOCKET 50-293 LER 83-036
 CONTROL ROD UNCOUPLES.
 EVENT DATE: 061683 REPORT DATE: 071483 NSSS: GE TYPE: BWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL RODS

(NSIC 184097) ON 6/16/83, DURING A STARTUP FROM COLD SHUTDOWN, AN OVERTRAVEL ALARM WAS RECEIVED DURING A ROUTINE COUPLING CHECK FOR CONTROL ROD 30-51 INDICATING A POSSIBLE UNCOUPLED ROD. TECH SPEC 3.3.B REQUIRES ALL CONTROL RODS BE COUPLED (TO ASSURE BLADE MOVEMENT WITH THE DRIVE.) THIS TYPE EVENT IS ANALYZED IN FSAR SEC. 4.7.1. LER 77-27 ALSO REPORTED AN UNCOUPLED ROD (#46-39). NO ROOT CAUSE CAN BE DETERMINED AT THIS TIME. PROCEDURE 2.4.2 WAS IMMEDIATELY USED TO "RECOUPLE" AND VERIFY THE DRIVE POSITION. STATION PROCEDURES ARE CONSIDERED ADEQUATE TO ASSURE CONTROL ROD DRIVE STATUS AND THE SUBJECT DRIVE WILL BE MONITORED FOR ANY FUTURE OVERTRAVEL INDICATIONS.

[347] PILGRIM 1 DOCKET 50-293 LER 83-037
 FIRE DOOR FAILS TO LATCH.
 EVENT DATE: 061783 REPORT DATE: 071483 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 184098) ON 6/17/83, FIRE DOOR #64 BETWEEN THE EMERGENCY DIESEL GENERATOR AIR COMPRESSOR ROOMS WAS NOT CAPABLE OF BEING LATCHED PROPERLY, AS REQUIRED BY TECH SPEC 3.12.F. A FIRE PATROL WAS INITIATED AND A MAINTENANCE REQUEST SUBMITTED. LER 81-035 REPORTED A SIMILAR EVENT. THE SUBJECT DOOR OF THE 1981 LER HAS SINCE BEEN REPLACED WITH A NEW DESIGN SUPPLIED BY CONSTRUCTION SPECIALTIES CO., INC. THE DOOR LATCH WAS FOUND TO REQUIRE AN ADJUSTMENT TO ALLOW PROPER CLOSURE AND LATCHING. TO MAINTAIN THE 3 HOUR RATING OF THIS DOOR, THE ADJUSTMENT PRESENTLY MUST BE MADE BY THE VENDOR. THE FIRE PATROL WILL BE MAINTAINED UNTIL ADJUSTMENT IS MADE.

[348] PILGRIM 1 DOCKET 50-293 LER 83-051 REV 1
 UPDATE ON INOPERABLE DRYWELL LEAK DETECTION SYSTEM.
 EVENT DATE: 091683 REPORT DATE: 103183 NSSS: GE TYPE: BWR
 SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: NUCLEAR MEASUREMENTS CORP.

(NSIC 187843) ON 9/16/83, DURING STEADY STATE OPERATIONS, THE DRYWELL AIRBORNE LEAK DETECTION SYSTEM (C-19) WAS FOUND TO BE INOPERABLE. A LOW FLOW IN THE PARTICULATE SYSTEM WAS TRACED TO A WATER CLOGGED FILTER AND A SMALL LEAK IN THE SENSING LINE INSIDE THE C-19 MONITOR. THE FILTER WAS CHANGED, THE LEAK REPAIRED AND THE HEAT TRACING ADJUSTED TO ALLOW MORE EFFECTIVE CONDENSATE PREVENTION. THE SYSTEM WAS RETURNED TO SERVICE THE SAME DAY.

[349] PILGRIM 1 DOCKET 50-293 LER 83-056
 FIRE DOOR HAS WRONG NUMBER.
 EVENT DATE: 102183 REPORT DATE: 111883 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: OTHER COMPONENTS
 VENDOR: RICHARDS WILCOX DIVISION

(NSIC 187536) DURING STEADY STATE OPERATION, ON OCTOBER 21, 1983, IT WAS FOUND THAT A SLIDING FIRE DOOR DID NOT HAVE THE PROPER NUMBER (1 AS-BUILT VS. 2 REQUIRED) OF BINDERS AS REQUIRED BY NFPA STANDARD #80. A FIRE PATROL HAS BEEN ESTABLISHED PER TECH SPEC 3.12.F. CAUSE WAS DETERMINED TO BE AN INSTALLATION OVERSIGHT. ENGINEERING HAS ORDERED A SECOND BINDER WHICH WILL BE INSTALLED TO BRING THE DOOR INTO CONFORMANCE WITH NFPA STANDARD #80. THE SLIDING FIRE DOOR IS THE ONLY ONE OF THIS DESIGN WITHIN THE STATION. THIS EVENT WAS AN ISOLATED INCIDENT.

[350] POINT BEACH 1 DOCKET 50-266 LER 83-004
 CIRCUIT BREAKER INADVERTENTLY OPENED.
 EVENT DATE: 062183 REPORT DATE: 071883 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 184754) DURING NORMAL OPERATION THE BREAKER WHICH SERVES MOV-826B WAS FOUND TO BE OPEN. THE REDUNDANT VALVE MOV-826C WAS NOT TESTED FOR OPERABILITY PRIOR TO THE DISABLING OF MOV-826B WHICH CONSTITUTES A VIOLATION OF TECH SPEC 15.3.3.A.2.C. MOV-826B #C# ARE ISOLATION VALVES WHICH ARE LOCATED BETWEEN THE SI PUMPS AND THE BORIC ACID STORAGE TANK. REFERENCE PREVIOUS TYPE EVENT LER NO. 77-001, UNIT 2. AN INVESTIGATION OF THE EVENT HAS BEEN PERFORMED AND NO EXPLANATION HAS BEEN FOUND. THE MOST PROBABLE CAUSE IS BELIEVED TO BE AN ACCIDENTAL OPENING OF THE BREAKER BY PERSONNEL. THE BREAKER WAS CLOSED AS SOON AS IT WAS FOUND TO BE OPEN. SUBSEQUENT TESTING PROVED ALL VALVES FUNCTIONED PROPERLY.

[351] POINT BEACH 1 DOCKET 50-266 LER 83-011
 LOSS OF OVERCURRENT PROTECTION FOR SI PUMP MOTOR.
 EVENT DATE: 102783 REPORT DATE: 112383 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: ELECTRICAL CONDUCTORS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187409) WITH THE UNIT IN COLD SHUTDOWN AN INSPECTION OF THE 4160 V AC BREAKER FOR SAFETY INJECTION (SI) PUMP 1P15B WAS PERFORMED. A WIRE IN THE 86 LOCKOUT RELAY CIRCUIT WAS FOUND LOOSE. WITH THE CIRCUIT OPEN, THE ELECTRICAL PROTECTION FOR THE PUMP MOTOR WAS DISABLED. THIS EVENT IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 15.6.9.2.B.2. THE WIRE WAS APPARENTLY ACCIDENTALLY PULLED LOOSE DURING THE COURSE OF AN INSPECTION. IT CANNOT BE DETERMINED IF THIS OCCURRED DURING THIS INSPECTION OR THE PRIOR REFUELING OUTAGE. CORRECTIVE ACTION CONSISTED OF RECONNECTING THE LOOSE WIRE AND TYING THE WIRE BUNDLE DOWN MORE SECURELY. ALL OTHER BREAKERS WILL BE INSPECTED FOR THIS PROBLEM.

[352] PRAIRIE ISLAND 1 DOCKET 50-282 LER 83-030
 DG SERVICE WATER PUMP INOPERABLE.
 EVENT DATE: 110483 REPORT DATE: 120283 NSSS: WE TYPE: PWR
 SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187524) DURING POWER OPERATION, A CONTROL ROOM ANNUNCIATOR ON NO. 22 DIESEL COOLING WATER PUMP WAS ACTUATED AS A RESULT OF A FALSE SIGNAL IN A CONTROL CABLE WHICH SHOWED THE ENGINE WAS RUNNING WHEN IN FACT IT WAS NOT. THE ENGINE RUNNING SIGNAL BLOCKS ALL START SIGNALS, SO THE PUMP WAS INOPERABLE FOR A SHORT TIME. TECH SPEC 3.3.D APPLIES. REDUNDANT EQUIPMENT WAS OPERABLE. CAUSE IS UNKNOWN AT THIS TIME; INVESTIGATION IS STILL IN PROGRESS. OPERATORS INVESTIGATED THE CAUSE OF THE ANNUNCIATOR, FOUND THE PROBLEM AND RETURNED THE PUMP TO AN OPERABLE STATUS IN A FEW MINUTES. A GROUND WAS LATER REMOVED FROM A CONTROL CABLE SHIELD. A FOLLOWUP REPORT WILL BE ISSUED.

[353] PRAIRIE ISLAND 1 DOCKET 50-282 LER 83-029
 OFFSITE POWER TIE BREAKER RACKED OUT WITH ONE EDG INOPERABLE.
 EVENT DATE: 111783 REPORT DATE: 120183 NSSS: WE TYPE: PWR
 SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187518) DURING POWER OPERATION WITH D1 DIESEL GENERATOR OUT OF SERVICE FOR APPENDIX R RELATED MODIFICATIONS, BUS TIE BREAKER 26-8 WAS RACKED OUT LEAVING BUS 15 WITH ONLY ONE SOURCE OF OFFSITE POWER. TECH SPEC 3.7.B.2 APPLIES. PERSONNEL ERROR IN ALLOWING BREAKER 28-8 TO BE REMOVED FROM SERVICE WHILE D1 DIESEL GENERATOR WAS INOPERABLE.

[354] PRAIRIE ISLAND 1 DOCKET 50-282 LER 83-032
 BATTERY TESTS NOT PERFORMED.
 EVENT DATE: 112183 REPORT DATE: 122183 NSSS: WE TYPE: PWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187841) DURING REVIEW OF THE SURVEILLANCE PROGRAM, IT WAS DISCOVERED THAT SP1096-1, MONTHLY STATION BATTERY TEST, WAS NOT COMPLETED AS SCHEDULED. SUBSEQUENT TESTING SHOWED THE BATTERY WAS OPERABLE DURING THE PERIOD. TECH SPEC 4.0 APPLIES. RECENT SIMILAR EVENT WAS RO 83-28. TEMPORARY CHANGE IN RESPONSIBILITIES LED TO THE PERSONNEL ERROR. THE EVENT WAS DISCUSSED WITH INVOLVED PERSONNEL. A SCHEDULING CHANGE WAS MADE WHICH SHOULD HELP PREVENT RECURRENCE.

[355] PRAIRIE ISLAND 1 DOCKET 50-282 LER 83-033
 NITROGEN TO ACCUMULATOR ISOLATION VALVE LEAKS.
 EVENT DATE: 120883 REPORT DATE: 122283 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
 VENDOR: COPES-VULCAN, INC.

(NSIC 187842) DURING LOCAL LEAKAGE RATE TESTING, CV-31440, AN ISOLATION VALVE IN THE NITROGEN SUPPLY TO UNIT 1 ACCUMULATORS EXHIBITED LEAKAGE IN EXCESS OF THE TECH SPEC 4.4.A.4.B LIMIT. REDUNDANT VALVES IN THE PENETRATION WERE OPERABLE. RECENT SIMILAR EVENT WAS RO 83-14. PLUG-TO-CAGE GALLING PREVENTED FULL CLOSURE OF THE COPES-VULCAN 1" 600 LB. USA STD. VALVE. PLUG, CAGE AND SEAT WERE REPLACED AND VALVE TESTED SATISFACTORILY.

[356] QUAD CITIES 1 DOCKET 50-254 LER 83-013
 MSIV AN PILOT VALVE LOSES TEMPERATURE INDICATION.
 EVENT DATE: 031983 REPORT DATE: 041283 NSSS: GE TYPE: BWR
 SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 183196) ON MARCH 19, 1983, WHILE PERFORMING THE OPERATORS SURVEILLANCE/TURNOVER SHEETS UNIT ONE EQUIPMENT ATTENDANTS, QOS 005-S13, THE OPERATOR DISCOVERED THAT THE 1A MAIN STEAM ISOLATION VALVE AIR PILOT VALVE TEMPERATURE INDICATOR WAS NOT OPERATING. THE OTHER THREE PILOT VALVE TEMPERATURES WERE VERIFIED TO BE LESS THAN 170F AS REQUIRED BY TECH SPECS 3.7.D.4. THERE WERE NO INDICATIONS THAT WOULD SUGGEST ABNORMALLY HIGH TEMPERATURES IN THE DRYWELL. SINCE ONLY THE TEMPERATURE INDICATION WAS FAULTY, THE SAFETY SIGNIFICANCE OF THIS EVENT WAS MINIMAL. DURING A RECENT OUTAGE, AN INSTRUMENT MECHANIC INADVERTENTLY REPLACED THE THERMOCOUPLE CABLE FROM THE PILOT VALVE THERMOCOUPLE AND CONNECTED IT TO THE WRONG TERMINALS IN THE LOCAL JUNCTION BOX. ON MARCH 22, LOAD WAS REDUCED AND A DRYWELL ENTRY WAS MADE TO CORRECT THE WIRING ERROR. THE PILOT VALVE TEMPERATURE WAS FOUND TO BE LESS THAN 170F. PERSONNEL WERE REMINDED OF THE NEED TO ENSURE THE PROPER EQUIPMENT IS BEING WORKED ON.

[357] QUAD CITIES 1 DOCKET 50-254 LER 83-024 REV 1
 UPDATE ON LOSS OF VACUUM BREAKER POSITION INDICATION.
 EVENT DATE: 061083 REPORT DATE: 110383 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: MICRO SWITCH
 ATWOOD & MORRILL CO., INC.

(NSIC 187506) ON JUNE 10, 1983, WHILE PERFORMING THE SUPPRESSION CHAMBER TO DRYWELL VACUUM BREAKERS MONTHLY EXERCISE, QOS 1600-1, THE DIVISION I POSITION INDICATION LIGHTS FOR VACUUM BREAKER 1-1601-33F INDICATED THE VALVE WAS NOT FULLY CLOSED. THE SUPPRESSION CHAMBER TO DRYWELL PRESSURE SEPARATION TEST WAS PERFORMED IMMEDIATELY AS REQUIRED BY TECH SPEC 3.7.A.4.D. THE VACUUM BREAKER WAS

DETERMINED TO BE CLOSED; THEREFORE, THE SAFETY IMPLICATIONS OF THIS EVENT WERE MINIMAL. THE APPARENT CAUSE OF THE DEVIATION WAS CORROSION IN THE "OPEN" LIMIT SWITCH CAUSING THE SWITCH TO BIND. THE LIMIT SWITCH WAS REPLACED ON SEPTEMBER 16, 1983, DURING A SCHEDULED MAINTENANCE OUTAGE. THE VACUUM BREAKER WAS SATISFACTORILY TESTED AFTER REPLACEMENT.

[358] QUAD CITIES 1 DOCKET 50-254 LER 83-036
SECONDARY CONTAINMENT BREACHED BY OPEN FIRE BARRIER.
EVENT DATE: 092083 REPORT DATE: 101883 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
VENDOR: BRAND INSULATION INC.

(NSIC 186259) AT 1331 HOURS ON SEPTEMBER 20, 1983, WHILE PERFORMING THE SURVEILLANCE OF PENETRATION FIRE STOPS, QTS 170-1, IT WAS DISCOVERED THAT THE VENTILATION AND FIRE STOP BOOT ON THE "1D" MAIN STEAM LINE PENETRATION (MK 110) OUT OF THE SECONDARY CONTAINMENT WAS RIPPED. THIS IS CONTRARY TO THE REQUIREMENTS SPECIFIED IN TECH SPEC 3.7.C.1. THE SECONDARY CONTAINMENT CAPABILITY TEST HAD RECENTLY BEEN PERFORMED; THEREFORE, CONTAINMENT INTEGRITY WAS MAINTAINED. THE UNIT ONE STARTUP WAS TERMINATED WHILE STILL SUBCRITICAL, AND FUEL MOVES ON UNIT TWO WERE TERMINATED UNTIL PROVISIONS WERE MADE TO ASSURE SECONDARY CONTAINMENT INTEGRITY. THE BOOT APPARENTLY RIPPED DUE TO EXTENDED EXPOSURE TO HEAT AND NORMAL WEAR. THE MISSING URETHANE FOAM FILL MATERIAL HAD APPARENTLY NEVER BEEN INSTALLED SINCE INITIAL CONSTRUCTION. THE BOOT WAS REPLACED WITH A FIRE RETARDANT SILICONE RUBBER BOOT AND URETHANE FOAM FILL WILL BE INSTALLED WHERE NEEDED WHEN IT IS AVAILABLE. THE REMAINING BOOTS ON UNIT ONE AND THE BOOTS ON UNIT TWO WERE INSPECTED AND WERE FOUND TO BE SATISFACTORY.

[359] QUAD CITIES 1 DOCKET 50-254 LER 83-037
CONTAINMENT OXYGEN CONCENTRATION EXCEEDED LIMIT.
EVENT DATE: 092383 REPORT DATE: 102083 NSSS: GE TYPE: BWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: VESSELS, PRESSURE

(NSIC 186260) AT 0040 HOURS ON SEPTEMBER 23, 1983, WHILE INERTING THE PRIMARY CONTAINMENT DURING A UNIT ONE STARTUP, THE CONTAINMENT OXYGEN CONCENTRATION WAS NOT REDUCED TO LESS THAN 5% BY WEIGHT WITHIN 24 HOURS AS SPECIFIED IN TECH SPEC 3.7.A.5.B. THE MAXIMUM OXYGEN CONCENTRATION AFTER 24 HOURS WAS 4% BY VOLUME AND THE REACTOR POWER WAS APPROXIMATELY 75%. THEREFORE, THE MINIMAL OXYGEN PRODUCTION IN THE REACTOR AND THE LOW CONCENTRATION IN THE CONTAINMENT WOULD HAVE MINIMIZED THE POTENTIAL FOR A HYDROGEN COMBUSTION. THE CAUSE OF THIS OCCURRENCE IS PARTIALLY ATTRIBUTED TO THE SAMPLE RESPONSE TIME OF THE MONITORING INSTRUMENTATION AND A PROBABLE SOURCE OF AIR IN-LEAKAGE THROUGH THE COMPRESSOR USED TO MAINTAIN THE DIFFERENTIAL PRESSURE BETWEEN THE DRYWELL AND SUPPRESSION CHAMBER. THESE PROBLEMS WERE AGGRAVATED BY A DELAY IN THE INITIATION OF THE INERTION PROCESS BY OPERATING PERSONNEL. THIS OCCURRENCE WILL BE DISCUSSED WITH OPERATING DEPARTMENT PERSONNEL. THE SOURCE OF IN-LEAKAGE WILL CONTINUE TO BE INVESTIGATED.

[360] QUAD CITIES 1 DOCKET 50-254 LER 83-039
VACUUM BREAKER FAILS TO OPEN.
EVENT DATE: 100983 REPORT DATE: 102783 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES
VENDOR: ATWOOD & MORRILL CO., INC.

(NSIC 186788) ON OCTOBER 9, 1983, WHILE PERFORMING THE MONTHLY SUPPRESSION CHAMBER TO DRYWELL VACUUM BREAKER EXERCISE, QOS 1600-1, VACUUM BREAKER 1-1601-32F WOULD NOT INDICATE A FULL OPEN POSITION. THE VACUUM BREAKER WAS DECLARED INOPERABLE AND THE PRESSURE SEPARATION TEST WAS PERFORMED SUCCESSFULLY AS SPECIFIED IN TECH SPEC 3.7.A.4.C. THE REMAINING 11 VACUUM BREAKERS ARE CAPABLE

OF PASSING THE REQUIRED FLOW; THEREFORE, THE SAFETY IMPLICATIONS OF THIS OCCURRENCE WERE MINIMAL. DUE TO THE INACCESSIBILITY OF THE VACUUM BREAKERS DURING OPERATION, THE CAUSE OF THIS OCCURRENCE IS UNKNOWN AT THIS TIME. THE VACUUM BREAKER WILL BE REPAIRED DURING THE NEXT OUTAGE OF SUFFICIENT DURATION. A SUPPLEMENTAL REPORT WILL BE ISSUED AT THAT TIME.

[361] QUAD CITIES 1 DOCKET 50-254 LER 83-040
 SURVEILLANCE NOT DONE WITHIN ALLOTTED TIME.
 EVENT DATE: 101983 REPORT DATE: 111883 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187507) ON OCT. 19, 1983, THE OPERATING ENGINEERS WERE REVIEWING COMPLETED SURVEILLANCE DOCUMENTATION. ELEVEN INSTANCES WERE IDENTIFIED BETWEEN BOTH UNIT ONE AND TWO WHERE A WEEKLY SURVEILLANCE WAS NOT PERFORMED WITHIN THE SURVEILLANCE INTERVAL DEFINED IN TECH SPEC 1.0.EE. THE SAFETY IMPLICATIONS OF THIS EVENT ARE MINIMAL DUE TO THE FACT THAT IN MOST CASES, REDUNDANT CHECKS AND SURVEILLANCES ARE PERFORMED ON THE EQUIPMENT BY TECHNICAL STAFF AND OPERATING DEPARTMENT PERSONNEL. ALL EQUIPMENT WAS FOUND TO BE FULLY OPERABLE WHEN THE SURVEILLANCES WERE PERFORMED. THE CAUSE OF THIS EVENT IS DESIGNATED AS PERSONNEL ERROR. ALTHOUGH THE SURVEILLANCE WAS PERFORMED DURING THE CALENDAR WEEK, THE SURVEILLANCE INTERVAL AS DEFINED IN THE TECH SPECS WAS EXCEEDED. THE IMPORTANCE OF PERFORMING SURVEILLANCES WITHIN THE REQUIRED INTERVAL WAS EMPHASIZED DURING A MEETING WITH ALL OPERATING MANAGEMENT PERSONNEL.

[362] QUAD CITIES 1 DOCKET 50-254 LER 83-041
 SBLC SODIUM PENTABORATE CONCENTRATION HIGH.
 EVENT DATE: 101983 REPORT DATE: 110783 NSSS: GE TYPE: BWR
 SYSTEM: OTHER ENGRD SAFETY FEATR SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187508) ON OCT. 19, 1983, WHILE ANALYZING THE STANDBY LIQUID CONTROL (SBLC) SODIUM PENTABORATE CONCENTRATION, THE CONCENTRATION WAS FOUND TO EXCEED TECH SPEC FIGURE 3.4-2 LIMITS. AFTER AN ATTEMPT TO REDUCE THE CONCENTRATION AND INCREASE THE TEMPERATURE FAILED TO BRING THE SOLUTION WITHIN LIMITS, AN UNUSUAL EVENT WAS DECLARED AND A UNIT ONE SHUTDOWN INITIATED. THE TEMPERATURE IN THE TANK WAS ADEQUATE TO MAINTAIN THE SODIUM PENTABORATE IN SOLUTION. THE BORON CONCENTRATION THROUGHOUT THE EVENT WAS SUFFICIENT TO SHUTDOWN THE REACTOR TO A COLD XENON-FREE CONDITION; THEREFORE, THE SAFETY IMPLICATIONS OF THIS OCCURRENCE WERE MINIMAL. THE CAUSE OF THIS OCCURRENCE WAS INADEQUATE PROCEDURES WHICH DID NOT PROPERLY INTERFACE OPERATING AND CHEMISTRY DEPARTMENT SURVEILLANCES. THE SBLC TANK TEMPERATURE WAS INCREASED, WHICH INCREASED THE EVAPORATION RATE AND THUS, THE CONCENTRATION. BY 1 A.M., ON OCT. 20, THE CONCENTRATION WAS WITHIN LIMITS; AND THE UNUSUAL EVENT AND THE REACTOR SHUTDOWN WAS TERMINATED. THE APPLICABLE PROCEDURES WILL BE REVIEWED AND PERSONNEL WILL BE INFORMED TO ESTABLISH A BETTER INTERFACE BETWEEN DEPARTMENTS AND UNDERSTAND THE RELATIONSHIP BETWEEN SBLC TANK TEMPERATURE AND SOLUTION CONCENTRATION.

[363] QUAD CITIES 1 DOCKET 50-254 LER 83-042
 FIRE PUMP INOPERABLE.
 EVENT DATE: 102483 REPORT DATE: 111583 NSSS: GE TYPE: BWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: BATTERIES & CHARGERS
 VENDOR: CUMMINS ENGINE CO., INC.

(NSIC 187393) THE STATION 1/2A DIESEL FIRE PUMP WAS MADE INOPERABLE WHEN THE DIESEL FAILED TO START ON THE 'A' BATTERY BANK. A REPLACEMENT BATTERY COULD NOT BE PROCURED WITHIN 7 DAYS; THEREFORE, THIS EVENT REPORT WAS INITIATED AS REQUIRED BY TECH SPEC 3.12.B.2. THE 1/2B DIESEL FIRE PUMP AND THE STATION SERVICE WATER SYSTEM WERE AVAILABLE THROUGHOUT THE TIME OF THE EVENT. IN ADDITION, A PORTABLE FIRE PUMP LOCATED NEAR THE DISCHARGE FLUME WAS AVAILABLE AND PROCEDURES ARE IN

PLACE FOR ITS USE. THEREFORE, ADEQUATE BACKUP FIRE PROTECTION SYSTEMS WERE AVAILABLE WHILE THE 1/2A FIRE PUMP WAS INOPERABLE. THE BATTERY APPARENTLY HAD REACHED ITS END OF USEFUL LIFE. A REPLACEMENT BATTERY COULD NOT BE PROCURED FROM THE VENDOR WITHIN 7 DAYS. THE NEW BATTERY WAS INSTALLED AND THE DIESEL FIRE PUMP WAS SUCCESSFULLY STARTED ON OCTOBER 29, 1983. THE MONTHLY OPERABILITY SURVEILLANCE OF THE DIESEL FIRE PUMP IS CONSIDERED ADEQUATE IN DETECTING SUCH PROBLEMS IN THE FUTURE.

[364] QUAD CITIES 1 DOCKET 50-254 LER 83-043
VACUUM BREAKER HAS DUAL POSITION INDICATION.
EVENT DATE: 102483 REPORT DATE: 110783 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: MICRO SWITCH

(NSIC 187394) AT 0735 HOURS, ON OCTOBER 24, 1983, WHILE PERFORMING THE SUPPRESSION CHAMBER TO DRYWELL VACUUM BREAKER MONTHLY EXERCISE, QOS 1600-1, VACUUM BREAKER 1-1601-32C SHOWED A DUAL INDICATION ON DIVISION 1 WHILE CLOSING. AS REQUIRED BY TECH SPEC 3.7.A.4.B, THE SUPPRESSION CHAMBER TO DRYWELL PRESSURE SEPARATION WAS PERFORMED IMMEDIATELY, AND THE VACUUM BREAKER WAS VERIFIED TO BE CLOSED. SINCE THE ONLY APPARENT PROBLEM WAS A LIMIT SWITCH ON DIVISION 1, THE VACUUM BREAKER WAS CAPABLE OF PERFORMING ITS DESIGN FUNCTION. THE SAFETY IMPLICATIONS OF THIS OCCURRENCE WERE MINIMAL. THE CAUSE OF THIS OCCURRENCE IS SUSPECTED AS BEING THE DIVISION 1 OPEN LIMIT SWITCH OUT OF ADJUSTMENT. THE ROOT CAUSE WILL BE DETERMINED AT THE NEXT OUTAGE OF SUFFICIENT DURATION. A SUPPLEMENTAL REPORT WILL BE ISSUED FOLLOWING REPAIRS. UNTIL THAT TIME, THE SUPPRESSION CHAMBER TO DRYWELL PRESSURE SEPARATION TEST WILL BE PERFORMED EVERY 15 DAYS AS REQUIRED BY TECH SPEC 3.7.A.4.D.

[365] QUAD CITIES 1 DOCKET 50-254 LER 83-044
SET POINT DRIFT OF SUPPRESSION CHAMBER REACTOR BUILDING PRESSURE SWITCH.
EVENT DATE: 102683 REPORT DATE: 111583 NSSS: GE TYPE: BWR
SYSTEM: ENGRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: STATIC-O-RING

(NSIC 187395) ON OCTOBER 26, 1983, WHILE PERFORMING THE PRESSURE SUPPRESSION CHAMBER AND REACTOR BUILDING VACUUM BREAKER ACTUATIONAL CALIBRATION TEST, QIS 48-1, PRESSURE SWITCH NUMBER TWO OF PSI-1-1622A ACTUATED AT 0.52 PSID. THIS IS 0.02 PSID GREATER THAN THE TECH SPEC 3.7.A.3.A LIMIT. THE CONSEQUENCES WERE MINIMAL BECAUSE THE 100 PERCENT REDUNDANT VACUUM BREAKER SYSTEM WAS OPERABLE. THE SUPPRESSION CHAMBER IS DESIGNED FOR 2 PSIG EXTERNAL PRESSURE; THEREFORE, BOTH VACUUM BREAKERS WOULD HAVE ACTUATED PRIOR TO REACHING THIS LIMIT. THE CAUSE OF THIS OCCURRENCE WAS INSTRUMENT SETPOINT DRIFT. PRESSURE SWITCH PS-1-1622A WAS IMMEDIATELY RECALIBRATED TO WITHIN THE TECH SPEC LIMITS. THERE HAVE BEEN PAST OCCURRENCES OF SETPOINT DRIFT WITH THESE PRESSURE SWITCHES, THE MOST RECENT BEING DOCUMENTED UNDER LER 81-14/03L-0, ON AUGUST 17, 1981.

[366] QUAD CITIES 1 DOCKET 50-254 LER 83-045
SEVEN LIMIT SWITCHES ASSEMBLED IMPROPERLY.
EVENT DATE: 112183 REPORT DATE: 112883 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: NAMCO CONTROLS

(NSIC 187401) ON NOVEMBER 21, 1983, WHILE PERFORMING A RECEIPT INSPECTION OF NAMCO CONTROLS LIMIT SWITCHES, ALL SEVEN SWITCHES IN LOT #00873, WITH MODEL NO. 180-21302, WERE FOUND TO HAVE BEEN ASSEMBLED IMPROPERLY. THE MODEL NUMBER IDENTIFIES THE SWITCHES AS ROTATING CLOCKWISE, WHEN IN FACT, THEY WERE FOUND TO ROTATE COUNTER-CLOCKWISE. THIS REPORT WAS WRITTEN IN ACCORDANCE WITH TECH SPEC 6.6.B.1.I, TO IDENTIFY A POTENTIALLY GENERIC DEFECT IN LOT #00873 LIMIT SWITCHES.

THE SWITCHES, WHICH ARE USED ON MSIVS, COULD ALSO HAVE BEEN FOUND DEFECTIVE DURING INSTALLATION OR FUNCTIONAL TESTING. THE CAUSE OF THE OCCURRENCE IS APPARENTLY AN ASSEMBLY ERROR DURING MANUFACTURING. THE SPRING HAD BEEN INSTALLED ON THE OPPOSITE SIDE OF THE SWITCH ACTUATING ARM. THE LIMIT SWITCHES WERE TAGGED WITH QUALITY ASSURANCE HOLD TAGS TO PREVENT INADVERTENT USE OF THE SWITCHES. THE SWITCHES WILL BE REPAIRED AT THE STATION AND USED AS NECESSARY.

[367] QUAD CITIES 2 DOCKET 50-265 LER 83-013
CONTROL ROD OVERTRAVELS.
EVENT DATE: 090183 REPORT DATE: 091983 NSSS: GE TYPE: BWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL RODS
VENDOR: GENERAL ELECTRIC CO.

(NSIC 186147) WHILE PERFORMING CONTROL ROD DRIVE WEEKLY EXERCISE, QOS 300-1, CONTROL ROD C-10 (10-39) WENT TO OVERTRAVEL, INDICATING A POSSIBLE UNCOUPLING. THE CONTROL ROD WAS FULLY INSERTED AND ELECTRICALLY DISARMED; THEREBY SATISFYING TECH SPEC 3.3.B.1. A REVIEW OF PAST SURVEILLANCES SHOW THE CONTROL ROD HAS BEEN COUPLED SINCE THE LAST UNIT SHUTDOWN. THE CAUSE OF THIS EVENT IS NOT KNOWN AT THIS TIME. AN INVESTIGATION WILL BE PERFORMED DURING THE PRESENT REFUEL OUTAGE WHEN THE CONTROL ROD DRIVE IS REMOVED AND OVERHAULED. A SUPPLEMENTAL REPORT WILL BE SUBMITTED AT THAT TIME.

[368] QUAD CITIES 2 DOCKET 50-265 LER 83-015
VALVE AND PENETRATION LEAK RATE EXCESSIVE.
EVENT DATE: 091283 REPORT DATE: 100783 NSSS: GE TYPE: BWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: VALVES

(NSIC 186102) ON SEPTEMBER 12, 1983, WHILE PERFORMING REFUELING OUTAGE LOCAL LEAK RATE TESTING, THE MEASURED COMBINED LEAKAGE RATE FOR ALL PENETRATIONS AND VALVES, EXCEPT MAIN STEAM ISOLATION VALVES, WAS FOUND TO EXCEED 293.75 SCFH (0.61 LA). A DETAILED ANALYSIS OF THE SAFETY IMPLICATION OF THE VALVE LEAKAGES WILL BE INCLUDED IN A SUPPLEMENTAL REPORT. THE PROBABLE CAUSE OF THE EXCESSIVE LEAKAGE IN THE VALVES THAT CAUSED THE TOTAL MEASURED LEAKAGE TO EXCEED THE LIMIT (TECH SPEC 4.7.A.2) IS NOT KNOWN AT THIS TIME. A SUPPLEMENTAL REPORT WILL BE SUBMITTED LISTING THE NECESSARY REPAIRS AND CORRECTIVE ACTIONS TAKEN TO REDUCE THE TOTAL LEAKAGE TO BELOW THE LIMITS.

[369] QUAD CITIES 2 DOCKET 50-265 LER 83-017
RCIC TURBINE AREA TEMPERATURE SWITCHES' SETPOINTS DRIFT.
EVENT DATE: 092483 REPORT DATE: 102083 NSSS: GE TYPE: BWR
SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: UNITED ELECTRIC CONTROLS COMPANY

(NSIC 186148) WHILE PERFORMING THE RCIC TURBINE AREA HIGH TEMPERATURE SWITCH CALIBRATION, QIS-28, TEMPERATURE SWITCHES TS 2-1360-15B, 16B, AND 14D WERE FOUND TO TRIP ABOVE THE 200F LIMIT SPECIFIED IN TECH SPEC TABLE 3.2-1. THE 13 REMAINING SWITCHES WERE FOUND TO ACTUATE WITHIN LIMITS; THEREFORE, THE RCIC SYSTEM COULD HAVE BEEN ISOLATED AS REQUIRED. THE CAUSE OF THIS OCCURRENCE IS INSTRUMENT SETPOINT DRIFT. A CONTRIBUTING CAUSE IS PROCEDURE INADEQUACY; WHEREAS THE EXCESSIVE TEMPERATURES APPLIED DURING THE CALIBRATION CAUSES DEFORMATION OF THE BELLOWS. THE SWITCHES WERE REPLACED AND FUNCTIONALLY TESTED SATISFACTORILY. THE PROCEDURE WILL BE REVISED TO USE A VARIABLE HEAT GUN THAT WILL NOT EXCEED THE DESIGN TEMPERATURE RANGE OF THE SWITCHES.

[370] QUAD CITIES 2 DOCKET 50-265 LER 83-021 REV 2
 UPDATE ON RECIRCULATION SYSTEM PIPES EXPERIENCE INTERGRANULAR STRESS CORROSION
 CRACKING.
 EVENT DATE: 102883 REPORT DATE: 120183 NSSS: GE TYPE: BWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: PIPES, FITTINGS
 VENDOR: DRAVO, INC.

(NSIC 187776) WHILE REVIEWING ULTRASONIC TEST DATA OBTAINED DURING THE INSPECTION OF LARGE BORE STAINLESS STEEL PIPING, TWO LINEAR INDICATIONS WERE IDENTIFIED ON THE 'M' 12-INCH RECIRCULATION SYSTEM RISER. ONE CIRCUMFERENTIAL LINEAR INDICATION WAS LOCATED IN THE HEAT-AFFECTED ZONE OF PIPE-TO-ELBOW WELD 02M-S4. ELBOW-TO-PIPE WELD 02M-S3 WAS FOUND TO HAVE CIRCUMFERENTIAL LINEAR INDICATIONS ON BOTH SIDES OF THE WELD IN ITS HEAT-AFFECTED ZONE. THE SLOW GROWTH RATE TYPICAL IN THIS TYPE OF INDICATION 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 INTERGRANULAR STRESS CORROSION CRACKING. FURTHER ANALYSES ARE BEING PERFORMED TO DETERMINE THE CORRECTIVE ACTION TO BE TAKEN. A SUPPLEMENTAL REPORT WILL BE SUBMITTED FOLLOWING CORRECTIVE ACTIONS.

[371] RANCHO SECO DOCKET 50-312 LER 83-038
 DHR PUMP SUCTION VALVE FAILS TO OPEN.
 EVENT DATE: 111083 REPORT DATE: 120883 NSSS: BW TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
 VENDOR: ALOYCO, INC.

(NSIC 187851) ON NOV. 10, 1983, VALVE SFV-25004, THE DHR PUMP "B" SUCTION ISOLATION VALVE FROM THE BORATED WATER STORAGE TANK, FAILED TO OPEN AT THE CONCLUSION OF A SURVEILLANCE TEST. THE "A" DHR SYSTEM WAS AVAILABLE AT THAT TIME AND THE VALVE WAS PROMPTLY RESTORED TO OPERABLE CONDITION. INVESTIGATION OF THE PROBLEM DISCLOSED THAT THE PACKING WAS BINDING ON THE VALVE STEM, CAUSING THE MOTOR TO TRIP OUT. THE PACKING WAS READJUSTED AND THE VALVE STROKED PROPERLY.

[372] ROBINSON 2 DOCKET 50-261 LER 83-027
 LEAKS IN COOLING COILS OF TWO CONTAINMENT FAN COOLERS.
 EVENT DATE: 110383 REPORT DATE: 111683 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: HEAT EXCHANGERS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187407) ON NOVEMBER 3, 1983, WITH THE PLANT IN HOT SHUTDOWN, COOLING COIL LEAKS WERE DISCOVERED ON CONTAINMENT FAN COOLERS HVH-1 AT 1430 HOURS AND HVH-3 AT 1440 HOURS. AN UNUSUAL EVENT WAS DECLARED AND THEN TERMINATED WHEN SERVICE WATER FLOW WAS ISOLATED TO BOTH HVH-1 AND HVH-3 AT 1447 HOURS. THIS EVENT IS CONSIDERED A DEGRADATION OF THE CONTAINMENT BOUNDARY PURSUANT TO IE BULLETIN 80-24 AND IS REPORTED PER TECH SPEC 6.9.2.A.3. SUFFICIENT CONTAINMENT COOLING CAPABILITY FOR A DESIGN BASIS ACCIDENT WAS AVAILABLE. PER TECH SPEC 3.3.2.2.A, CONTAINMENT SPRAY PUMPS WERE TESTED OPERABLE AT 1614 HOURS. PER TECH SPEC 3.0, THE PLANT WAS PLACED IN COLD SHUTDOWN AT 1230 HOURS ON NOV. 4, 1983. HVH-1 AND HVH-3 ARE BEING REPAIRED WITH A CERAMIC SEALANT MATERIAL, AND ALL FOUR HVH UNITS WILL BE HYDROSTATICALLY TESTED TO GREATER THAN ACCIDENT PRESSURE DURING THIS COLD SHUTDOWN. THE COOLING COILS ARE SCHEDULED TO BE REPLACED DURING THE NEXT REFUELING OUTAGE.

[373] ROBINSON 2 DOCKET 50-261 LER 83-028
 STEAM GENERATOR TUBES FOUND LEAKING.
 EVENT DATE: 112383 REPORT DATE: 120783 NSSS: WE TYPE: PWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: HEAT EXCHANGERS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187775) THE RESULTS OF THIS INSPECTION ARE REPORTED AS AN ABNORMAL DEGRADATION OF THE REACTOR COOLANT BOUNDARY PER TECH SPEC 6.9.2.A.3. THE PRIMARY TO SECONDARY LEAKAGE DID NOT APPROACH TECH SPEC LIMITS. THE STEAM GENERATOR TUBE INSPECTION WAS INITIATED AS A RESULT OF APPLYING NEW ANALYTICAL TECHNIQUES TO PREVIOUS EDDY CURRENT DATA. THE MAJOR CORROSION MECHANISM IS BELIEVED TO BE PHOSPHATE THINNING. DURING THIS OUTAGE, 116 TUBES WERE PLUGGED IN 'A' S/G, 217 TUBES IN 'B' S/G AND 242 TUBES IN 'C' S/G. TO DATE, 15% OF THE TUBES ARE PLUGGED IN 'A' S/G, 28.9% IN 'B' S/G, AND 24% IN 'C' S/G. A TOTAL OF 22.6% OF THE TUBES HAS BEEN PLUGGED IN ALL THREE STEAM GENERATORS.

[374] ROBINSON 2 DOCKET 50-261 LER 83-030
 DRIFT OF DEGRADED VOLTAGE RELAYS.
 EVENT DATE: 112983 REPORT DATE: 122983 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: RELAYS
 VENDOR: INTERNATIONAL DERRICK

(NSIC 187831) ON NOV. 29, 1983, WITH THE UNIT IN COLD SHUTDOWN, TWO OF THE THREE DEGRADED VOLTAGE RELAYS FOR EMERGENCY BUS E-2 WERE FOUND OUT OF TOLERANCE DURING CALIBRATION. THE TOLERANCE IS 412 VOLTS PLUS OR MINUS 1 VOLT. ONE RELAY WAS MEASURED AT 410.1 VOLTS AND THE OTHER AT 410.2 VOLTS. THE PLANT WAS IN COLD SHUTDOWN. THIS IS REPORTED PURSUANT TO TECH SPEC 6.9.2.B.2. INSTRUMENT DRIFT ACCOUNTED FOR THIS SLIGHTLY OUT OF TOLERANCE ERROR. BOTH INSTRUMENTS WERE CALIBRATED INTO TOLERANCE. NO FURTHER ACTION IS NECESSARY.

[375] SALEM 1 DOCKET 50-272 LER 82-029 REV 1
 UPDATE ON LOW FLOW TO CONTAINMENT FAN COIL UNIT.
 EVENT DATE: 050182 REPORT DATE: 111783 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES
 VENDOR: FISHER CONTROLS CO.

(NSIC 187710) ON MAY 1, 1982, DURING SURVEILLANCE TESTING, THE CONTROL ROOM OPERATOR DISCOVERED THAT THE SERVICE WATER FLOW TO NO. 12 CONTAINMENT FAN COIL UNIT (CFCU) WAS LESS THAN THE 2500 GPM REQUIRED BY THE TECH SPECS FOR LOW SPEED OPERATION. NO. 12 CFCU WAS DECLARED INOPERABLE, AND AT 0730 HOURS, ACTION STATEMENT 3.6.2.3.A WAS ENTERED. (82-029, 82-024, 82-22, 81-121, 81-99). FLOW CONTROL VALVE 12 SW223 HAD STUCK IN THE CLOSED POSITION, RESULTING IN LOW SERVICE WATER FLOW TO THE CFCU. VALVE 12 SW223 WAS EXERCISED, AND NO. 12 CFCU WAS SATISFACTORILY TESTED. THE UNIT WAS DECLARED OPERABLE AT 1015 HOURS, MAY 1, 1982, AND ACTION STATEMENT 3.6.2.3.A WAS TERMINATED. DAILY OPERATION OF THE CFCUS HAS CORRECTED THIS PROBLEM.

[376] SALEM 1 DOCKET 50-272 LER 83-003E
 BOTH UNITS SHUTDOWN.
 EVENT DATE: 012183 REPORT DATE: 021683 NSSS: WE TYPE: PWR
 SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: HEAT EXCHANGERS

(NSIC 187676) DELAYS IN REFUELING OF UNIT 1. A PLANT SHUTDOWN FOR REFUELING OF SALEM UNIT 2 WAS COMMENCED. THE SHUTDOWN HAD BEEN SCHEDULED TO PROVIDE A MINIMUM OF FOUR WEEKS OF OPERATION FOLLOWING COMPLETION OF THE UNIT 1 REFUELING. BECAUSE OF UNANTICIPATED PROBLEMS WITH SAFETY RELATED EQUIPMENT, THE UNIT 1 RESTART WAS DELAYED APPROXIMATELY 7 WEEKS. DUE TO THE DELAY, AN UNINTENTIONAL CONCURRENT SHUTDOWN OF BOTH UNITS OCCURRED. THE OCCURRENCE CONSTITUTED AN UNUSUAL ENVIRONMENTAL EVENT THAT IS REPORTABLE IN ACCORDANCE WITH ENV. TECH SPEC 5.6.2.1. THE DELAY IN THE UNIT 1 RESTART WAS DUE TO PROBLEMS WITH STEAM GENERATOR NOZZLE DAMS AND DEGRADATION OF WELDS IN SERVICE WATER PIPING TO NO. 12 COMPONENT COOLING HEAT EXCHANGER. SINCE ALL REASONABLE EFFORTS WERE MADE TO PREVENT THE OCCURRENCE, AND THE PROBLEMS INVOLVED WERE ISOLATED IN NATURE, NO CORRECTIVE ACTION WAS DEEMED NECESSARY.

[377] SALEM 1 DOCKET 50-272 LER 83-039
 COMPUTER SUBCOOLING MONITOR INOPERABLE.
 EVENT DATE: 090483 REPORT DATE: 100383 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187410) ON SEPTEMBER 4, 1983, DURING ROUTINE OPERATION, THE CONTROL ROOM OPERATOR NOTED THAT THE P-250 COMPUTER CRT WAS NOT DISPLAYING UPDATED INFORMATION. SINCE IT UTILIZES COMPUTER MEMORY AND DATA INPUTS, THE REACTOR COOLANT SYSTEM (RCS) SUBCOOLING MONITOR WAS RENDERED INOPERABLE AND LIMITING CONDITION FOR OPERATION 3.3.3.7 ACTION 5 WAS ENTERED. WIDE RANGE INSTRUMENTATION AND STEAM TABLES WERE AVAILABLE IN THE CONTROL ROOM ALLOWING MANUAL CALCULATION OF THE SUBCOOLING MARGIN. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. INVESTIGATION REVEALED THE P-250 COMPUTER WAS ELECTRONICALLY LOCKED UP; THE CONDITION WAS ATTRIBUTED TO INTERMITTENT OPERATION OF INSTRUMENTATION CONTACTORS DURING POWER OPERATION. THE COMPUTER WAS ELECTRONICALLY CLEARED AND REBOOTSTRAPPED, THE RCS SUBCOOLING MONITOR WAS SATISFACTORILY TESTED, AND THE ACTION STATEMENT WAS TERMINATED. INSTALLATION OF A SAFETY RELATED COMPUTER (SPDG) IS SCHEDULED FOR LATE 1984 AND WILL ELIMINATE SUCH PROBLEMS.

[378] SALEM 1 DOCKET 50-272 LER 83-047
 DRIFT OF CONTROL ROD POSITION INDICATOR.
 EVENT DATE: 100683 REPORT DATE: 110483 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: BAILEY INSTRUMENT CO., INC.

(NSIC 186795) ON OCTOBER 6, 1983, DURING ROUTINE SURVEILLANCE OF THE CONTROL CONSOLE, THE CONTROL ROOM OPERATOR DISCOVERED NO. 1D4 CONTROL ROD POSITION INDICATOR (RPI) CHANNEL INDICATING GREATER THAN THE MAXIMUM ALLOWED DEVIATION IN THE TECH SPECS. ACTION STATEMENT 3.1.3.2A WAS ENTERED; NO OTHER CHANNELS IN EACH GROUP WERE OUT OF SPECIFICATION. ROD POSITIONS WERE VERIFIED TO BE NORMAL WITHIN 8 HOURS. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION, AND IS REPORTABLE PER TECH SPEC 6.9.1.9B. INVESTIGATION REVEALED THAT THE CALIBRATION OF THE INDICATOR AND THE SIGNAL CONDITIONING MODULE OF CHANNEL 1D4 HAD DRIFTED. THE CHANNEL WAS SATISFACTORILY RECALIBRATED AND WAS RETURNED TO WITHIN SPECIFICATION. ACTION STATEMENT 3.1.3.2A WAS TERMINATED; NO FURTHER ACTION WAS DEEMED NECESSARY.

[379] SALEM 1 DOCKET 50-272 LER 83-050
 CONTAINMENT DOOR LEAKS.
 EVENT DATE: 103183 REPORT DATE: 113083 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 187411) ON OCTOBER 31, 1983, THE 130' ELEVATION AIR LOCK INTERIOR DOOR FAILED THE SURVEILLANCE TEST. THE AIR LOCK WAS DECLARED INOPERABLE AND ACTION STATEMENT 3.6.1.3 WAS ENTERED. THE EXTERIOR DOOR WAS OPERABLE THROUGHOUT THE OCCURRENCE. THE AIR LOCK WAS RESTORED TO OPERATION WITHIN THE TIME SPECIFIED BY THE ACTION REQUIREMENT. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION AND IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. THE SEAL WAS NOT SEATED PROPERLY. REPAIRS WERE EFFECTED, THE AIR LOCK TESTED WITH SATISFACTORY RESULTS AND ACTION STATEMENT 3.6.1.3 WAS TERMINATED AT 1025 HOURS, OCTOBER 31, 1983. TRAINING WILL BE CONDUCTED FOR PERSONNEL IN THE PROPER OPERATION OF THE AIR LOCKS DURING NORMAL USE AND DURING SURVEILLANCE TESTING.

[380] SALEM 1 DOCKET 50-272 LER 83-051
 INLEAKAGE TO CONTAINMENT SUMP.
 EVENT DATE: 110383 REPORT DATE: 113083 NSSS: WE TYPE: PWR
 SYSTEM: REAC COOL PRES BOUN LEAK DETEC COMPONENT: VALVES
 VENDOR: COPEL-VULCAN, INC.
 VELAN VALVE CORP.

(NSIC 187513) ON NOV. 3, 1983, UNIDENTIFIED CONTAINMENT SUMP INLEAKAGE WAS GREATER THAN THE 1.0 GPM ALLOWED BY THE TECH SPECS. ACTION STATEMENT 3.4.6.2B WAS ENTERED AT 0830 HOURS. UNIDENTIFIED LEAKAGE WAS REDUCED TO LESS THAN 1.0 GPM IN THE TIME REQUIRED BY THE ACTION STATEMENT. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION AND IS REPORTABLE PER TECH SPEC 6.9.1.9B. LEAKAGE WAS DUE TO PACKING FAILURE ON 1CV75 (THE PACKING GLAND WAS INJECTED WITH FURMANITE) AND A BONNET LEAK ON 12GB3 (THE BONNET WAS CLAMPED AND FURMANITED). ACTION STATEMENT 3.4.6.2B WAS TERMINATED AT 1142 HOURS, NOV. 3, 1983.

[381] SALEM 1 DOCKET 50-272 LER 83-056
 RCS PRESSURE DROPS BELOW DNB LIMIT.
 EVENT DATE: 111183 REPORT DATE: 120983 NSSS: WE TYPE: PWR
 SYSTEM: MAIN STEAM SYSTEMS & CONTROLS COMPONENT: OTHER COMPONENTS

(NSIC 187778) ON NOV. 11, 1983, WHILE PERFORMING A ROUTINE SHUTDOWN, THE STEAM DUMP PRESSURE CONTROLLER SIGNAL WENT TO FULL SCALE LOW. THIS CAUSED RCS PRESSURE TO DECREASE BELOW THE TECH SPEC DNB LIMIT. PRESSURE WAS RESTORED WITHIN THE ALLOWABLE BAND WITHIN 2 MINUTES; WELL WITHIN THE TIME SPECIFIED BY THE ACTION REQUIREMENT (2 HOURS). THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION, AND IS THEREFORE REPORTABLE PER TECH SPEC 6.9.1.9B. THE PRESSURE CONTROLLER WAS DECLARED INOPERABLE AND IS SCHEDULED FOR REPAIR DURING THE NEXT AVAILABLE SHUTDOWN. A TEMPORARY CHANGE WAS MADE TO THE SHUTDOWN PROCEDURE. A SUPPLEMENTAL REPORT WILL BE ISSUED.

[382] SALEM 1 DOCKET 50-272 LER 83-054
 SETPOINT DRIFT IN HIGH FLUX BISTABLE.
 EVENT DATE: 111283 REPORT DATE: 120283 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187514) AT 1115 HOURS, NOV. 12, 1983, DURING A REACTOR STARTUP, INTERMEDIATE RANGE CHANNEL N35 HIGH FLUX BISTABLE TRIP DID NOT OCCUR WHEN POWER REACHED 25%. THE REDUNDANT CHANNEL OPERATED SATISFACTORILY. CHANNEL N35 WAS DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.3.1.1 ACTION 3 WAS ENTERED. THE STARTUP CONTINUED IN ACCORDANCE WITH THE ACTION REQUIREMENT. THE INSTRUMENT SETTING WAS LESS CONSERVATIVE THAN ESTABLISHED BY THE TECH SPECS AND THE EVENT IS REPORTABLE PER TECH SPEC 6.9.1.9A. CHANNEL N35 HIGH FLUX BISTABLE SETPOINT HAD DRIFTED OUT OF CALIBRATION. THE CHANNEL WAS RECALIBRATED AND ACTION STATEMENT 3.3.1.1 ACTION 3 WAS TERMINATED AT 1830 HOURS, NOV. 12, 1983.

[383] SALEM 1 DOCKET 50-272 LER 83-053
 RADIATION MONITORS FAIL TO ISOLATE CONTAINMENT VENTILATION.
 EVENT DATE: 111483 REPORT DATE: 112383 NSSS: WE TYPE: PWR
 SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: VICTOREEN INSTRUMENT DIVISION

(NSIC 187512) ON NOV. 14, 1983, WHILE PERFORMING FUNCTIONALS, RADIATION MONITORING CHANNEL 1R11A FAILED TO ISOLATE CONTAINMENT VENTILATION. THE REMAINING CHANNELS INDICATED THE SAME PROBLEM. IT WAS DETERMINED THAT THIS CONDITION EXISTED DURING A PRESSURE RELIEF. CONTAINMENT ISOLATION AND INDICATION

OF RADIOACTIVITY LEVELS WERE OPERABLE DURING THE OCCURRENCE. THE EVENT IS REPORTABLE PER TECH SPEC 6.9.1.8B. CHANNEL 1R41A WAS EXHIBITING AN ISOLATION SIGNAL, BUT DID NOT INDICATE THIS; CONSEQUENTLY, THE SIGNAL WAS RESET CAUSING ALL CHANNELS TO BE BLOCKED. DESIGN CHANGE DCR 1EC-1790 WILL DISPLAY THIS CONDITION ON AN ALARM IN THE CONTROL PANEL.

[384] SALEM 1 DOCKET 50-272 LER 83-057
CONTAINMENT HYDROGEN ANALYZER FAILS.
EVENT DATE: 111583 REPORT DATE: 121383 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT COMBUS GAS CONTROL SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187832) ON NOV. 15, 1983, DURING ROUTINE POWER OPERATION, NO. 11 CONTAINMENT HYDROGEN ANALYZER CHANNEL EXHIBITED A LOW OUTPUT DURING ROUTINE CALIBRATION CHECKS. THE CHANNEL WAS DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.6.4.1 WAS ENTERED AT 2230 HOURS. THE REDUNDANT HYDROGEN ANALYZER CHANNEL REMAINED OPERABLE THROUGHOUT THE OCCURRENCE. BECAUSE THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION, IT IS THEREFORE REPORTABLE PER TECH SPEC 6.9.1.9B. THE CAUSE WAS A FAILED DETECTOR. THE DETECTOR WAS REPLACED, CALIBRATED AND NO. 11 HYDROGEN ANALYZER CHANNEL WAS DECLARED OPERABLE. TECH SPEC ACTION STATEMENT 3.6.4.1 WAS TERMINATED AT 1530 HOURS, NOV. 16, 1983.

[385] SALEM 1 DOCKET 50-272 LER 83-058
CONTAINMENT AIR LOCK DOOR LEAKS.
EVENT DATE: 111883 REPORT DATE: 121383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 187833) AT 2100 HOURS, NOV. 18, 1983, WHILE PERFORMING ROUTINE AIR LOCK TESTING SURVEILLANCE, 100' EL. AIR LOCK EXTERIOR DOOR EXHIBITED A LEAKAGE RATE GREATER THAN ALLOWED BY THE TECH SPECS. THE AIR LOCK WAS DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.6.1.3 WAS ENTERED. THE INTERIOR DOOR REMAINED OPERABLE THROUGHOUT THE OCCURRENCE. SINCE THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION, IT IS REPORTABLE PER TECH SPEC 6.9.1.9B. THE DOOR LATCH ASSEMBLY WAS SLIGHTLY LOOSE. IT WAS TIGHTENED; THE AIR LOCK WAS RETESTED WITH SATISFACTORY RESULTS. THE AIR LOCK WAS DECLARED OPERABLE AND ACTION STATEMENT 3.6.1.3 WAS TERMINATED AT 2230 HOURS, NOV. 18, 1983.

[386] SALEM 1 DOCKET 50-272 LER 83-059
CONTAINMENT AIR LOCK DOOR LEAKS.
EVENT DATE: 112883 REPORT DATE: 121383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 187834) AT 0400 HOURS, NOV. 28, 1983, 130' EL. AIR LOCK INTERIOR DOOR EXHIBITED A LEAKAGE RATE GREATER THAN ALLOWED BY THE TECH SPECS. THE AIR LOCK WAS DECLARED INOPERABLE AND TECH SPEC ACTION STATEMENT 3.6.1.3 WAS ENTERED. THE EXTERIOR DOOR REMAINED OPERABLE THROUGHOUT THE OCCURRENCE. SINCE THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE PERMITTED BY A LIMITING CONDITION FOR OPERATION, IT IS REPORTABLE PER TECH SPEC 6.9.1.9B. THE OUTER SEAL OF THE INTERIOR DOOR WAS NOT SEATED PROPERLY IN ITS GROOVE. IT WAS ALIGNED AND THE AIR LOCK WAS RETESTED WITH SATISFACTORY RESULTS. TRAINING WILL BE CONDUCTED FOR PERSONNEL IN THE PROPER USE AND OPERATION OF THE AIR LOCKS, AND IN THE AREA OF AIR LOCK TESTING SURVEILLANCE.

[387] SALEM 2 DOCKET 50-311 LER 82-017 REV 1
 UPDATE ON LOW FLOW TO CONTAINMENT FAN COIL UNITS.
 EVENT DATE: 022882 REPORT DATE: 111783 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES
 VENDOR: FISHER CONTROLS CO.
 FISCHER & PORTER CO.

(NSIC 187712) ON FEB. 28, 1982, THE CONTROL ROOM OPERATOR DISCOVERED ZERO SERVICE WATER FLOW INDICATION UPON STARTING NO. 22 CONTAINMENT FAN COIL UNIT (CFCU). ACTION STATEMENT 3.6.2.3.A WAS ENTERED AT 0612 HOURS. ON MAR. 1, 1982 DURING PERFORMANCE OF SURVEILLANCE 4.0.5V-SW, THE OPERATOR NOTICED SERVICE WATER FLOW TO NO. 23 CFCU WAS LESS THAN THE 2500 GPM REQUIRED FOR LOW SPEED. WITH TWO CFCU GROUPS INOPERABLE, ACTION STATEMENT 3.6.2.3.B WAS ENTERED AT 0540 HOURS. THE CAUSE OF ZERO SERVICE WATER FLOW TO NO. 22 CFCU WAS VALVE 22SW223 WAS STUCK CLOSED. THE CAUSE OF LOW SERVICE WATER FLOW TO NO. 23 CFCU WAS THE TRANSMITTER WAS PLUGGED WITH SILT. NO. 23 CFCU TRANSMITTER WAS BLOWN DOWN, VALVE 22SW223 WAS EXERCISED; THE CFCUS WERE RETURNED TO SERVICE IN THE TIME REQUIRED BY THE TECH SPECS. DAILY OPERATION OF THE CFCUS HAS CORRECTED THESE PROBLEMS.

[388] SALEM 2 DOCKET 50-311 LER 83-014
 RHR PUMP DEENERGIZED ON TWO DIFFERENT OCCASIONS.
 EVENT DATE: 041383 REPORT DATE: 051183 NSSS: WE TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: AUTOMATION INDUSTRIES INC.

(NSIC 183175) ON TWO SEPARATE OCCASIONS ON APRIL 13 AND KAPRIL 18, 1983, OPERATING LOADS ON THE NO. 2A 4KV AND 460V VITAL BUSES WERE OBSERVED TO TRIP. IN BOTH CASES, DUE TO THE DEENERGIZATION OF NO. 21 RESIDUAL HEAT REMOVAL (RHR) PUMP, NO. 21 RHR LOOP WAS NO LONGER IN OPERATION, AND ACTION STATEMENT 3.4.1.4B WAS ENTERED. IN EACH INSTANCE, THE RHR LOOP WAS IMMEDIATELY RETURNED TO OPERATION; NO REDUCTION IN REACTOR COOLANT SYSTEM BORON CONCENTRATION OCCURRED. THE EVENTS CONSTITUTED OPERATION IN A DEGRADED MODE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. INVESTIGATION REVEALED THAT THE PROBLEMS WERE EVIDENTLY DUE TO THE SAFEGUARDS EQUIPMENT CONTROL SYSTEM. A CONTRACT HAS BEEN WRITTEN FOR FURTHER INVESTIGATION BY AN EXPERIENCED CONSULTANT. APPROPRIATE CORRECTIVE ACTION WILL BE TAKEN UPON COMPLETION OF THE INVESTIGATION.

[389] SALEM 2 DOCKET 50-311 LER 83-022
 VITAL INSTRUMENT INVERTER FAILS.
 EVENT DATE: 053083 REPORT DATE: 060883 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 183365) ON MAY 30, 1983, DURING ROUTINE SHUTDOWN OPERATION, THE NO. 2C VITAL INSTRUMENT INVERTER FAILED, RENDERING THE ASSOCIATED ELECTRICAL BUS TRAIN INOPERABLE. SINCE NO. 2A DIESEL GENERATOR WAS ALSO INOPERABLE AT THE TIME, ACTION STATEMENT 3.8.2.2 WAS ENTERED. CONTAINMENT INTEGRITY WAS ESTABLISHED WITHIN 8 HOURS AS REQUIRED BY THE ACTION STATEMENT. DUE TO OPERATION LESS CONSERVATIVE THAN THE LEAST CONSERVATIVE ASPECT OF A LIMITING CONDITION FOR OPERATION, THE EVENT IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.8B. THE FACT THAT ONE SURVEILLANCE TEST NECESSARY TO ESTABLISH CONTAINMENT INTEGRITY WAS EXPIRED WAS OVERLOOKED UNTIL INSUFFICIENT TIME REMAINED TO COMPLETE THE TEST. A REVIEW OF APPLICABLE PROCEDURES AND TECH SPECS WILL BE PERFORMED TO IDENTIFY IMPROVEMENTS WHICH WILL PREVENT RECURRENCE. THE INVERTER WAS REPAIRED AND THE ACTION STATEMENT WAS TERMINATED.

[390] SALEM 2 DOCKET 50-311 LER 83-029
 CHARGING PUMP ON DURING SAFETY INJECTION TEST.
 EVENT DATE: 061783 REPORT DATE: 070683 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187520) ON JUNE 17, 1983, DURING ROUTINE SHUTDOWN OPERATION, A TEST SAFETY INJECTION ACTUATION WAS INITIATED FOR SURVEILLANCE TESTING. NO. 22 CHARGING PUMP, WHICH WAS SUPPOSED TO BE DE-ENERGIZED FOR THE TEST, WAS INADVERTENTLY LEFT IN SERVICE. THE PUMP COMPRESSED THE PRESSURIZER BUBBLE AND RESULTED IN A PRESSURE TRANSIENT WHICH CAUSED THE ACTUATION OF THE PRESSURIZER OVERPRESSURE PROTECTION SYSTEM (POPS). THE POPS FUNCTIONED AS DESIGNED AND MITIGATED THE TRANSIENT; THE PLANT WAS IMMEDIATELY RETURNED TO A STABLE SHUTDOWN CONDITION. THE EVENT IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.2. INVESTIGATION REVEALED THAT THE PUMP HAD BEEN INITIALLY DE-ENERGIZED, IN ACCORDANCE WITH THE INITIAL CONDITIONS OF THE SURVEILLANCE PROCEDURE. THE TEST WAS STOPPED DUE TO UNRELATED MAINTENANCE; THE DELAY CARRIED OVER TO THE NEXT OPERATING SHIFT. IN THE INTERIM THE PUMP WAS RESTARTED FOR MAKEUP TO THE RCS. UPON RESUMING THE TEST, THE PUMP WAS LEFT IN OPERATION. A PRECAUTION WILL BE ADDED TO THE PROCEDURE.

[391] SALEM 2 DOCKET 50-311 LER 83-047
 SAFEGUARDS EQUIPMENT CONTROL CHANNEL ACTUATES TWICE.
 EVENT DATE: 082983 REPORT DATE: 092783 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 186282) ON TWO SEPARATE OCCASIONS, ON AUGUST 29 AND AUGUST 30, 1983, DURING ROUTINE SHUTDOWN OPERATION, ACTUATIONS OF CHANNEL NO. 2A SAFEGUARDS EQUIPMENT CONTROL (SEC) SYSTEM OCCURRED. IN EACH CASE REDUNDANT SAFETY RELATED EQUIPMENT WAS AVAILABLE AND FOLLOWING RESETTING OF THE CHANNEL, RUNNING EQUIPMENT WAS RESTORED TO THE DESIRED STATUS. IN THE SECOND CASE, THE NO. 2A VITAL BUS WAS DE-ENERGIZED, AND ACTION STATEMENT 3.8.2.1A WAS ENTERED. THE EVENT CONSTITUTED OPERATION IN A DEGRADED MODE IN ACCORDANCE WITH TECH SPEC 6.9.1.9B. THE FIRST INSTANCE WAS VIEWED AS A SPURIOUS ACTUATION. IN THE SECOND CASE, THE ACTUATION OCCURRED DURING PERFORMANCE OF A VOLTAGE MEASUREMENT; THE LOADING EFFECT OF THE TEST INSTRUMENT APPARENTLY CAUSED A SPURIOUS SIGNAL FROM THE CHANNEL. INVESTIGATION OF CHANNEL 2A SEC PROBLEMS IS CONTINUING. A COMMITMENT TO SUBMIT A SUPPLEMENTAL REPORT WAS MADE IN LER 83-014/03L.

[392] SALEM 2 DOCKET 50-311 LER 83-049
 CONTAINMENT COMPRESSED AIR SUPPLY ISOLATION VALVE FOUND OPEN.
 EVENT DATE: 092383 REPORT DATE: 100783 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN

(NSIC 186160) ON SEPTEMBER 23, 1983, DURING ROUTINE MODE 3 OPERATION, IT WAS DISCOVERED THAT THE CONTAINMENT COMPRESSED AIR SUPPLY ISOLATION VALVE WAS NOT LOCKED CLOSED AS REQUIRED BY THE TECH SPECS FOR OPERATION IN ELEVATED MODES. SUBSEQUENT INVESTIGATION REVEALED THAT THE VALVE HAD BEEN LEFT OPEN PRIOR TO ENTRY INTO MODE 4 ON SEPTEMBER 22, 1983. THE DOWNSTREAM CHECK VALVE AND RELATED PIPING PROVIDED A REDUNDANT BARRIER. NO DEGRADATION OF THE OTHER MULTIPLE FISSION PRODUCT BARRIERS WAS INVOLVED. THE INCIDENT WAS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.1.8B. FURTHER INVESTIGATION REVEALED THAT THE OFF-NORMAL STATUS OF THE VALVE HAD BEEN OVERLOOKED DURING VERIFICATION OF EQUIPMENT STATUS DURING SUBSEQUENT MODE CHANGES. THE OPERATORS INVOLVED WERE COUNSELED TO INSURE ALL OFF-NORMAL ITEMS ARE INDIVIDUALLY REVIEWED AND RESOLVED PRIOR TO MODE CHANGE. AN INFORMATION DIRECTIVE WAS ISSUED TO INFORM ALL OPERATING SHIFTS OF THE PROBLEM.

[393] SAN ONOFRE 1 DOCKET 50-206 LER 83-004 REV 1
 UPDATE ON OPENING IN CONTROL ROOM AIR TREATMENT SYSTEM.
 EVENT DATE: 092783 REPORT DATE: 112183 NSSS: WE TYPE: PWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 187717) A PATH FOR UNFILTERED AIR TO ENTER THE CONTROL ROOM VIA AN OPENING IN A RETURN AIR DUCT WAS CREATED. UNDER ACCIDENT CONDITIONS, THE CONTROL ROOM EMERGENCY AIR TREATMENT SYSTEM WOULD NOT HAVE BEEN CAPABLE OF PERFORMING ITS FUNCTION AS DESIGNED, POSSIBLY RESULTING IN HIGH CONTROL ROOM AIRBORNE RADIOACTIVITY LEVELS. THE DUCT OPENING WAS NOT CAPPED AS REQUIRED BY DESIGN DURING IMPLEMENTATION OF A MODIFICATION TO THE SYSTEM. POLICY AND PROCEDURES GOVERNING DESIGN CHANGES HAVE SINCE BEEN REVISED TO INCLUDE VERIFICATION OF COMPLETION OF ALL ASPECTS OF IMPLEMENTATION PRIOR TO ENTERING OPERATING MODES OF APPLICABLE LIMITING CONDITIONS FOR OPERATION.

[394] SAN ONOFRE 2 DOCKET 50-361 LER 83-044
 MANUFACTURING ERROR IN HPSI PUMP FEEDER BREAKER.
 EVENT DATE: 021083 REPORT DATE: 061583 NSSS: CE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: GOULDS PUMPS INC.

(NSIC 183999) A REVIEW OF THE CIRCUITRY ASSOCIATED WITH KIRK KEY INTERLOCK OPERATION OF HIGH PRESSURE SAFETY INJECTION (HPSI) PUMPS 2P017 AND 2P018 IDENTIFIED THE EXISTENCE OF ELECTRICAL CONTINUITY WITHIN BREAKER 2A0409 WHICH WOULD HAVE RESULTED IN THE SIMULTANEOUS STARTING OF 2P017 AND 2P018 UPON RECEIPT OF AN ACTUATION SIGNAL. THE HPSI PUMP WOULD HAVE PERFORMED ITS FUNCTION IF CALLED UPON TO DO SO. THIS EVENT WAS DUE TO THE IMPROPER INSTALLATION OF A JUMPER ACROSS CONTACTS 133-7 AND ER-7 CONTRARY TO THE UNIT 2 ELEMENTARY DRAWING. THE JUMPER WAS REMOVED AND THE PUMPS DECLARED OPERABLE. A REVIEW OF OTHER BREAKERS HAS INDICATED NO SIMILAR ERRORS EXIST. THIS WAS AN ISOLATED MANUFACTURING ERROR.

[395] SAN ONOFRE 2 DOCKET 50-361 LER 83-030
 TRAIN B OF CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM INOPERABLE.
 EVENT DATE: 040683 REPORT DATE: 050683 NSSS: CE TYPE: PWR
 SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: MOTORS

(NSIC 183269) WITH UNIT 2 IN MODE 4 AND UNIT 3 IN MODE 5, CREACUS TRAIN B WAS DECLARED INOPERABLE AT 2115 FOR INVESTIGATION OF A GROUND ON FAN MOTOR ME-419. THE ACTION STATEMENT OF LCO 3.7.5 FOR MODES 1 THROUGH 4 WAS INVOKED AND SATISFIED AT 1300 ON 4/7/83 WHEN UNIT 2 ENTERED MODE 5. AT THIS POINT LCO 3.7.5, ACTION STATEMENT 'A' WAS ENTERED, WHICH REQUIRES THE SUSPENSION OF CORE ALTERATIONS AND POSITIVE REACTIVITY CHANGES. THE MOST LIKELY CAUSE OF THE GROUND ON FAN MOTOR ME-419 WAS AN OILY RESIDUE ON THE WINDINGS WHICH WAS ATTRIBUTED TO GREASE USED TO LUBRICATE THE MOTOR BEARINGS. WHEN THE MOTOR WAS INITIALLY INSTALLED, THE MOTOR BEARINGS WERE FILLABLE AND REQUIRED PERIODIC GREASING. THE PREVENTIVE MAINTENANCE PROGRAM FOR THIS MOTOR WAS NOT MODIFIED TO REFLECT THE CHANGE IN THE TYPE OF BEARING, SO PERIODIC GREASING CONTINUED. SINCE THE BEARINGS ARE SEALED, THIS RESULTED IN GREASE BEING PUMPED INTO THE MOTOR HOUSING. CORRECTIVE ACTIONS INCLUDED REPLACEMENT OF THE MOTOR AND REMOVAL OF ITS GREASE FITTINGS. FURTHER CORRECTIVE ACTIONS TO ADDRESS THIS PROBLEM ARE CURRENTLY BEING EVALUATED.

[396] SAN ONOFRE 2 DOCKET 50-361 LER 83-061
 CORE PROTECTION CALCULATOR DECLARED INOPERABLE.
 EVENT DATE: 052983 REPORT DATE: 062883 NSSS: CE TYPE: PWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: FOXBORO CO., THE

[397] SAN ONOPRE 2 DOCKET 50-361 LER 83-097
SPURIOUS FIRE PROTECTION SYSTEM DELUGE ACTUATION OCCURS.
EVENT DATE: 101783 REPORT DATE: 111683 NSSS: CE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS

[398] SAN ONOFRE 2 DOCKET 50-361 LER 83-126
NUCLEAR INSTRUMENTATION CHANNEL TESTS NOT COMPLETED ON TIME.
EVENT DATE: 101883 REPORT DATE: 112383 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

[399] SAN ONOFRE 2 DOCKET 50-361 LER 83-137
CONTAINMENT EMERGENCY COOLING UNIT HAS LOW FLOW.
EVENT DATE: 101983 REPORT DATE: 111883 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES

(NSIC 187814) ON 10/19/83, AT 0815, WITH UNIT 3 IN MODE 1, UNIT 3 TRAIN A CONTAINMENT EMERGENCY COOLING UNIT 3E-399 FAILED TO MEET THE ACCEPTANCE CRITERIA OF TECH SPEC 4.6.2.3.A.2, AND WAS DECLARED INOPERABLE. LCO 3.6.2.3, ACTION STATEMENT 'A' WAS ENTERED. ON 10/20/83, AT 1000, WITH UNIT 2 IN MODE 1, UNIT 2E-399 FAILED IN THE SAME MANNER, AND UNIT 2 ENTERED LCO 3.6.2.3, ACTION STATEMENT 'A'. THE EVENTS OCCURRED WHEN 3HV-6371, RESPECTIVELY, FAILED TO OPEN COMPLETELY TO ALLOW A FLOWRATE OF 2000 GPM. IN BOTH CASES, THE TORQUE SETTINGS ON THE VALVES WERE INCREASED, AND THE SYSTEMS WERE DECLARED OPERABLE PER SO23-3-3.30

AT 0140 ON 10/21/83 AND AT 1645 ON 10/21/83, FOR UNITS 2 AND 3, RESPECTIVELY. INVESTIGATION IS CONTINUING.

[400] SAN ONOFRE 2 DOCKET 50-361 LER 83-138
WASTE GAS CONTAINMENT ISOLATION VALVE FAILS TO CLOSE.
EVENT DATE: 102183 REPORT DATE: 112183 NSSS: CE TYPE: PWR
SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVE OPERATORS
VENDOR: WKM VALVE DIVISION

(NSIC 187744) ON OCT. 21, 1983, AT 0145, WITH UNIT 2 IN MODE 1 AT 100% POWER, CONTAINMENT ISOLATION VALVE 2HV7258 FAILED TO CLOSE DURING THE WASTE GAS QUARTERLY VALVE TEST. 2HV7258 WAS DECLARED INOPERABLE AND PER LCO 3.6.3, ACTION STATEMENT 'B', 2HV7259 WAS SECURED IN THE ISOLATION POSITION WITHIN FOUR HOURS AT 0210. THE INOPERABILITY OF 2HV7258 WAS DUE TO A LOOSE CONNECTION ON THE TERMINAL BLOCK IN THE CLOSING CIRCUIT. THE CONNECTION WAS TIGHTENED AND ON OCT. 24, 1983, AT 1400, 2HV7258 WAS DECLARED OPERABLE IN ACCORDANCE WITH PROCEDURE S023-3-3.30. THIS IS CONSIDERED AN ISOLATED OCCURRENCE AND NO FURTHER CORRECTIVE ACTION IS PLANNED.

[401] SAN ONOFRE 2 DOCKET 50-361 LER 83-139
TOXIC GAS ISOLATION SYSTEM SPURIOUSLY INITIATES.
EVENT DATE: 102483 REPORT DATE: 112383 NSSS: CE TYPE: PWR
SYSTEM: CONT ROOM HABITBLTY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WALLACE & TIEMAN, INC.

(NSIC 187815) ON OCT. 24, 1983, AT 0848, WITH UNITS 2 AND 3 IN MODE 1 AT 100% AND 50% POWER, RESPECTIVELY, TOXIC GAS ISOLATION SYSTEM (TGIS) TRAIN 'B' CHLORINE ANALYZER SPURIOUSLY INITIATED AND WAS DECLARED INOPERABLE. PER LCO 3.3.2, TABLE 3.3-3, ACTION 14, ACTION WAS INITIATED TO RESTORE THE ANALYZER TO OPERABLE STATUS WITHIN 7 DAYS. TGIS TRAIN 'A' CHLORINE ANALYZER REMAINED OPERABLE. THE INOPERABILITY OF THE CHLORINE ANALYZER WAS DUE TO A DEFECTIVE SILICON CONTROL RECTIFIER IN THE CIRCUIT BOARD AND A DEFECTIVE ELECTRODE DETECTOR ASSEMBLY. THE DEFECTIVE COMPONENTS WERE REPLACED AND THE ANALYZER WAS RECALIBRATED. THE ANALYZER WAS TESTED IN ACCORDANCE WITH STATION PROCEDURE S023-II-1.15 AND DECLARED OPERABLE AT 1929 ON 10/24/83.

[402] SAN ONOFRE 3 DOCKET 50-362 LER 83-087
PMS COMPUTER FAILS WITH CONTROL RODS IN PHYSICS TESTING PATTERN.
EVENT DATE: 102683 REPORT DATE: 111083 NSSS: CE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 187602) ON 10/26/83, AT 1019, THE PLANT MONITORING SYSTEM (PMS) COMPUTER FAILED WHILE THE PLANT WAS UNDER SPECIAL TEST EXCEPTION LCO 3.10.2. LCO 3.10.2, ACTION STATEMENT 'B', COULD NOT BE SATISFIED SINCE THE PMS COMPUTER OPERATES THE INCORE DETECTOR MONITORING SYSTEM. LCO 3.0.3 WAS INVOKED. PLANT SHUTDOWN WAS NOT REQUIRED BECAUSE THE PMS COMPUTER WAS RESTORED TO OPERABLE STATUS WITHIN ONE HOUR AT 1049. THE PMS FAILURE WAS DUE TO A MOVING HEAD DISK ERROR IN THE PMS COMPUTER. THE CAUSE OF THE MOVING HEAD DISK ERROR IS UNKNOWN. THE PMS COMPUTER WAS RESTARTED AT 1049 AND OPERATED SATISFACTORILY. NO FURTHER CORRECTIVE ACTION IS PLANNED.

[403] SAN ONOFRE 3 DOCKET 50-362 LER 83-097
CONTROL RODS SLIP SEVERAL TIMES.
EVENT DATE: 102983 REPORT DATE: 112883 NSSS: CE TYPE: PWR
SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL ROD DRIVE MECHANISMS
VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 187603) WITH UNIT 3 IN MODE 2, CONTROL ELEMENT ASSEMBLY (CEA) 57 DROPPED MORE THAN 19 INCHES AT 1329 ON 10/29/83, AND ALSO AT 0015 ON 10/30/83, AND CEA 61 DROPPED MORE THAN 19 INCHES AT 1612 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 WHEN CEA 65 SLIPPED, ON 10/29/83 AT 2235 WHEN CEA 61 SLIPPED, ON 11/1/83 AT 1556 WHEN CEA 61 SLIPPED, AND ON 11/1/83 AT 1610 WHEN CEA 65 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. AS CORRECTIVE ACTION, THE TIMING SEQUENCES AND VOLTAGES WERE ADJUSTED TO COMPENSATE FOR SLUGGISHNESS IN THE GRIPPER ASSEMBLIES. NO FURTHER CORRECTIVE ACTIONS ARE PLANNED. SEE LER 83-62.

[404] SEQUOYAH 1 DOCKET 50-327 LER 83-115
 DAMPER OPERATOR FOUND DISCONNECTED.
 EVENT DATE: 082783 REPORT DATE: 092383 NSSS: WE TYPE: PWR
 SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: VALVE OPERATORS
 VENDOR: AMERICAN WARMING & VENTILATING INC.

(NSIC 186112) WITH UNIT 1 IN MODE 1 AT 30% REACTOR POWER AT 1230 CDT ON 8/27/83, THE OPERATOR FOR AUXILIARY BUILDING GAS TREATMENT SYSTEM DAMPER 1-FCV-30-146A WAS FOUND DISCONNECTED. THIS EVENT REQUIRED ENTRY INTO LCO 3.7.8. PREVIOUS OCCURRENCES - NONE. THE MECHANICAL LINKAGE FROM THE OPERATOR TO THE DAMPER ARM AND LIMIT STOPS HAD BECOME DISCONNECTED DUE TO LOCKING NUTS BEING LOOSE. THE LINKAGE WAS RECONNECTED, LOCKING NUTS TIGHTENED, AND THE DAMPER RETURNED TO SERVICE AT 1900 CDT. INVESTIGATION FOUND NO SPECIFIC CAUSE FOR THE EVENT. SINCE THIS IS THE FIRST EVENT OF THIS TYPE, NO ADDITIONAL CORRECTIVE ACTIONS WILL BE TAKEN UNLESS THE PROBLEM RECURS.

[405] SEQUOYAH 1 DOCKET 50-327 LER 83-120
 ICE CONDENSER DOORS OPEN.
 EVENT DATE: 091083 REPORT DATE: 100783 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: PENETRATIONS,PRIMARY CONTAIN

(NSIC 186177) UNIT 1 WAS IN MODE 4 WITH RCS TEMPERATURE AND PRESSURE AT 215 DEGREES F AND 350 PSIG. AT 2012 ON 9/10/83, ALL ICE CONDENSER DOORS OPENED WHEN 1-FCV-63-73, CONTAINMENT ECCS SUMP ISOLATION VALVE, WAS STROKED DURING PERFORMANCE OF SI-166.3, "FULL STROKING OF CATEGORY A AND B VALVES DURING COLD SHUTDOWN". THIS EVENT REQUIRED ENTRY INTO LCO 3.6.5.3. NO PREVIOUS OCCURRENCES. WHEN THE VALVE WAS STROKED, 215 DEGREE WATER FROM THE RHR SYSTEM BACKFLOWED INTO THE CONTAINMENT SUMP. FLASHING OF THIS WATER TO STEAM CAUSED A SMALL PRESSURE SURGE IN LOWER CONTAINMENT FORCING THE ICE CONDENSER DOORS OPEN. THE DOORS WERE ALL CLOSED AT 2038 CDT ON 9/10/83. FUTURE STROKE TESTING OF 1-FCV-63-73 WILL BE PERFORMED IN COLD SHUTDOWN TO PREVENT RECURRENCE.

[406] SEQUOYAH 1 DOCKET 50-327 LER 83-116
 SUBCOOLING MARGIN MONITOR FAILS.
 EVENT DATE: 092483 REPORT DATE: 102083 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186451) WITH THE UNIT 1 IN MODE 1 (100% REACTOR POWER) AT 1124 CDT ON 9/24/83, THE REACTOR COOLANT SUBCOOLING MARGIN MONITOR WAS DECLARED INOPERABLE DUE TO THE LOSS OF THE P-250 COMPUTER. THE UNIT COMPLIED WITH ACTION STATEMENT (A) OF LCO 3.3.3.7. PREVIOUS OCCURRENCES - SEVEN (SQRO-50-327/83057, 83092, AND SQRO-50-328/83034, 83069, 83074, 83085, 83095). INVESTIGATION INTO THE EVENT SHOWED THAT THE PLANT PROCESS COMPUTER FAILED DUE TO A POWER SPIKE TO THE DISC. THE POWER SPIKE WAS CAUSED BY BUS TRANSFERS BEING MADE IN THE 500-KW SWITCHYARD. THE COMPUTER WAS RESTARTED AND THE RCS SUBCOOLING MARGIN MONITOR VERIFIED OPERABLE AT 1215 CDT ON 9/24/83. NO FURTHER ACTION IS PLANNED.

[407] SEQUOYAH 1 DOCKET 50-327 LER 83-128
 CONTAINMENT VENTILATION RADIATION MONITOR FAILS.
 EVENT DATE: 092583 REPORT DATE: 102483 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 186459) WITH UNIT 1 IN MODE 1 (100% REACTOR POWER) AT 1128 CDT ON 9/25/83, THE CONTAINMENT VENTILATION RADIATION MONITOR (1-RM-90-106B) FOR GASEOUS ACTIVITY WAS DECLARED INOPERABLE DUE TO FAILURE TO INITIATE CONTAINMENT VENTILATION ISOLATION ON SIGNAL. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENTS 19 AND 28 OF LCOS 3.3.2.1 AND 3.3.3.1 RESPECTIVELY. PREVIOUS OCCURRENCES - NONE. INVESTIGATION INTO THE EVENT REVEALED THAT THE GASEOUS HIGH RADIATION RELAY WAS FOUND PULLED OUT OF ITS TERMINAL WHICH DID NOT ALLOW FOR AN ISOLATION SIGNAL. THE REASON FOR THE MISPOSITIONED RELAY IS UNKNOWN. HOWEVER, THIS IS CONSIDERED AN ISOLATED INCIDENT. THE RELAY REINSTALLED AND THE MONITOR VERIFIED OPERABLE AT 1304 CDT ON 9/25/83. NO FURTHER ACTION IS PLANNED.

[408] SEQUOYAH 1 DOCKET 50-327 LER 83-123
 AUXILIARY BUILDING GAS TREATMENT SYSTEM TRAIN INOPERABLE.
 EVENT DATE: 092683 REPORT DATE: 102183 NSSS: WE TYPE: PWR
 SYSTEM: OTHER ENGNRD SAFETY FEATR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: JOHNSON CONTROLS INC.

(NSIC 186458) WITH UNIT 1 IN MODE 1 (100% REACTOR POWER) AT 0821 ON 9/26/83, TRAIN 'A' OF THE AUXILIARY BUILDING GAS TREATMENT SYSTEM WAS DECLARED INOPERABLE DUE TO CONTROL DAMPER 1-PCV-30-149 FAILING TO OPERATE. THIS EVENT REQUIRED ENTRY INTO THE ACTION STATEMENT OF LCO 3.7.8. PREVIOUS OCCURRENCES - NONE. INVESTIGATION REVEALED THAT THE DAMPER FAILED TO OPERATE DUE TO FLOW CONTROLLER FC-30-149 BEING INOPERABLE. THE CAUSE FOR THE INOPERABLE CONTROLLER IS UNKNOWN. THE CONTROLLER WAS REPLACED AND THE DAMPERS VERIFIED OPERABLE. TRAIN 'A' OF ABGTS WAS DECLARED OPERABLE AT 1800 CDT ON 9/27/83. PLANS ARE BEING MADE TO REPLACE THE CONTROLLER WITH A MORE RELIABLE INSTRUMENT.

[409] SEQUOYAH 1 DOCKET 50-327 LER 83-152
 NITROGEN SUPPLY VALVE TO REACTOR COOLANT DRAIN TANK INOPERABLE.
 EVENT DATE: 102883 REPORT DATE: 112583 NSSS: WE TYPE: PWR
 SYSTEM: OTHER COOLANT SUBSYS & CONTROL COMPONENT: VALVE OPERATORS
 VENDOR: IOSSI, EDQIN W. PAINTING & DECORATING I

(NSIC 187553) UNIT 1 IN MODE 1 AT 100% RTP. AT 1620 (C) ON 10/28/83, CONTAINMENT ISOLATION VALVE 1-FCV-77-20 IN THE REACTOR COOLANT DRAIN TANK NITROGEN SUPPLY LINE WAS FOUND INOPERABLE DURING SURVEILLANCE TESTING. THIS EVENT REQUIRED ENTRY INTO LCO 3.6.3. THE VALVE WAS ISOLATED UPON DISCOVERY. INVESTIGATION REVEALED A BAD CABLE HAD CAUSED THE VALVE INOPERABILITY. THE CABLE WILL BE REPLACED AS SOON AS MATERIAL IS AVAILABLE AND PROPER WORK PROCEDURES ARE COMPLETE.

[410] SEQUOYAH 1 DOCKET 50-327 LER 83-167
 WASTE GAS DECAY TANK HAS HIGH OXYGEN CONCENTRATION.
 EVENT DATE: 111583 REPORT DATE: 121383 NSSS: WE TYPE: PWR
 SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: OTHER COMPONENTS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187797) UNIT 1 IN MODE 1 AT 100% RX POWER AND UNIT 2 IN MODE 1 AT 100% RX POWER. ON 11/15/83 AT 1030 (C), THE "E" WASTE GAS DECAY TANK (WGDT) WAS DISCOVERED TO HAVE AN OXYGEN CONCENTRATION OF 2.7%. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT "A" OF LCO 3.11.2.5. PREVIOUS OCCURRENCES - ONE (SQRO-50-327/83154). THE MOST PROBABLE CAUSE OF THE HIGH OXYGEN CONCENTRATION HAS BEEN ATTRIBUTED TO AIR ENTERING THE WASTE GAS SYSTEM FOLLOWING MAINTENANCE ON THE "B" BORIC ACID TANK. THE "E" WGDT WAS RELEASED AT 1830 (C) ON 11/15/83.

FOLLOWING FUTURE WORK ON THE BORIC ACID EVAPORATOR, IT WILL BE PURGED WITH NITROGEN TO ATTEMPT TO REDUCE THE OXYGEN.

[411] SEQUOYAH 1 DOCKET 50-327 LER 83-169
 STEAM GENERATOR BLOWDOWN RECORDER FAILS.
 EVENT DATE: 111783 REPORT DATE: 121483 NSSS: WE TYPE: PWR
 SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187799) WITH UNIT 1 IN MODE 1 (100% RX POWER) AT 1710 CST ON 11/17/83, THE STEAM GENERATOR BLOWDOWN FLOW RATE MONITOR (1-FE-15-25) WAS DECLARED INOPERABLE DUE TO THE LOSS OF THE RECORDER. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT "33" OF LCO 3.3.3.9. PREVIOUS OCCURRENCES - NONE. TROUBLESHOOTING THE INOPERABLE FLOW RECORDER REVEALED THAT THE INK PEN WAS NOT IN CONTACT WITH THE PAPER AND THAT THE PEN WAS OUT OF INK. AT 0524 CST ON 11/18/83, INK WAS ADDED AND A CUPFORT PLATE WAS ADDED TO MAINTAIN PEN TO PAPER CONTACT. A PREVENTIVE MAINTENANCE PROGRAM WILL BE WRITTEN TO PERIODICALLY INSPECT THE RECORDER TO PREVENT RECURRENCE.

[412] SEQUOYAH 1 DOCKET 50-327 LER 83-168
 DIESEL GENERATOR FAILS TO START.
 EVENT DATE: 111883 REPORT DATE: 121583 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: DIALCO

(NSIC 187798) UNIT 1 IN MODE 1 (100% POWER). AT 0845 CST ON 11/18/83, THE 1A-A DIESEL GENERATOR WAS DECLARED INOPERABLE WHEN IT FAILED TO START DURING PERFORMANCE OF SI-7.1. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT "A" OF LCO 3.8.1.1. PREVIOUS OCCURRENCES - NONE. INVESTIGATION DETERMINED THE CAUSE TO BE A SHORT-CIRCUITED LAMP HOLDER WHICH KEPT BLOWING CONTROL FUSES TO THE DIESEL START CIRCUITRY. THE LAMP HOLDER WAS REPLACED AND THE DIESEL WAS DECLARED OPERABLE AT 1348 CST ON 11/18/83. NO ADDITIONAL CORRECTIVE ACTION IS PLANNED.

[413] SEQUOYAH 1 DOCKET 50-327 LER 83-173
 DIESEL GENERATOR FAILS TO REACH VOLTAGE AND SPEED.
 EVENT DATE: 112183 REPORT DATE: 122083 NSSS: WE TYPE: PWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: RELAYS
 VENDOR: SQUARE D COMPANY

(NSIC 187802) WITH UNIT 1 IN MODE 1 AND UNIT 2 IN MODE 1 AT 1000 CST ON 11/21/83, DIESEL GENERATOR 2B-B WAS DECLARED INOPERABLE DUE TO FAILURE TO MEET SURVEILLANCE REQUIREMENTS. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT 'A' OF LCO 3.8.1.1. PREVIOUS OCCURRENCES - NONE. DURING PERFORMANCE OF SI-7.1, D/G 2B-B FAILED TO REACH RATED VOLTAGE AND SPEED WITHIN THE SPECIFIED TIME REQUIREMENTS. TROUBLESHOOTING REVEALED THE FIELD FLASH RELAY K1A COIL TO BE OPEN. THE CAUSE FOR THE FAILED COIL IS UNKNOWN. THE K1A RELAY WAS REPLACED AND THE D/G TESTED SATISFACTORILY AT 1300 CST ON 11/21/83. NO FURTHER ACTION IS PLANNED.

[414] SEQUOYAH 2 DOCKET 50-328 LER 83-121
 CONTAINMENT AIRLOCK LEAKS.
 EVENT DATE: 091183 REPORT DATE: 100783 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 186114) WITH UNIT 2 IN MODE 5 AT 0330 ON 09/11/83, THE LOWER CONTAINMENT AIRLOCK FAILED SI-159.1, OVERALL LEAKAGE TEST. ALLOWABLE LEAKAGE FOR THE AIRLOCK IS < OR = 11.25 SCFH. THE AIRLOCK LEAKAGE WAS 26.54 SCFH. THIS CONDITION WAS DISCOVERED IN MODE 5, BUT MAY HAVE EXISTED IN APPLICABLE MODES PER LCO 3.6.1.3.

THE TECH SPEC REQUIREMENTS FOR OVERALL CONTAINMENT INTEGRITY (BYPASS AND SUMMATION LEAKAGE) WAS NOT EXCEEDED. PREVIOUS OCCURRENCES - FIVE (SQRO-50-327/80176, 81108, 82139, 50-328/82064, AND 82138). WHILE THE EXACT CAUSE OF LEAKAGE COULD NOT BE EXACTLY IDENTIFIED, MOST PROBABLE LEAKAGE WAS LEAKAGE THROUGH THE FOUR HANDWHEEL PACKINGS, CAUSED BY NORMAL WEAR DURING THE LARGE USAGE OF THE AIRLOCK DUE TO THE PRESENT REFUELING OUTAGE. THE DOORS WERE OVERHAULED AND RETESTED SATISFACTORILY ON 09/25/83.

[415] SEQUOYAH 2 DOCKET 50-328 LER 83-140
 DRIFT OF SUMP LEVEL TRANSMITTERS.
 EVENT DATE: 100383 REPORT DATE: 110183 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 186862) WITH UNIT 2 IN MODE 5 (0% REACTOR POWER) ON 10/03/83 WHILE THE UNIT WAS IN REFUELING OPERATIONS, IT WAS DISCOVERED THAT THREE CONTAINMENT SUMP LEVEL CHANGES WERE OUT OF TOLERANCE DURING CALIBRATION. THE CHANNELS WERE RECALIBRATED AND RETURNED TO SERVICE ON THE SAME DAY. THIS IS REPORTABLE UNDER 6.9.1.13.B OF THE TECH SPECS. PREVIOUS OCCURRENCES - ELEVEN (SQRO-50-327/80091, 81040, 81151, 82070; 50-328/81116, 81135, 82026, 82015, 83030, 80397, 83130). DURING THE PERFORMANCE OF SI-202 (18-MONTH SURVEILLANCE), CHANNELS LT-63-176, 177, AND 178 WERE FOUND OUT OF CALIBRATION. THE MOST PROBABLE REASON OF THE DISCREPANCY IS INSTRUMENT DRIFT CAUSED BY AIR LEAKAGE AROUND THE O-RING SEAL ON THE OIL-FILLED REFERENCE LEG OF THE SAME LINES. THE BARTON MODEL 764 PROBLEMS ASSOCIATED WITH AIR IN THE SENSE LINES HAS BEEN COORDINATED WITH THE MANUFACTURER TO PROVIDE CORRECTIVE ACTION TO PREVENT RECURRENCE.

[416] SEQUOYAH 2 DOCKET 50-328 LER 83-141
 SETPOINT DRIFT OF STEAM SYSTEM PRESSURE SWITCH.
 EVENT DATE: 100483 REPORT DATE: 110283 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: FOXBORO CO., THE

(NSIC 186863) WITH UNIT 2 IN MODE 5 (0% REACTOR POWER) DURING SHUTDOWN FOR REFUELING, IT WAS DISCOVERED THAT STEAM HEADER PRESSURE CHANNEL 2-PS-1-9 WAS OUT OF CALIBRATION. THIS IS REPORTABLE UNDER 6.9.1.13.B OF THE TECH SPECS. PREVIOUS OCCURRENCES - NONE. DURING THE PERFORMANCE OF SI-98, 18-MONTH CALIBRATION OF STEAM HEADER LOOPS, IT WAS NOTED THAT CHANNEL 2-PS-1-9 WAS OUT OF TOLERANCE. THE MOST PROBABLE CAUSE FOR THE DEFICIENCY IS INSTRUMENT DRIFT. THE LOOP WAS RECALIBRATED AND RETURNED TO SERVICE ON 10/04/83. NO FURTHER ACTION IS PLANNED.

[417] SEQUOYAH 2 DOCKET 50-328 LER 83-132
 LOW FLOW TO SG BLOWDOWN RADIATION MONITOR.
 EVENT DATE: 100783 REPORT DATE: 110483 NSSS: WE TYPE: PWR
 SYSTEM: LIQ RADIOACT WSTE MANAGMNT SYS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186861) WITH UNIT 2 IN MODE 3 (0% REACTOR POWER) AT 1910 CDT ON 10/07/83, THE STEAM GENERATOR BLOWDOWN LIQUID EFFLUENT RADIATION MONITOR (2-RM-90-120/121) WAS DECLARED INOPERABLE DUE TO FAILURE TO MAINTAIN ADEQUATE SAMPLE FLOW. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT '31' OF LCO 3.3.3.9. PREVIOUS OCCURRENCES - TWO (SQRO-50-327/81149 AND 83113). INVESTIGATION INTO THE EVENT REVEALED THE STEAM GENERATOR (SG) BLOWDOWN FLOW TO THE COOLING TOWERS WAS NOT SUFFICIENT TO MAINTAIN AN ADEQUATE PRESSURE AND FLOW TO THE MONITOR FROM THE FLASH TANK. THE ACTION STATEMENT WILL BE COMPLIED WITH UNTIL ADEQUATE FLOW IS AVAILABLE. TO PREVENT RECURRENCE, MODIFICATIONS ARE BEING MADE TO REPLACE THE FLASH TANK WITH A HEAT EXCHANGER AND PULL THE SAMPLE FROM THE DISCHARGE OF THE HEAT EXCHANGER.

[418] SEQUOYAH 2 DOCKET 50-328 LER 83-148
 DRIFT IN CONDENSER VACUUM FLOW TRANSMITTER.
 EVENT DATE: 102283 REPORT DATE: 111883 NSSS: WE TYPE: PWR
 SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187422) WITH UNIT 2 IN MODE 1 (60% POWER) AT 0531 CDT ON 10/22/83, THE CONDENSER VACUUM EXHAUST FLOW RATE MONITOR FAILED HIGH AND WAS DECLARED INOPERABLE. THE UNIT COMPLIED WITH ACTION STATEMENT '41' OF LCO 3.3.3.10. PREVIOUS OCCURRENCES - THREE (SQRO-50-327/83106 AND 50-328/83093, 83131). INVESTIGATION INTO THE EVENT REVEALED THAT CHANNEL 2-FT-2-257 HAD A ZERO SHIFT IN THE TRANSMITTER OUTPUT. THE TRANSMITTER WAS RECALIBRATED AND RETURNED TO SERVICE AT 0623 CDT ON 10/22/83. A DESIGN CHANGE REQUEST HAS BEEN INITIATED TO CHANGE THE FLOW ELEMENT TO A TURBINE METER FOR BETTER RELIABILITY.

[419] SEQUOYAH 2 DOCKET 50-328 LER 83-153
 CONTAINMENT AIR LOCK DOOR NOT FULLY CLOSED.
 EVENT DATE: 103183 REPORT DATE: 112983 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN
 VENDOR: CHICAGO BRIDGE AND IRON COMPANY

(NSIC 187280) UNIT 2 IN MODE 1 AT 100% RTP. AT APPROXIMATELY 1000 (C) ON 10/31/83, PERSONNEL ATTEMPTING TO PERFORM AN AIR LEAKAGE TEST ON THE UPPER CONTAINMENT AIRLOCK DISCOVERED THE OUTER DOOR NOT FULLY CLOSED. THIS EVENT REQUIRED ENTRY INTO LCO 3.6.1.3. THE DOOR WAS CLOSED UPON DISCOVERY. SECURITY PERSONNEL CONDUCTED A SEARCH OF UPPER CONTAINMENT AND CONCLUDED NO SECURITY COMPROMISE HAD TAKEN PLACE. THE MOST PROBABLE CAUSE OF THE DOOR BEING NOT FULLY CLOSED HAS BEEN ATTRIBUTED TO PUBLIC SAFETY PERSONNEL NOT GETTING THE DOOR FULLY SEATED FOLLOWING AN ALARM CHECK AT 0403 (C) ON 10/31/83.

[420] SEQUOYAH 2 DOCKET 50-328 LER 83-160
 APW HAS LOW FLOW.
 EVENT DATE: 110283 REPORT DATE: 120183 NSSS: WE TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: OTHER COMPONENTS

(NSIC 187554) WITH UNIT 2 IN MODE 1 (100% RX POWER) AT 0513 CST ON 11/02/83, TURBINE-DRIVEN AUXILIARY FEEDWATER PUMP FAILED ACCEPTANCE CRITERIA OF SI-166.32 BY NOT OBTAINING THE 880 GPM MINIMUM FLOW RATE. THIS EVENT REQUIRED ENTRY INTO ACTION STATEMENT 3.7.1.2.B. INVESTIGATION REVEALED THAT AUXILIARY FEEDWATER FLOW TRANSMITTER (2-FT-3-142) WHICH FEEDS BACK TO THE TURBINE SPEED CONTROLS, WAS READING HIGH DUE TO AIR IN THE INSTRUMENT SENSE LINE. THE SENSE LINES WERE VENTED AND THE TDAFWP WAS DECLARED OPERABLE AT 1245 CST ON 11/08/83. LCO 3.7.1.2.B BECAME NOT APPLICABLE ON 11/02/83 WHEN UNIT 2 ENTERED MODE 4 DUE TO HIGH VIBRATION ON #4 RCP. THE REPAIR WAS MADE PRIOR TO UNIT STARTUP.

[421] SEQUOYAH 2 DOCKET 50-328 LER 83-151
 TWO UPPER HEAD INJECTION ISOLATION VALVES FAIL TO OPEN.
 EVENT DATE: 110783 REPORT DATE: 120683 NSSS: WE TYPE: PWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187803) WITH UNIT 2 IN MODE 3 (0% RX POWER, 450 DEGREES F, 2100 PSIG) AT 1730 CST ON 11/07/83, DURING HEATUP AND PRESSURIZATION, IT WAS NOTED THAT THE UHI ISOLATION VALVES WERE NOT OPENED PRIOR TO EXCEEDING 1900 PSIG. INVESTIGATION INTO THIS EVENT INDICATED THAT TWO VALVES (2-FCV-87-24 AND -23) WOULD NOT OPERATE CORRECTLY DUE TO WIRING ERRORS. THE UNIT COMPLIED WITH LCO 3.5.1.2 ACTION REQUIREMENTS. PREVIOUS OCCURRENCES - NONE. INVESTIGATION INTO THE EVENT OF EXCEEDING 1900 PSIG WITHOUT OPENING THE UHI ISOLATION VALVES INDICATES THAT THIS WAS A PERSONNEL ERROR IN THAT THE OPERATOR FAILED TO FOLLOW PROCEDURES. UPON EVENT DISCOVERY, THE PRESSURE WAS IMMEDIATELY REDUCED TO LESS THAN 1900 PSIG.

FOLLOWING THE REDUCTION IN PRESSURE, AN ATTEMPT WAS MADE TO OPEN THE VALVES. HOWEVER, VALVES 2-FCV-87-23 AND -24 FAILED TO OPERATE CORRECTLY DUE TO INCORRECTLY TERMINATED WIRES IN THE ASSOCIATED LEVEL SWITCHES.

[422] SEQUOYAH 2 DOCKET 50-328 LER 83-163
 ROD POSITION INDICATOR READS ERRATICALLY.
 EVENT DATE: 111183 REPORT DATE: 120983 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187804) WITH UNIT 2 IN MODE 1 (30% RX POWER) AT 2245 CST ON 11/11/83, ROD POSITION INDICATOR FOR ROD M-2 ON SHUTDOWN BANK 'A' WAS DECLARED INOPERABLE DUE TO READING ERRATIC. THE UNIT COMPLIED WITH ACTION STATEMENT 'A' OF LCO 3.1.3.2. PREVIOUS OCCURRENCES - FOUR (SQRO-50-327/80186, 80192, 82087, 82055). TROUBLESHOOTING THE ROD POSITION INDICATOR REVEALED DIRTY CONTACTS ON THE ROD M-2 AMPLIFIER BOARD. THE CONTACTS WERE CLEANED AND THE INDICATOR RETURNED TO SERVICE AT 0115 CST ON 11/12/83. NO FURTHER ACTION IS PLANNED.

[423] SEQUOYAH 2 DOCKET 50-328 LER 83-165
 PRESSURIZER SAFETY VALVE LEAKS PAST SEAT.
 EVENT DATE: 111583 REPORT DATE: 121383 NSSS: WE TYPE: PWR
 SYSTEM: COOLANT RECIRC SYS & CONTROLS COMPONENT: VALVES
 VENDOR: CORSBY VALVE & GAGE CO.

(NSIC 187805) UNIT 2 IN MODE 5. DURING A REVIEW OF SURVEILLANCE INSTRUCTION SI-112 (TESTING AND SETTING OF SETPOINT OF PRESSURIZED SAFETY VALVES) ON 11/15/83, IT WAS NOTED THAT PRESSURIZER SAFETY VALVE 2-VLV-68-563 HAD FAILED SEAT LEAKAGE CRITERIA, AND THE LIFT SETPOINT COULD NOT BE VERIFIED. THIS CONDITION WAS DISCOVERED IN MODE 5, BUT MAY HAVE EXISTED IN APPLICABLE MODES AND MAY HAVE REQUIRED ENTRY INTO LCO 3.4.3.1. PREVIOUS OCCURRENCES - TWO (SQRO-50-327/83001 AND 50-328/83127). THE MOST PROBABLE CAUSE OF THE VALVE SEAT LEAKAGE HAS BEEN ATTRIBUTED TO THE LOSS OF THE LOOP SEAL. THE VALVE WAS REPLACED AND RETURNED TO SERVICE ON 11/08/83. A FUTURE MODIFICATION IS PLANNED TO REMOVE THE LOOP SEAL AND INSTALL NEW TRIM PORTS IN THE PRESSURIZER SAFETY VALVES.

[424] SEQUOYAH 2 DOCKET 50-328 LER 83-170
 ISOLATION VALVE DECLARED INOPERABLE.
 EVENT DATE: 111883 REPORT DATE: 121583 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: VALVES
 VENDOR: MASONEILAN INTERNATIONAL, INC.

(NSIC 187854) UNIT 1 IN MODE 1 (100% POWER) AND UNIT 2 IN MODE 1 (100% POWER). AT 1100 CST ON 11/18/83, VALVE 2-FCV-63-84 WAS DECLARED INOPERABLE DUE TO INDICATION IN THE CONTROL ROOM OF THE VALVE BEING IN THROTTLE POSITION. THIS EVENT REQUIRED ENTRY INTO LCO 3.6.3. MANUAL ISOLATION VALVE 2-HCV-63-601 WAS CLOSED AT 1317 TO COMPLY WITH THE ACTION STATEMENT. THE CAUSE OF THIS EVENT WAS DUE TO LIMIT SWITCH BEING OUT OF ADJUSTMENT. ADJUSTMENTS WERE MADE, AND THE VALVE WAS DECLARED OPERABLE AT 1749 CST ON 11/18/83. NO ADDITIONAL CORRECTIVE ACTION IS PLANNED.

[425] ST. LUCIE 1 DOCKET 50-335 LER 83-019
 STEAM GENERATOR FEEDWATER NOZZLES HAVE REJECTABLE INDICATIONS.
 EVENT DATE: 032283 REPORT DATE: 040183 NSSS: CE TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: PIPES, FITTINGS
 VENDOR: COMBUSTION ENGINEERING, INC.

(NSIC 186279) DURING IN-SERVICE INSPECTION, REJECTABLE INDICATIONS WERE NOTED IN THE RESULTS OF THE ULTRASONIC TESTS OF THE "A" S.G. FEEDWATER NOZZLE. BECAUSE OF

THESE FINDINGS THE "B" S.G. WAS ALSO INSPECTED WITH SIMILAR RESULTS (ALTHOUGH NOT CODE REJECTABLE). NO BROKEN OR MISSING PARTS WERE NOTED. THESE FINDINGS ARE REPORTABLE IN ACCORDANCE WITH TECH SPEC 4.4.10.2.A. A DETAILED REPORT WILL BE SUBMITTED WITHIN 90 DAYS. THIS IS THE FIRST LER OF THIS TYPE. A COMPLETE RESOLUTION OF THIS PROBLEM IS NOT KNOWN AT THIS TIME. THE NOZZLE SAFEENDS ARE BEING REPLACED AND A DECISION WILL BE MADE CONCERNING FURTHER REPAIRS OR CORRECTIVE ACTIONS WHEN THE EVALUATIONS OF THE TESTS THAT HAVE BEEN PERFORMED ARE COMPLETED.

[426] ST. LUCIE 2 DOCKET 50-389 LER 83-014
 FEEDWATER ISOLATION VALVE DRIFTS OPEN.
 EVENT DATE: 052283 REPORT DATE: 062283 NSSS: CE TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: VALVE OPERATORS
 VENDOR: ANCHOR/DARLING VALVE CO.

(NSIC 184146) WHILE OPERATING IN MODE 4 DURING INITIAL STARTUP, THE "B" MAIN FEEDWATER ISOLATION VALVE (MFWIV) DRIFTED OPEN. THE VALVE WAS CLOSED IN ACCORDANCE WITH TECH SPEC 3.7.1.G. SUBSEQUENTLY THE VALVE DRIFTED OPEN AGAIN. THE VALVE WAS THEN HYDRAULICALLY LOCKED CLOSED AND THE HYDRAULIC LINE MODIFIED. THIS WAS THE FIRST OCCURRENCE OF THIS TYPE. THE MFWIV DRIFTED OPEN DUE TO A THERMAL RELIEF ORIFICE INSTALLED IN THE HYDRAULIC LINE TO THE TOP OF THE ACTUATOR. AS AN INTERIM SOLUTION, THE THERMAL RELIEF ORIFICE IN THE HYDRAULIC SYSTEM WAS PLUGGED. THE VALVE MANUFACTURER IS PRESENTLY EVALUATING THE PROBLEM TO DETERMINE FUTURE CORRECTIVE ACTION.

[427] ST. LUCIE 2 DOCKET 50-389 LER 83-071
 CHARGING PUMP DISCHARGE LINE HAS PIN-HOLE LEAKS.
 EVENT DATE: 110883 REPORT DATE: 120883 NSSS: CE TYPE: PWR
 SYSTEM: CHEM, VOL CONT & LIQ POISON SYS COMPONENT: PIPES, FITTINGS

(NSIC 187821) WHILE AT 100% POWER, TWO "PINHOLE" LEAKS WERE NOTED ON THE DOWNSTREAM WELD ON THE 2B CHARGING PUMP DISCHARGE VALVE. THE PUMP WAS STOPPED. 2C WAS ALIGNED TO HPSI HEADER. ON NOV. 9 2A&B PUMPS WERE OUT OF SERVICE FOR INTERIM REPAIR (TECH SPEC 3.1.2.4). DURING REPAIR IT WAS DETERMINED THAT THE WELD WAS CRACKED. ON NOV. 19, USING A FREEZE SEAL, THE VALVE AND SECTION OF LINE WAS REPLACED. THIS IS SECOND SOCKET WELD FAILURE (SEE LER 83-06). THE CAUSE OF THE FAILURE HAS NOT BEEN DETERMINED. THE WELD TO THE TWO INCH SCHEDULE 160 LINE IS BEING SENT OFF SITE FOR EXAMINATION. THE WELD WAS INSTALLED PER THE FP&L UNIT 2 ASME SECT. III PROGRAM. THE ENTIRE SECTION OF LINE WAS REPLACED. FURTHER ACTION, IF ANY, WILL BE DETERMINED BY THE RESULTS OF THE OFF SITE EVALUATION.

[428] SUMMER 1 DOCKET 50-395 LER 83-049
 SERVICE WATER BOOSTER PUMP DISCHARGE CHECK VALVE INOPERABLE.
 EVENT DATE: 060683 REPORT DATE: 062083 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: VALVES
 VENDOR: DARLING VALVE & MFG CO.

(NSIC 184006) AT 0600 HOURS, JUNE 6, 1983, WITH THE PLANT IN MODE 1, SERVICE WATER BOOSTER PUMP A DISCHARGE CHECK VALVE, XVC-3135A-SW, WAS DECLARED INOPERABLE BECAUSE OF FAILURE TO CLOSE ON REVERSE FLOW. THERE WERE NO ADVERSE CONSEQUENCES DUE TO THIS EVENT BECAUSE SERVICE WATER BOOSTER PUMP B WAS AVAILABLE TO SUPPLY COOLING WATER TO REACTOR BUILDING COOLING UNITS XAA-1B AND XAA-2B-AH ON RECEIPT OF A SAFETY INJECTION SIGNAL. THE CAUSE OF FAILURE WAS DUE TO THE HINGE BEING WORN. THE HINGE AND KEY WERE REPLACED, AND THE VALVE DISK WAS LAPPED. THE VALVE WAS REASSEMBLED, THE APPLICABLE SURVEILLANCE TEST SATISFACTORILY PERFORMED, AND THE SYSTEM DECLARED OPERABLE. NO ADDITIONAL CORRECTIVE ACTION IS PROPOSED OTHER THAN REQUIRED SURVEILLANCE TESTING.

[429] SUMMER 1 DOCKET 50-395 LER 83-069
 EXCESSIVE MISALIGNMENT OF SNUBBER ASSEMBLY.
 EVENT DATE: 062083 REPORT DATE: 072083 NSSS: WE TYPE: PWR
 SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: SHOCK SUPPRESSORS AND SUPPORTS
 VENDOR: PACIFIC SCIENTIFIC COMPANY

(NSIC 184606) AT 1345, JUNE 20, 1983, WITH THE PLANT IN MODE 1, SNUBBER FWH-0265 WAS DECLARED INOPERABLE DUE TO MISALIGNMENT AND A BENT PADDLE PLATE. A THOROUGH REVIEW AND INSPECTION OF THE ENTIRE PIPING SYSTEM AND RELATED SUPPORTS HAS BEEN PERFORMED BY ENGINEERING. FUNCTIONAL TESTS WERE ALSO PERFORMED ON ALL OTHER SNUBBERS ON THIS LINE. ALL RESULTS CONFIRM THE TRANSIENT LOADING HAD NO FURTHER ADVERSE EFFECTS. THE CAUSE OF THE FAILURE IS ATTRIBUTED TO TRANSIENT LOADING DURING START-UP. IMMEDIATE ACTION TAKEN WAS AN ENGINEERING EVALUATION OF THE SNUBBER FAILURE AND INSTALLATION OF A NEW UNIT. THE NEW UNIT INSTALLATION HAS APPROPRIATE TRAVEL SETTINGS TO ALLOW TRANSIENT LOADING.

[430] SUMMER 1 DOCKET 50-395 LER 83-070
 DRIFT OF PRESSURIZER RELIEF TANK LEVEL TRANSMITTER.
 EVENT DATE: 062983 REPORT DATE: 072583 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: ROSEMOUNT, INC.

(NSIC 184607) ON JUNE 29, 1983, WITH THE PLANT IN MODE 1, PRESSURIZER RELIEF TANK LEVEL INDICATOR ILI-470A ON THE CONTROL ROOM EVACUATION PANEL WAS REMOVED FROM SERVICE BECAUSE IT WAS INDICATING HIGHER THAN REDUNDANT MAIN CONTROL BOARD INDICATOR ILI-470. THE PLANT WAS IN COMPLIANCE WITH TECH SPEC 3.3.3.5, ACTION STATEMENT (A). THE CAUSE OF THIS EVENT IS ATTRIBUTED TO ZERO SHIFT ON THE TRANSMITTER DUE TO BURN-IN OF A NEW ELECTRONIC BOARD. THE TRANSMITTER WAS CALIBRATED, THE APPLICABLE SURVEILLANCE TEST PROCEDURE PERFORMED, AND THE UNIT WAS DECLARED OPERABLE JUNE 29, 1983. NO FURTHER CORRECTIVE ACTION IS PLANNED. TOTAL TIME OUT OF SERVICE WAS 11.5 HOURS.

[431] SUMMER 1 DOCKET 50-395 LER 83-127
 PRESSURIZER RELIEF TANK LEVEL SWITCH SETPOINT DRIFTS.
 EVENT DATE: 110383 REPORT DATE: 120283 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: ROSEMOUNT, INC.

(NSIC 187635) ON NOV. 3, 1983, WITH THE PLANT IN MODE 1, A DISCREPANCY OF 10% WAS OBSERVED DURING THE PERFORMANCE OF A CHANNEL CHECK BETWEEN THE MAIN CONTROL BOARD AND THE CONTROL ROOM EVACUATION PANEL (CREP) INDICATION FOR PRESSURIZER RELIEF TANK LEVEL. THERE WERE NO ADVERSE CONSEQUENCES RESULTING FROM THIS EVENT WHICH IS SIMILAR TO A PREVIOUS FAILURE IDENTIFIED IN LER 83-118. TRANSMITTER LT-470A WAS CALIBRATED AND RETURNED TO OPERABLE STATUS ON 11/3/83 PER ACTION STATEMENT A OF TECH SPEC 3.3.3.5. THE DISCREPANCY OBSERVED ON 11/3/83 WAS DUE TO A ZERO SHIFT ON TRANSMITTER LT-470A WHICH PROVIDES THE CREP INDICATION. AN ENGINEERING EVALUATION OF THE RECURRING DRIFT PROBLEM AND ANY CORRECTIVE ACTION REQUIRED TO INCREASE THE RELIABILITY OF LT-470A WILL BE COMPLETED BY THE END OF THE NEXT MAINTENANCE OUTAGE, PRESENTLY SCHEDULED TO BEGIN IN APR 1984.

[432] SUMMER 1 DOCKET 50-395 LER 83-126
 ELECTRICAL PANEL POWER LEAD SHORTS OUT.
 EVENT DATE: 110583 REPORT DATE: 120283 NSSS: WE TYPE: PWR
 SYSTEM: SAFETY RELATED DISPLAY INSTR COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187822) DURING THE INSTALLATION OF AN ELECTRICAL PANEL COVER, A POWER LEAD WAS SHORTED OUT CAUSING THE FOLLOWING ALARMS: PLUS/MINUS RATE TRIP AND HI FLUX TRIP ON N-44. THE SHORT ALSO CAUSED THE BREAKER TO TRIP WHICH POWERS REACTOR

VESSEL LEVEL CABINET APN-7248. CONSEQUENCES DUE TO THIS EVENT WERE ERRONEOUS INDICATIONS IN THE CONTROL ROOM AND LOSS OF ONE CHANNEL OF REACTOR VESSEL LEVEL. THE CAUSE OF THE EVENT WAS DUE TO THE WIRING FOR THE CIRCUIT BEING ROUTED NEAR THE FRONT OF THE PANEL. CORRECTIVE ACTION TAKEN WAS THE RESETTING OF THE TRIPS (N-44), AND ESTABLISHING TEMPORARY POWER TO APN-7248. THE SHORTED LEAD WAS REPAIRED, THE UNIT TESTED AND DECLARED OPERABLE ON NOVEMBER 5, 1983. THE CIRCUIT WIRING WILL BE REWORKED DURING THE STEAM GENERATOR EDDY CURRENT OUTAGE.

[433] SUMMER 1 DOCKET 50-395 LER 83-129
FIRE DAMPERS FAIL TO CLOSE.
EVENT DATE: 112183 REPORT DATE: 121283 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187871) ON NOV. 21, 1983, DURING SURVEILLANCE TESTING, AS REQUIRED BY TECH SPEC 3.7.9.3, "CARBON DIOXIDE SYSTEM," FOUR FIRE DAMPERS ASSOCIATED WITH THE RELAY ROOM CARBON DIOXIDE SYSTEM DID NOT CLOSE. THERE WERE NO ADVERSE CONSEQUENCES DUE TO THIS EVENT. DAMPERS IN SERIES WITH THE FOUR DAMPERS DID FULLY CLOSE WHICH WOULD HAVE PREVENTED LOSS OF THE CARBON DIOXIDE, SHOULD A FIRE HAVE OCCURRED. THIS EVENT WAS DUE TO AN ELECTRICAL THERMAL LINK WIRING TERMINATOR PROBLEM WITH TWO OF THE DAMPERS. DEBRIS ON THE DAMPER TRACKS PREVENTED THE OTHER TWO FROM FULLY CLOSING. THE WIRING TERMINATION PROBLEMS WERE CORRECTED, THE DAMPER TRACKS WERE CLEANED, AND THE DAMPERS WERE SATISFACTORILY TESTED. THE LICENSEE PLANS NO ADDITIONAL CORRECTIVE ACTION.

[434] SURRY 1 DOCKET 50-280 LER 83-028
CO(2) TANK LEVEL DROPS BELOW MINIMUM REQUIRED LEVEL.
EVENT DATE: 070283 REPORT DATE: 080183 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: VESSELS, PRESSURE

(NSIC 184756) ON JULY 2, 1983, WITH THE UNIT AT FULL POWER, THE CO(2) TANK LEVEL WAS DISCOVERED TO BE LESS THAN 75%. THIS IS CONTRARY TO TECH SPEC 3.21.D.1 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE TANK COULD DISCHARGE SOME CO(2) AND FIRE WATCHES WERE IMMEDIATELY ESTABLISHED. THE TANK WAS BEING USED TO PURGE THE UNIT 2 MAIN GENERATOR OF HYDROGEN. THE OPERATOR ASSIGNED THE TASK DID NOT MONITOR THE PURGE. FIRE WATCHES WITH BACKUP FIRE SUPPRESSION EQUIPMENT WERE ESTABLISHED. THE TANK WAS REFILLED TO THE REQUIRED LEVEL.

[435] SURRY 1 DOCKET 50-280 LER 83-046
CHEMICAL AND VOLUME CONTROL HEAT TRACING DAMAGED.
EVENT DATE: 100883 REPORT DATE: 110483 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: HEATERS, ELECTRIC
VENDOR: THERMON MANUFACTURING

(NSIC 186798) ON OCTOBER 8, 1983 WITH UNIT #1 AT 100%, HEAT TRACING PANEL 2A1 WAS FOUND DEENERGIZED. THIS IS CONTRARY TO TECH SPEC -3.2.B.5 AND IS REPORTABLE PER TECH SPEC -6.6.2.B.(2). THE REDUNDANT HEAT TRACING PANEL REMAINED ENERGIZED. MAINTENANCE PERSONNEL WORKING IN THE VICINITY OF FT-113 APPARENTLY DAMAGED THE HEAT TAPE AND RTD ON CIRCUIT 25 WHICH CAUSED THE RESPECTIVE BRANCH BREAKER TO OPEN ON OVERLOAD. IN ADDITION, THE PANEL'S FEEDER BREAKER TRIPPED ON GROUND FAULT. THE DAMAGED HEAT TRACING AND RTD WERE REPLACED AND THE CIRCUIT RETURNED TO SERVICE.

[436] SURRY 1 DOCKET 50-280 LER 83-047
CHEMICAL ACID VOLUME CONTROL HEAT TRACING BREAKER FOUND OPEN.
EVENT DATE: 100983 REPORT DATE: 110483 NSSS: WE TYPE: PWR
SYSTEM: CHEM, VOL CONT & LIQ POISN SYS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: SQUARE D COMPANY

[437] SURRY 1 DOCKET 50-280 LER 83-048
CHARGING PUMP COMPONENT COOLING PUMP DISCHARGE PRESSURE LOW.
EVENT DATE: 102483 REPORT DATE: 112183 NSSS: WE TYPE: PWR
SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: OTHER COMPONENTS
VENDOR: FISHER CONTROLS CO.

[438] SURRY 1 DOCKET 50-280 LER 83-050
HEAT TRACING BREAKER TRIPPED.
EVENT DATE: 110383 REPORT DATE: 120283 NSSS: WE TYPE: PWR
SYSTEM: OTHER ENGRND SAFETY FEATR SYS COMPONENT: HEATERS,ELECTRIC
VENDOR: THERMON MANUFACTURING

[439]	SURRY 1	DOCKET 50-280	LER 83-051
BOTH CONTAINMENT VACUUM PUMPS INOPERABLE.			
EVENT DATE: 111083		REPORT DATE: 120283	
SYSTEM: OTHER SYSTEMS		NSSS: WE	TYPE: PWR
		COMPONENT: PUMPS	
VENDOR: GAST MANUFACTURING CORP.			

(NSIC 187516) WITH UNIT 1 AT 100% AND WITH 1-CV-P-1A ('A' CONTAINMENT VACUUM PUMP) TAGGED OUT FOR MAINTENANCE, THE SUCTION LINE FOR 1-CV-P-1B ('B' CONTAINMENT VACUUM PUMP) WAS INADVERTENTLY BLANK FLANGED. AS A RESULT, BOTH CONTAINMENT VACUUM PUMPS WERE INOPERABLE. THIS IS CONTRARY TO TECH SPEC 3.15.B AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). CONTAINMENT PRESSURE REMAINED WITHIN ALLOWABLE LIMITS DURING THE EVENT. A BLANK FLANGE WAS TO BE PLACED ON THE SUCTION LINE FOR 1-CV-P-1A TO SUPPORT MAINTENANCE ACTIVITIES ON THAT PUMP. HOWEVER, AN OPERATOR INCORRECTLY IDENTIFIED THE PROPER SUCTION LINE FOR 1-CV-P-1A AND THE FLANGE WAS INSTALLED ON THE SUCTION LINE FOR 1-CV-P-1B. THE FLANGE WAS REMOVED AND THE PUMP WAS VERIFIED OPERABLE. THE OPERATOR INVOLVED WAS DISCIPLINED.

[440] SURRY 1 DOCKET 50-280 LER 83-053
 REACTOR COOLANT I-131 EXCEEDS LIMITS.
 EVENT DATE: 112283 REPORT DATE: 122183 NSSS: WE TYPE: PWR
 SYSTEM: REACTOR CORE COMPONENT: FUEL ELEMENTS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187837) ON NOVEMBER 22, 1983, FOLLOWING A REACTOR RAMPDOWN AND SUBSEQUENT TRIP FROM SUBCRITICAL POWER, ACTIVITY SAMPLES OF THE REACTOR COOLANT SYSTEM INDICATED A DOSE EQUIVALENT I-131 LEVEL GREATER THAN THE TECH SPEC 3.1.D.2 LIMIT. THE ACTIVITY REMAINED BELOW THE TECH SPEC 3.1.D.3 LIMIT. THIS EVENT IS REPORTABLE PER TECH SPEC 6.6.2.B.(2) AND THE SPECIAL REPORTING REQUIREMENTS OF TECH SPEC 3.1.D.4. THE EVENT WAS CAUSED BY KNOWN, BUT NOT SPECIFICALLY IDENTIFIED FUEL ELEMENT DEFECTS IN THE REACTOR CORE. POST RAMPDOWN/TRIP CONDITIONS IN THE CORE ENHANCED THE RELEASE OF FISSION PRODUCTS TO THE REACTOR COOLANT SYSTEM RESULTING IN AN IODINE SPIKE. AN ACCELERATED SAMPLING FREQUENCY WAS IMPLEMENTED UNTIL THE RCS SPECIFIC ACTIVITY RETURNED TO LESS THAN THE TECH SPEC 3.1.D.2 LIMIT.

[441] SURRY 1 DOCKET 50-280 LER 83-054
 DRIFT OF ROD POSITION INDICATORS.
 EVENT DATE: 112383 REPORT DATE: 122183 NSSS: WE TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: AMPHENOL

(NSIC 187838) WITH THE UNIT AT 37% POWER, THE ROD POSITION INDICATORS FOR RODS G-13 AND N-9 WERE OBSERVED TO BE GREATER THAN 12 STEPS OUT OF ALIGNMENT. THIS IS CONTRARY TO TECH SPEC 3.12.B.1 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE INDICATION OF MISALIGNMENT DID NOT AFFECT CONTROL OF THE RODS AND BOTH WERE CAPABLE OF BEING DROPPED AT ALL TIMES. THE CAUSE OF THE MISALIGNMENT HAS BEEN ATTRIBUTED TO INSTRUMENT DRIFT. THE RPI'S WERE CALIBRATED, TESTED, AND RETURNED TO SERVICE.

[442] SURRY 2 DOCKET 50-281 LER 83-049
 CONTROL ROD DROPPED INTO CORE.
 EVENT DATE: 101183 REPORT DATE: 111083 NSSS: WE TYPE: PWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: CONTROL RODS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187531) WITH THE UNIT AT FULL POWER, CONTROL ROD D-6 DROPPED TO ITS FULLY INSERTED POSITION. THE RESULTING QUADRANT POWER TILT WAS GREATER THAN 2% WHICH IS CONTRARY TO TECH SPEC-3.12.B.6 AND IS REPORTABLE PER TECH SPEC-6.6.2.B.(2). A POWER DECREASE DUE TO A TURBINE RUNBACK REDUCED THE CONSEQUENCES OF THE TILT. ALL OTHER CONTROL RODS REMAINED OPERABLE. THE CONTROL ROD DROPPED BECAUSE OF A FAILED VOLTAGE REGULATION CARD IN THE ASSOCIATED POWER CABINET. THE CARD WAS REPLACED.

[443] SURRY 2 DOCKET 50-281 LER 83-051
 SECOND CHARGING PUMP SERVICE WATER PUMP FAILS.
 EVENT DATE: 102483 REPORT DATE: 112383 NSSS: WE TYPE: PWR
 SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: PUMPS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187533) WITH THE UNIT IN 100% POWER AND CHARGING PUMP SERVICE WATER PUMP 2-SW-P-10A REMOVED FROM SERVICE, CHARGING PUMP SERVICE WATER PUMP 2-SW-P-10B TRIPPED. THIS EVENT IS CONTRARY TO TECH SPEC 3.3.A.8.B AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE PUMP WAS RESTORED TO SERVICE WITHIN THE TIME LIMIT OF TECH SPEC 3.0.1. THE THERMAL OVERLOAD FOR PUMP 2-SW-P-10B WAS RESET AND THE PUMP WAS STARTED AND RETURNED TO SERVICE. THE PUMP MOTOR WAS LOAD CHECKED AND

VERIFIED TO BE OPERATING SATISFACTORILY. THE MOTOR THERMAL OVERLOADS WERE REPLACED AND THE PUMP TESTED SATISFACTORILY.

[444] SURRY 2 DOCKET 50-281 LER 83-050
CHARGING PUMP SERVICE WATER PUMP HAS LOW FLOW.
EVENT DATE: 102783 REPORT DATE: 112183 NSSS: WE TYPE: PWR
SYSTEM: STATION SERV WATER SYS & CONT COMPONENT: FILTERS
VENDOR: ZURN INDUSTRIES, INC.
 GENERAL ELECTRIC CO.

(NSIC 187532) WITH THE UNIT AT FULL POWER, CHARGING PUMP SERVICE WATER PUMP 2-SW-P-10B LOST SUFFICIENT DISCHARGE PRESSURE (< 10 PSIG) WHICH CAUSED THE 2-SW-P-10A TO AUTO-START. THIS EVENT 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. THE LOSS OF SUFFICIENT DISCHARGE PRESSURE WAS DUE TO A CLOGGED IN LINE STRAINER. THE FINE MESH IN THE STRAINER WAS REMOVED AND 2-SW-P-10B RETURNED TO SERVICE.

[445] SURRY 2 DOCKET 50-281 LER 83-052
CONTAINMENT SPRAY PUMP TRIPS DURING TESTS.
EVENT DATE: 111283 REPORT DATE: 120283 NSSS: WE TYPE: PWR
SYSTEM: CNTNMNT HEAT REMOV SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: ITE IMPERIAL CORPORATION

(NSIC 187517) WITH UNIT NO. 2 AT 100% POWER, 2-CS-P-1B TRIPPED WHILE ATTEMPTING TO START DURING THE PERFORMANCE OF THE MONTHLY SURVEILLANCE TEST. THIS IS CONTRARY TO TECH SPEC 3.4.A.1 AND REPORTABLE PER TECH SPEC 6.6.2.B.(2). THE REDUNDANT SPRAY SUBSYSTEM REMAINED OPERABLE. THE CAUSE OF THE TRIP WAS DUE TO A LOOSE ARMATURE STOP SCREW ON THE BREAKER OVERLOAD DEVICE. THE SCREW WAS TIGHTENED AND THE PUMP MOTOR AND CIRCUIT BREAKERS WERE TESTED SATISFACTORILY. THE PUMP WAS RETURNED TO SERVICE.

[446] SURRY 2 DOCKET 50-281 LER 83-053
CONTAINMENT VACUUM PUMP FAILS TO DEVELOP FLOW.
EVENT DATE: 111583 REPORT DATE: 121283 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PUMPS
VENDOR: GAST MANUFACTURING CORP.

(NSIC 187780) WITH THE UNIT AT 100% POWER PRIOR TO REMOVING CONTAINMENT VACUUM PUMP 2-CV-P-1B FOR MAINTENANCE, AN OPERABILITY CHECK OF CONTAINMENT VACUUM PUMP 2-CV-P-1A REVEALED IT TO BE INOPERABLE. THIS EVENT IS CONTRARY TO TECH SPEC 3.15.B AND IS REPORTABLE PURSUANT TO TECH SPEC 6.6.2.B(2). PUMP 2-CV-P-1A WAS RETURNED TO SERVICE WITHIN THE TIME ALLOWED BY TECH SPEC 3.0.1. THE PUMP WAS UNABLE TO DEVELOP FLOW DUE TO WORN IMPELLER SLIDING VANES. PUMP 2-CV-P-1A WAS REPLACED WITH A SHOP SPARE AND RETURNED TO SERVICE.

[447] SURRY 2 DOCKET 50-281 LER 83-054
OPERATOR OPENS EDG BREAKER.
EVENT DATE: 111883 REPORT DATE: 121683 NSSS: WE TYPE: PWR
SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
VENDOR: ITE IMPERIAL CORPORATION

(NSIC 187839) WITH THE UNIT AT FULL POWER, IT WAS FOUND THAT THE NO. 3 EMERGENCY DIESEL OUTPUT BREAKER WAS INADVERTENTLY TAGGED OUT. THIS EVENT IS CONTRARY TO TECH SPEC 3.16.A.1 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(3). THE NO. 1 AND 2 EMERGENCY DIESELS PROVIDED 100% OF THE ONSITE EMERGENCY POWER REQUIREMENTS AND WERE OPERABLE. THE NO. 3 OUTPUT BREAKER WAS RACKED OUT FOR 50 MINUTES. THE

CAUSE OF THIS EVENT WAS PERSONNEL ERROR. THE BREAKER WAS RETURNED TO OPERABLE STATUS.

[448] SURRY 2 DOCKET 50-281 LER 83-057
DRIFT OF SEVERAL DEGRADED AND UNDERVOLTAGE RELAYS.
EVENT DATE: 112383 REPORT DATE: 122183 NSSS: WE TYPE: PWR
SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: RELAYS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187840) DURING A REVIEW OF EMP-P-RT-86 AND 87, IT WAS DISCOVERED THAT SEVERAL OF THE DEGRADED VOLTAGE AND UNDERVOLTAGE RELAYS FOR THE 2J AND 2H EMERGENCY BUSES WERE SET LOW. THIS IS CONTRARY TO TECH SPEC TABLE 3.7-2 AND IS REPORTABLE PER TECH SPEC 6.6.2.B.(1). THE MINIMUM NUMBER OF CHANNELS REMAINED OPERABLE. THE CAUSE OF THE EVENT IS INSTRUMENT DRIFT. THE RELAYS WERE RESET TO THE TECH SPEC LIMITS.

[449] SUSQUEHANNA 1 DUCKET 50-387 LER 82-071 REV 1
UPDATE ON FAILURE TO TEST THE TURBINE STOP VALVE.
EVENT DATE: 120982 REPORT DATE: 111683 NSSS: GE TYPE: BWR
SYSTEM: MAIN STEAM ISOL SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187760) DURING THE STARTUP TESTING PROGRAM, IT WAS DETERMINED THAT THE CHANNEL FUNCTIONAL TEST FOR THE TURBINE STOP VALVE HAD NOT BEEN PERFORMED PRIOR TO EXCEEDING 30% RATED THERMAL POWER. THIS IS REQUIRED PER TECH SPEC 4.3.4.2.1, AND 4.3.1.1, AND IS REPORTABLE PER TECH SPEC 6.9.1.9.C. THE TURBINE STOP VALVES WERE NOT REQUIRED TO CLOSE DUE TO A TURBINE TRIP BEFORE THE FUNCTIONAL TEST WAS PERFORMED ON 12-9-82. THE SURVEILLANCE WAS IN A DRAFT COPY OF THE PROCEDURE. HOWEVER, THE NEED TO ISSUE THE REVISED PROCEDURE PRIOR TO EXCEEDING 30% R.T.P. WAS NOT NOTED. THE EVENT WAS DISCOVERED DURING AN NSAG REVIEW. TO PREVENT RECURRENCE, AN OPEN ITEMS TRACKING SYSTEM WILL BE UTILIZED TO TRACK PROCEDURAL REVISIONS REQUIRING ISSUANCE BY A SPECIFIC DATE.

[450] SUSQUEHANNA 1 DOCKET 50-387 LER 83-116
RHR PUMP DISCHARGE CHECK VALVE LEAKS.
EVENT DATE: 082383 REPORT DATE: 092283 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(INSTR 186127) WHILE CHANGING THE RMR LOOP 'A' LINEUP, IT WAS DISCOVERED THAT THE CHECK VALVE IN THE RHR PUMP 'A' DISCHARGE LINE WOULD NOT SEAT PROPERLY. WHILE TRYING TO SEAT THE VALVE, THE RHR PUMP 'A' SUCTION VALVE WAS CLOSED, CAUSING ENTRY INTO VARIOUS LCOS. THE OPERATIONS PERSONNEL INVOLVED WERE WELL AWARE OF THE SYSTEM CONFIGURATION AND COULD HAVE QUICKLY RETURNED THE PUMPS TO SERVICE. THE LCO'S WERE EFFECTIVE FOR ONLY 1.25 HRS. DELIBERATE ENTRY INTO THE LCO'S WAS CAUSED BY THE NEED TO SEAT THE DISCHARGE LINE CHECK VALVE. THE VALVE WAS RESEATED AND THE SYSTEM PROMPTLY RETURNED TO SERVICE. AS PLANT CONDITIONS PERMIT, THE VALVE WILL BE DISASSEMBLED AND INSPECTED TO DETERMINE THE CAUSE OF THE LEAK. CORRECTING THE LEAK WILL PREVENT RECURRENCE OF THIS EVENT.

[451] SUSQUEHANNA 1 DOCKET 50-387 LER 83-116 REV 1
UPDATE ON RHR PUMP DISCHARGE CHECK VALVE FAILURE.
EVENT DATE: 082383 REPORT DATE: 102183 NSSS: GE TYPE: BWR
SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: VALVES
VENDOR: PACIFIC VALVES, INC.

(NSIC 187819) WHILE CHANGING THE RHR LOOP 'A' LINEUP, IT WAS DISCOVERED THAT THE CHECK VALVE IN THE RHR PUMP 'A' DISCHARGE LINE WOULD NOT SEAT PROPERLY. WHILE TRYING TO SEAT THE VALVE, THE RHR PUMP 'A' SUCTION VALVE WAS CLOSED, CAUSING

ENTRY INTO VARIOUS LCO'S. THE OPERATIONS PERSONNEL INVOLVED WERE WELL AWARE OF THE SYSTEM CONFIGURATION AND COULD HAVE QUICKLY RETURNED THE PUMPS TO SERVICE. THE LCO'S WERE EFFECTIVE FOR 1.25 HRS. DELIBERATE ENTRY INTO THE LCO'S WAS CAUSED BY THE NEED TO SEAT THE DISCHARGE LINE CHECK VALVE. THE VALVE WAS RESEATED AND THE SYSTEM PROMPTLY RETURNED TO SERVICE. WHEN THE VALVE WAS DISASSEMBLED, THE VALVE DISC WAS FOUND MISALIGNED AND THE DISC HINGE PIN WAS BENT. THE PIN WAS REPLACED AND A SPACER WASHER WAS INSTALLED TO ALIGN THE HINGE ARM. THESE ACTIONS WILL PREVENT RECURRENCE OF THIS EVENT.

[452] SUSQUEHANNA 1 DOCKET 50-387 LER 83-120
 REACTOR CORE ISOLATION COOLING SYSTEM TURBINE TRIPS ON OVERSPEED.
 EVENT DATE: 082883 REPORT DATE: 092783 NSSS: GE TYPE: BWR
 SYSTEM: REAC CORE ISOL COOL SYS & CONT COMPONENT: VALVES
 VENDOR: TERRY STEAM TURBINE COMPANY

(NSIC 186128) DURING A POST-SCRAM VESSEL LEVEL FLUCTUATION ON 8/28/83, RCIC INITIATED ON LOW RPV LEVEL, AND THE TURBINE TRIPPED 3 SECONDS LATER ON ELECTRICAL OVERSPEED. OPERATIONS PERSONNEL ESTABLISHED MANUAL CONTROL OF THE SYSTEM AND ADJUSTED TURBINE SPEED TO MAINTAIN PROPER VESSEL LEVEL. RCIC IS NOT AN EMERGENCY CORE COOLING SYSTEM AND IS NOT REQUIRED FOR SAFE SHUTDOWN FOLLOWING A SCRAM. THE OVERSPEED TRIP WAS CAUSED BY THE SLOW RESPONSE OF THE GOVERNOR VALVE DURING SYSTEM START. THE GOVERNOR VALVE LINKAGE TRAVEL WAS REDUCED BY ONE-QUARTER INCH AND THE SYSTEM SUCCESSFULLY RETESTED. RCIC PERFORMANCE WILL BE REVIEWED AND THE QUICK START SURVEILLANCE TESTING FREQUENCY ADJUSTED ACCORDINGLY TO ASSURE PROPER SYSTEM OPERATION. INSTALLATION OF A BYPASS LINE AROUND THE RCIC STEAM SUPPLY VALVE IS PLANNED.

[453] SUSQUEHANNA 1 DOCKET 50-387 LER 83-122
 REACTOR BUILDING VENTILATION ZONE COULD NOT BE RESTORED AFTER ISOLATION.
 EVENT DATE: 090183 REPORT DATE: 093083 NSSS: GE TYPE: BWR
 SYSTEM: AIR COND, HEAT, COOL, VENT SYSTEM COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS

(NSIC 186276) THE REACTOR BUILDING ZONE III VENTILATION SYSTEM ISOLATED AND WOULD NOT RESTART CAUSING ENTRY INTO LIMITING CONDITION FOR OPERATION 3.6.5.1. THE VENTILATION SYSTEM ISOLATION SIGNAL RESULTED WHEN A RADIATION DETECTOR'S POWER SUPPLY WAS SWITCHED TO AN ALTERNATE SOURCE. THE POWER INTERRUPTION DURING SWITCHOVER INITIATED THE ISOLATION SIGNAL AS DESIGNED. THE BACK-UP VENTILATION SYSTEMS WERE AVAILABLE AND FUNCTIONED AS DESIGNED. A BLOWN FUSE WAS FOUND ON A ZONE III ISOLATION DAMPER (HD17502A). THE FUSE WAS REPLACED AND CIRCUITRY CHECKED FOR GROUNDS. THE SYSTEM WAS RESTARTED AND OPERATED SATISFACTORILY. THE DAMPER SOLENOID WILL BE CHECKED FOR INTERMITTENT GROUNDS AND REBUILT OR REPLACED AS NECESSARY.

[454] SUSQUEHANNA 1 DOCKET 50-387 LER 83-123
 SPURIOUS ISOLATION OF REACTOR BUILDING VENTILATION ZONE.
 EVENT DATE: 090183 REPORT DATE: 093083 NSSS: GE TYPE: BWR
 SYSTEM: AIR COND, HEAT, COOL, VENT SYSTEM COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 186275) DURING A ROUTINE STARTUP, REACTOR BUILDING ZONE III VENTILATION TRIPPED CAUSING A SHORT-DURATION LOSS OF THE 0.25 IN. WATER VACUUM REQUIRED BY TECH SPEC 3/4.6.5.1. ZONE III IS DEFINED AS UNIT 1 AND 2 SECONDARY CONTAINMENTS ABOVE ELEVATION 779 FT., WHICH INCLUDES THE REFUELING FLOOR. THERE WERE NO ADVERSE CONSEQUENCES IN THAT THE SYSTEM WAS OUT OF SERVICE FOR ONLY 20 MIN. AND TECH SPEC ACTION STATEMENTS WERE COMPLIED WITH. BACKUP VENTILATION SYSTEMS WERE AVAILABLE, THERE WERE NO REFUELING ACTS IN PROGRESS, AND THERE WERE NO RADIOLOGICAL CONDITIONS REQUIRING SYSTEM ISOLATION. THIS ZONE III TRIP IS CONSIDERED TO HAVE BEEN CAUSED BY A MOMENTARY, SPURIOUS SIGNAL. INVESTIGATION ESTABLISHED THAT THERE WERE NO ZONE III ISOLATION SIGNALS PRESENT, LOW FLOW

CONDITIONS, NOR DAMPERS OUT OF POSITION. NO RELATED SYSTEM ALARMS WERE IDENTIFIED BY OPERATIONS PERSONNEL. THIS EVENT IS CONSIDERED TO BE AN ISOLATED OCCURRENCE.

[455] SUSQUEHANNA 1 DOCKET 50-387 LER 83-131 REV 1
 UPDATE ON DIESEL GENERATOR FAILURE TO START.
 EVENT DATE: 091083 REPORT DATE: 112283 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: COOPER-BESSEMER CO.

(NSIC 187870) DURING ITS MONTHLY SURVEILLANCE TEST, DIESEL GENERATOR, 'B' TRIPPED PRIOR TO ACHIEVING 600 RPM. THREE LOW PRIORITY ALARMS WERE RECEIVED CONCURRENTLY WITH THE TRIP. THE TEST WAS CLASSIFIED AS NON-VALID PER THE DEFINITION OF REG. GUIDE 1.108 SECTION C.2.E BECAUSE THE TRIP WAS CAUSED BY ALARMED CONDITIONS WHICH ARE BYPASSED DURING EMERGENCY OPERATING CONDITIONS. IN AN ACTUAL EMERGENCY THE DIESEL WOULD HAVE STARTED PROPERLY. IT HAS BEEN VERIFIED THAT THERE HAVE BEEN NO FAILURES IN LAST 100 TESTS. THE ALARMS WERE IMMEDIATELY RESET AND A SECOND START SEQUENCE COMPLETED SUCCESSFULLY. THE TRIP WAS CAUSED BY WATER AND CORROSION PRODUCTS IN THE INSTRUMENT AIR SYSTEM. AIR DRYERS WILL BE INSTALLED DURING THE FIRST REFUELING OUTAGE TO CORRECT THIS CONDITION. CURRENT DIESEL SURVEILLANCE TEST INTERVAL REMAINS AT 31 DAYS IN CONFORMANCE WITH TECH SPEC TABLE 4.8.1.1.2-1 AND R.G. 1.108, SEC. C.2.D.

[456] SUSQUEHANNA 1 DOCKET 50-387 LER 83-139 REV 1
 UPDATE ON LOSS OF INDEPENDENCE IN OFFSITE POWER.
 EVENT DATE: 101983 REPORT DATE: 112183 NSSS: GE TYPE: BWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187884) THE ALTERNATE POWER SUPPLY BREAKER TO 4KV BUS 1A203 WAS REMOVED FOR PREVENTIVE MAINTENANCE AND LIMITING CONDITION FOR OPERATION 3.8.1.1.A WAS NOT DECLARED. WITH THIS BREAKER REMOVED, BUS 1A203 DID NOT HAVE TWO "INDEPENDENT" OFF-SITE SOURCES OF POWER. THE REMAINING 3 BUSES EMERGENCY BUSES WERE NOT AFFECTED. AT THE TIME THE BREAKER WAS REMOVED, 1A203 WAS CONSIDERED TO HAVE TWO OFF-SITE SOURCES SINCE THE 13.8 KV TIE-BREAKER WAS AVAILABLE AND BOTH OFF-SITE SOURCES COULD FEED 1A203. SINCE BOTH SOURCES WOULD HAVE TO USE THE NORMAL SUPPLY BREAKER TO 1A203, THE REQUIREMENT FOR TWO PHYSICALLY INDEPENDENT SOURCES WAS NOT MET. SHIFT SUPERVISION WAS INSTRUCTED ON THE PROPER INTERPRETATION OF THIS REQUIREMENT.

[457] SUSQUEHANNA 1 DOCKET 50-387 LER 83-151
 SECONDARY CONTAINMENT HAS LOW DIFFERENTIAL PRESSURE.
 EVENT DATE: 102283 REPORT DATE: 112183 NSSS: GE TYPE: BWR
 SYSTEM: AIR COND, HEAT, COOL, VENT SYSTEM COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187634) WHILE COMPLETING THE DAILY ROUNDS, AN OPERATOR FOUND ZONE I (UNIT 1 REACTOR BUILDING) DIFFERENTIAL PRESSURE (DP) TO BE LESS THAN THE 0.25 INCHES VACUUM WATER GAUGE REQUIRED BY TECH SPEC 3.6.5.1 FOR SECONDARY CONTAINMENT INTEGRITY. THE ALTERNATE ZONE I EXHAUST FAN WAS STARTED AND PROPER BUILDING DP RESTORED WITHIN 30 MIN. THE LOSS OF REQUIRED DP WAS CAUSED BY MECHANICAL DRAG IN THE EXHAUST FAN OUTLET DAMPER MECHANISM. FURTHER INVESTIGATION AND CORRECTIVE ACTIONS WILL BE TAKEN DURING AN UPCOMING OUTAGE. BOTH ZONE I EXHAUST FANS HAVE SINCE BEEN RUN AND THEIR RESPECTIVE OUTLET DAMPERS HAVE OPERATED PROPERLY.

[458] SUSQUEHANNA 1 DOCKET 50-387 LER 83-147
 CONTROL ROD SCRAM ACCUMULATOR LEVEL HIGH AND PRESSURE LOW.
 EVENT DATE: 102583 REPORT DATE: 112383 NSSS: GE TYPE: BWR
 SYSTEM: REACTIVITY CONTROL SYSTEMS COMPONENT: ACCUMULATORS

VENDOR: GENERAL ELECTRIC CO.

(NSIC 187820) WHILE AT 100% POWER THE PRESSURE FOR CONTROL ROD SCRAM ACCUMULATOR 46-07 FELL BELOW THE MINIMUM PRESSURE OF 940 PSIG SPECIFIED IN TECH SPEC 3.1.3.5. THE ACCUMULATOR WAS BEING INTENTIONALLY DRAINED OF EXCESS WATER TO CLEAR AN 'ACCUMULATOR TROUBLE' ALARM WHEN THE LOW PRESSURE CONDITION OCCURRED. DRAINING OF THE WATER WAS COMPLETED AND THE ACCUMULATOR WAS RECHARGED. THE REMAINING 184 ACCUMULATORS WERE OPERABLE AT ALL TIMES AND NO OCCURRENCES EXISTED THAT REQUIRED A SCRAM. THE LOW PRESSURE CONDITION AROSE DURING THE DRAINING ACTIVITY WHICH IN TURN WAS IMPLEMENTED TO CORRECT THE CAUSE OF THE ACCUMULATOR TROUBLE ALARM. ACCUMULATOR 46-07 IS IDENTIFIED WITHIN LOGS AND WORK AUTHORIZING DOCUMENTS AS IN NEED OF REPAIRS WHICH ARE SCHEDULED FOR THE DECEMBER OUTAGE. OPERATORS HAVE BEEN INSTRUCTED TO BALANCE CHARGING AND DRAINING OF ACCUMULATORS TO PREVENT LOW PRESSURE CONDITIONS.

[459] SUSQUEHANNA 1 DOCKET 50-387 LER 83-144
HYDROGEN ANALYZER RETURN VALVES NOT OPENED.
EVENT DATE: 110583 REPORT DATE: 111883 NSSS: GE TYPE: BWR
SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: VALVES

(NSIC 187568) WHILE OPERATING AT LESS THAN 2% POWER, A NUCLEAR PLANT OPERATOR (NPO), ATTEMPTING TO PLACE THE COMMON RECOMBINER HYDROGEN ANALYZERS IN SERVICE, FAILED TO LOCATE THE PARTIALLY OBSCURED HYDROGEN ANALYZER RETURN VALVES, CAUSING THE TWO HYDROGEN ANALYZER CHANNELS TO BE INOPERABLE UNTIL 1220 ON 11/5/83. HYDROGEN RECOMBINERS FUNCTIONED PROPERLY, NO ABNORMAL CONCENTRATIONS OF HYDROGEN OCCURRED AND DIVERSE SYSTEM ISOLATION/ALARMS EXISTED. THE EVENT WAS CAUSED BY THE LOCATION OF HYDROGEN ANALYZER RETURN VALVES THAT WERE PARTIALLY OBSCURED FROM VIEW. CORRECTIVE ACTIONS INCLUDE PROCEDURE REVISION, MORE VISABLE VALVE IDENTIFICATION, TRAINING SESSIONS, EVENT REPORT REVIEW BY OPERATORS AND AN ON-SHIFT VISUAL INSPECTION OF THE HYDROGEN ANALYZER SUPPLY AND RETURN VALVES IN THE HYDROGEN SAMPLE LINES.

[460] THREE MILE ISLAND 1 DOCKET 50-289 LER 82-002 REV 1
UPDATE ON WASTE GAS PIPE LEAKAGE.
EVENT DATE: 012882 REPORT DATE: 060683 NSSS: BW TYPE: PWR
SYSTEM: GAS RADIOACT WSTE MANAGMNT SYS COMPONENT: PIPES, FITTINGS
VENDOR: GILBERT ASSOCIATES, INC.

(NSIC 184732) DURING LONG TERM COLD SHUTDOWN, LEAKAGE DEPOSITS WERE VISUALLY OBSERVED ON THE 2 INCH NIPPLE WHICH CONNECTS TO THE AUXILIARY BUILDING SIDE OF VALVE WDG-V4, A CONTAINMENT ISOLATION VALVE FOR THE RADIOACTIVE WATER GAS DISPOSAL SYSTEM IN THE AUXILIARY BUILDING. DURING WELDED INSTALLATION OF THE REPLACEMENT PIPE NIPPLE, A SECOND CRACK IN AN ADJACENT PIP WAS DISCOVERED. REPORTED PER TECH SPEC 6.9.2.B.(4). CORROSION IS IDENTIFIED AS STRESS CORROSION CRACKING (ID INITIATED) OF 304 STAINLESS STEEL PIPE, WHICH PROPAGATED INTERGRANULARLY THROUGH THE SENSITIZED MICROSTRUCTURE OF THE WELD HAZ. NDE, AS DETAILED IN ATTACHED, WAS PERFORMED. FIFTY (50) FEET OF PIPE WAS REPLACED AND LEAK TESTED SATISFACTORILY.

[461] THREE MILE ISLAND 1 DOCKET 50-289 LER 82-011 REV 1
UPDATE ON PORV AND BLOCK VALVE CORROSION.
EVENT DATE: 083182 REPORT DATE: 060683 NSSS: BW TYPE: PWR
SYSTEM: REACTOR VES. & APPURTENANCES COMPONENT: VALVES
VENDOR: DRESSER INDUSTRIAL VALVE & INST DIV

(NSIC 184733) DURING LONG TERM COLD SHUTDOWN, GPU NUCLEAR WAS NOTIFIED BY WYLE LABS THAT THE PORV WHICH HAD BEEN SHIPPED TO THEM FOR REFURBISHMENT, WAS SEVERELY CORRODED. SOME QUESTION EXISTS IF THE VALVE COULD HAVE PERFORMED ITS INTENDED

FUNCTION IF CALLED UPON IN ITS PRESENT CONDITION. A SPARE VALVE IS INSTALLED AT TMI-1 NOW AND HAS FUNCTIONED. THIS IS NOT REPORTABLE PER SPECIFIC TECH SPEC REQUIREMENTS. INFORMATION BEING PROVIDED AS A SPECIAL REPORT. CORROSION HAS BEEN ATTRIBUTED TO ACID SULFUR COMPOUNDS. SEE ATTACHMENTS FOR DETAILS OF TRANSPORT MECHANISM. CORRECTIVE ACTION FOR THIS PORV WAS TO REMOVE FROM SERVICE AND REFURBISH INSTALLED SPARE PER UPDATED LER 83-003/01T-1. NO FURTHER CORRECTIVE ACTION IS REQUIRED.

[462] THREE MILE ISLAND 1 DOCKET 50-289 LER 83-028
INSTRUMENT AIR CONTAINMENT ISOLATION VALVE PARTIALLY OPEN.
EVENT DATE: 092083 REPORT DATE: 100483 NSSS: BW TYPE: PWR
SYSTEM: COMPRESSED AIR SYSTEMS & CONT COMPONENT: VALVES
VENDOR: HANCOCK CO.

(NSIC 186401) A MANUALLY-OPERATED (INSIDE) CONTAINMENT ISOLATION VALVE (IA-V20) IN THE INSTRUMENT AIR SYSTEM WAS FOUND OPEN CONTRARY TO TECH SPEC 3.6.1. THE REDUNDANT (OUTSIDE) CONTAINMENT VALVE IA-V6 WAS OPERABLE AND LOCKED CLOSED DURING THE ENTIRE TIME WHEN CONTAINMENT INTEGRITY WAS REQUIRED. BOTH VALVES HAVE PASSED A LEAK TEST FOLLOWING REPAIRS TO IA-V20. WHEN THE CONTAINMENT INTEGRITY CHECKLIST WAS PERFORMED, THE VALVE APPEARED TO BE FULLY CLOSED. THE THREADED STEM BUSHING WAS BACKED PARTIALLY OUT OF THE VALVE YOKE AND THE ENTER BUSHING THREADS HAD GALLED. THIS COMBINED WITH BINDING OF PAINT ON THE STEM THREADS PREVENTED FULL CLOSURE. APPROPRIATE VALVE COMPONENTS WERE REPLACED. PROCEDURE 1101-3 WILL BE CHANGED TO VERIFY NO DAMAGE OR OBSTRUCTION EXISTS TO PREVENT FULL VALVE CLOSURE.

[463] THREE MILE ISLAND 1 DOCKET 50-289 LER 83-038
REACTOR BUILDING PURGE RADIATION MONITOR VALVED OUT OF SERVICE.
EVENT DATE: 101783 REPORT DATE: 111683 NSSS: BW TYPE: PWR
SYSTEM: PROCESS SAMPLING SYSTEMS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187534) WHILE IN COLD SHUTDOWN CONDITIONS WITH REACTOR BUILDING PURGE HAVING BEEN ON FOR SEVERAL DAYS AND DAILY SAMPLES OF PURGE EXHAUST BEING TAKEN, AN AUXILIARY OPERATOR FOUND V-2 ON RM-A-9 IN POSITION 2 RATHER THAN POSITION 1. THUS, REACTOR BUILDING PURGE SAMPLE FLOW HAD BEEN SHUT OFF. THIS IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.2.B.(2) SINCE RM-A-9 WAS OUT OF SERVICE WITH REACTOR BUILDING PURGE IN PROGRESS RESULTING IN A DEGRADED MODE PERMITTED BY THE LIMITING CONDITIONS FOR OPERATION (TECH SPEC 3.21.2). THE CAUSE OF THIS INCIDENT WAS PERSONNEL ERROR IN THAT VALVE V-2 WAS NOT PROPERLY POSITIONED OR PROPERLY VERIFIED AFTER A SAMPLE WAS TAKEN EARLIER THAT DAY. WHEN FOUND, THE VALVE WAS POSITIONED PROPERLY. THIS INCIDENT SHALL BE REVIEWED WITH ALL RAD CON AND OPERATIONS PERSONNEL. PERSONNEL INVOLVED HAVE BEEN APPROPRIATELY COUNSELLED AND/OR DISCIPLINED BY THEIR DEPARTMENT MANAGERS.

[464] THREE MILE ISLAND 1 DOCKET 50-289 LER 83-044
AFW CIRCUIT CABLES ROUTED IN SAME CABLE BUNDLE.
EVENT DATE: 111483 REPORT DATE: 112883 NSSS: BW TYPE: PWR
SYSTEM: FEEDWATER SYSTEMS & CONTROLS COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187535) DURING INVESTIGATION INTO A FIELD QUESTIONNAIRE (FQ-C-8267) IT WAS NOTED THAT, CONTRARY TO SAFETY GRADE DESIGN CRITERIA FOR ELECTRICAL SEPARATION, EFW AUTO INITIATION REDUNDANT CIRCUITS (RED, GREEN) WERE ROUTED IN THE SAME CABLE BUNDLE. THIS IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.2.A.9. THIS MODIFICATION WAS ORIGINALLY DESIGNED TO MEET THE INITIAL SHORT TERM REQUIREMENT, NUREG 0578 2.1.7A, FOR CONTROL GRADE CIRCUITRY. WHEN THE DESIGN CRITERIA WAS UPGRADED TO SAFETY GRADE THIS CIRCUITRY WAS NOT FULLY REVIEWED AND UPGRADED. THE REDUNDANT CABLES WILL BE SEPARATED.

[465] THREE MILE ISLAND 2 DOCKET 50-320 LER 82-023 REV 1
 UPDATE ON FIRE PROTECTION SYSTEM ACTUATION.
 EVENT DATE: 062982 REPORT DATE: 103183 NSSS: BW TYPE: PWR
 SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187467) AT 1605 HOURS ON JUNE 29, 1982, 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 EVENT: LER 82-018. THE INITIATING CAUSE OF THE EVENT IS ATTRIBUTED TO LIGHTNING ACTUATING THE ULTRAVIOLET LIGHT DETECTORS IN THE AIR INTAKE TUNNEL. THE SYSTEM OPERATED AS DESIGNED PERFORMING THE SUBSEQUENT SYSTEM ACTUATING/TRIPS. THE HALON AND DELUGE SYSTEMS WERE SECURED AND THE VENTILATION SYSTEMS RESTORED AT 1710 HOURS ON JUNE 29, 1982. THE HALON SYSTEM WAS RECHARGED AND RETURNED TO SERVICE AT 1827 HOURS ON JULY 9, 1982.

[466] THREE MILE ISLAND 2 DOCKET 50-320 LER 82-035 REV 1
 UPDATE ON FAILURE OF RB SUMP LEVEL INDICATOR.
 EVENT DATE: 111082 REPORT DATE: 113083 NSSS: BW TYPE: PWR
 SYSTEM: OTHR INST SYS NOT REQD FR SFTY COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187826) AT 1120 HOURS ON NOV. 10, 1982, THE REACTOR BUILDING SUMP LEVEL INDICATOR WAS OBSERVED TO BE READING HIGH. DUE TO THIS ANOMALY, THE INDICATOR WAS DECLARED INOPERABLE. THIS EVENT IS CONSIDERED REPORTABLE PER TECH SPEC 6.9.1.8(B) DUE TO ENTRY IN AND EXCEEDING THE TIMECLOCK OF SPEC 3.3.3.6. THIS EVENT WAS BELIEVED TO BE CAUSED BY A BUILDUP OF SLUDGE IN THE END OF THE RB SUMP LEVEL INDICATOR. THE INDICATOR'S LINE WAS BLOWN FREE WITH 20 LBS. OF PRESSURE. AN EVALUATION OF THE RB SUMP LEVEL INDICATOR WAS PERFORMED AND IT WAS DETERMINED TO BE SATISFACTORY. ADDITIONALLY, THE SUMP LEVEL INDICATOR WILL BE BLOWN DOWN MONTHLY TO PREVENT CLOGGING.

[467] THREE MILE ISLAND 2 DOCKET 50-320 LER 82-041 REV 1
 UPDATE ON AUXILIARY BUILDING VENTILATION SYSTEM FAILURE.
 EVENT DATE: 121682 REPORT DATE: 103183 NSSS: BW TYPE: PWR
 SYSTEM: AIR COND,HEAT,COOL,VENT SYSTEM COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187468) AT 2147 HOURS ON DECEMBER 16, 1982, WHILE ATTEMPTING TO SWITCH THE AUXILIARY BUILDING VENTILATION SYSTEM EXHAUST FANS AH-E-8C/D TO EXHAUST FANS AH-E-8A/B, THE AUX. BLDG. SUPPLY FANS AH-E-7A/B TRIPPED REPEATEDLY ON THERMAL OVERLOADS WHILE RESTARTING. THE VENTILATION SYSTEM WAS RETURNED TO NORMAL FLOWRATE AT 2240 HOURS ON DECEMBER 16, 1982. THE EVENT IS REPORTABLE PURSUANT TO SECTION 6.9.1.9(B) DUE TO ENTRY INTO AND COMPLIANCE WITH THE REQUIREMENTS OF TECH SPEC ACTION STATEMENT 3.9.12.2(B). THE CAUSE OF THIS EVENT WAS THE TRIPPING OF THE THERMAL OVERLOAD BREAKERS FOR THE AUXILIARY BLDG. SUPPLY FANS. THE PROXIMATE CAUSE FOR THE TRIPPING OF THE THERMAL OVERLOAD BREAKERS IS BELIEVED TO BE DUE TO HAIRLINE CRACKS IN THE OVERLOAD RELAYS. THE OVERLOAD RELAYS AND CIRCUIT BREAKERS FOR AH-E-7A/B WERE REPLACED AND TESTED SATISFACTORILY.

[468] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-001 REV 1
 UPDATE ON FAILURES OF SG PRESSURE TRANSMITTERS.
 EVENT DATE: 010483 REPORT DATE: 103183 NSSS: BW TYPE: PWR
 SYSTEM: MAIN STEAM SUPPLY SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: FOXBORO CO., THE

(NSIC 187275) ON JAN. 4, 1983, AFTER FILLING THE SECONDARY SIDE OF ONCE THROUGH

STEAM GENERATOR (OTSG) "A" TO FACILITATE CLEANING, THE OTSG PRESSURE INSTRUMENT WAS EXPECTED, BUT DID NOT, REGISTER A SMALL CHANGE. INVESTIGATION SHOWED BOTH "A" OTSG PRESSURE INDICATORS WERE INOPERABLE. FURTHER INVESTIGATION ON JAN. 7 SHOWED 1 INDICATOR ON THE "B" WAS INOPERABLE ON JAN. 25; THE 2ND "B" OTSG PRESSURE INSTRUMENT WAS INOPERABLE. THESE EVENTS ARE REPORTABLE VIA TECH SPEC 3.3.3.5 AND 3.3.3.6 PURSUANT TO 6.9.1.8(B). INVESTIGATION ON THE "A" OTSG PRESSURE INDICATORS INDICATE THAT THE PROBABLE CAUSE WAS FAILURE OF THE PRESSURE TRANSMITTERS LOCATED ON THE 282' ELEVATION OF THE REACTOR BLDG. ALTERNATE PRESSURE INDICATION WAS PROVIDED FOR BOTH OTSG'S TO FULFILL REQUIREMENTS OF TECH SPEC 3.3.3.6. A TECH SPEC CHANGE REQUEST HAS BEEN SUBMITTED TO DELETE THE OTSG PRESSURE INSTRUMENT REQUIREMENTS OF TECH SPEC 3.3.3.5.

[469] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-004 REV 2
UPDATE ON HIGH LEVEL IN AIR INTAKE TUNNEL.
EVENT DATE: 021683 REPORT DATE: 103183 NSSS: BW TYPE: PWR
SYSTEM: OTHER SYSTEMS COMPONENT: HEATERS, ELECTRIC

(NSIC 187276) ON FEBRUARY 16, 1983 WHILE PERFORMING SURVEILLANCE ON THE FIRE SYSTEM VALVES, IT WAS REALIZED THAT THE AIR INTAKE TUNNEL (AIT) SUMP LEVEL HAD RISEN SUCH THAT THERE WAS STANDING WATER ON APPROX. 1/4 OF THE AIT FLOOR. INVESTIGATION DETERMINED THE AIT DELUGE SYSTEM HAD DEVELOPED LEAKS. IN ADDITION, THE AIT HALON SYSTEM GENERATOR A TROUBLE ALARM IN 1 OF 4 ZONES. THIS EVENT IS REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9(B) DUE TO ENTRY INTO THE ACTION STATEMENTS OF SECTIONS 3.7.10.2 AND 3.7.10.3. THE DELUGE SYSTEM LEAKS WERE FREEZE-INDUCED DUE TO FAILED HEAT TRACING. THE LEAKAGE ALONG WITH GROUNDWATER INLEAKAGE AND FAILED HI AND HI-HI SUMP ALARMS, ALLOWED THE SUMP TO OVERFLOW AND SUBMERGE 1 OR 2 HALON SYSTEM HEAT DETECTORS. THE DELUGE LEAKS WERE REPAIRED AND THE HEAT TRACING AND HEAT DETECTORS WERE REPLACED. THE LEVEL SWITCH FOR THE HI-HI ALARM WAS RECALIBRATED AND THE HI ALARM WAS REPLACED.

[470] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-006 REV 1
UPDATE ON PERSONNEL AIR LOCK LEAKS.
EVENT DATE: 021683 REPORT DATE: 103183 NSSS: BW TYPE: PWR
SYSTEM: REACTOR CONTAINMENT SYSTEMS COMPONENT: PENETRATIONS, PRIMARY CONTAIN

(NSIC 187420) ON FEB. 16, 1983, SUBSEQUENT TO A REACTOR BUILDING ENTRY, THE DOORS OF THE PERSONNEL AIRLOCK (PAL) NO. 2 WERE LEAK TESTED. THE INNER DOOR FAILED AND WAS DECLARED INOPERABLE AT 2030 HOURS. AFTER CORRECTIVE ACTION, AS DESCRIBED BELOW, THE INNER DOOR WAS RETURNED TO AN OPERABLE STATUS AT 2245 HOURS ON SAME DATE. THIS EVENT IS A VIOLATION OF TECH SPEC 3.6.1.3 AND IS REPORTABLE UNDER SECTION 6.9.1.9(B). THE CAUSE OF THE EVENT IS ATTRIBUTED TO A SMALL GOUGE IN ONE OF THE O-RINGS OF REACTOR BUILDING PAL NO. 2 INNER DOOR. THE DAMAGED O-RING WAS REPLACED, THE LEAKAGE RATE RETESTED, AND FOUND SATISFACTORY. PROTECTIVE SHIELDS FOR THE DOOR SEALS HAVE BEEN CONSTRUCTED.

[471] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-036 REV 1
UPDATE ON LOSS OF OFF SITE POWER.
EVENT DATE: 080883 REPORT DATE: 100483 NSSS: BW TYPE: PWR
SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: OTHER COMPONENTS

(NSIC 187421) ON AUG. 8, 1983, AT 0933 HOURS, THE BOOM OF A HYDRAULIC TRUCK CRANE STRUCK AND GROUNDED THE 230KV BUS 4 FEEDLINE. THIS RESULTED IN LOSS OF POWER FROM UNIT AUXILIARY TRANSFORMER 2A. ALL MAJOR BUSES FED FROM UNIT AUXILIARY TRANSFORMER 2A AUTO-TRANSFERRED TO UNIT AUXILIARY TRANSFORMER 2B, AS DESIGNED. THIS EVENT FORCED THE TERMINATION OF RCS SAMPLING EVOLUTIONS. THE PROXIMATE CAUSE OF THIS INCIDENT WAS ALLOWING THE CRANE BOOM TO COME TOO CLOSE TO THE 230 KV LINE AS A RESULT OF THE CRANE OPERATOR'S AND DRIVER'S PERSONAL ERROR. CORRECTIVE ACTIONS INCLUDE WARNING DEVICES ON ROADWAYS AND OVERHEAD LINES AND

GROUNDMEN TO WALK CRANE PATH IN CONGESTED AREAS. ALL CORRECTIVE ACTIONS ARE SCHEDULED FOR COMPLETION BY DEC. 1983.

[472] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-045
 SETPOINT DRIFT OF REACTOR BUILDING PRESSURE TRANSMITTER.
 EVENT DATE: 082783 REPORT DATE: 092383 NSSS: BW TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: FOXBORO CO., THE

(NSIC 186266) ON AUGUST 27, 1983, AT 2130 HOURS, DURING THE PERFORMANCE OF ROUTINE CHANNEL CALIBRATION, REACTOR BUILDING PRESSURE TRANSMITTER BS-PT-4388-2 WAS FOUND TO BE OUT OF CALIBRATION. THIS EVENT PLACED THE UNIT IN THE ACTION STATEMENT OF TECH SPEC 3.3.3.6 AND IS CONSIDERED REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9(B). NO SIGNIFICANT OCCURRENCE RESULTED FROM THIS EVENT. REACTOR BUILDING PRESSURE TRANSMITTER BS-PT-4388-2 WAS DETERMINED TO BE OUT OF CALIBRATION DUE TO INSTRUMENT DRIFT. THE TRANSMITTER WAS RECALIBRATED AND RETURNED TO SERVICE AT 2215 HOURS ON AUGUST 27, 1983. NO FURTHER ACTION IS CONTEMPLATED.

[473] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-061
 SUMP LEVEL INDICATOR INOPERABLE.
 EVENT DATE: 111083 REPORT DATE: 120883 NSSS: BW TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187852) AT 1230 HOURS ON NOV. 10 AND 0300 HOURS ON NOV. 16, 1983, THE REACTOR BUILDING (RB) SUMP LEVEL INDICATOR WAS READING HIGH. IN BOTH EVENTS, THE INDICATOR WAS DECLARED INOPERABLE AND WAS RETURNED TO OPERABLE STATUS WITHIN THE EIGHT HOUR TIMECLOCK. THESE EVENTS ARE CONSIDERED REPORTABLE PURSUANT TO TECH SPEC 6.9.1.9(B) DUE TO ENTRY INTO AND COMPLIANCE WITH THE ACTION STATEMENT OF TECH SPEC 3.3.3.6. THE ABOVE EVENTS WERE CAUSED BY AN OBSTRUCTION IN THE BUBBLER AND REFERENCE LINES OF THE LEVEL TRANSMITTER. THE LINES WERE BLOWN FREE AND THE LEVEL INDICATION RETURNED TO NORMAL. THE RB SUMP LEVEL INDICATOR WILL BE BLOWN MONTHLY TO PREVENT CLOGGING.

[474] THREE MILE ISLAND 2 DOCKET 50-320 LER 83-057
 ENVIRONMENTAL MONITORING INSTRUMENTS FAIL.
 EVENT DATE: 111583 REPORT DATE: 121583 NSSS: BW TYPE: PWR
 SYSTEM: OTHR INST SYS REQD FOR SAFETY COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: TELEDYNE-GEOTECH

(NSIC 187881) AT 2230 HOURS ON NOVEMBER 15, 1983, A PROMPT REPORTABLE CONDITION WAS DETERMINED TO HAVE EXISTED. IT WAS DETERMINED THAT FROM NOVEMBER 13, 1983, TO 2305 HOURS ON NOVEMBER 15, 1983, THERE WERE NO OPERABLE AIR TEMPERATURE DELTA-T METEOROLOGICAL INSTRUMENTS. IN ADDITION, THE WIND DIRECTION INSTRUMENTATION FAILED AS OF 1430 HOURS ON NOVEMBER 15, 1983. IT WAS REPAIRED AND RETURNED TO SERVICE AT 2305 HOURS ON NOVEMBER 15, 1983 ALSO. THIS EVENT IS REPORTABLE PURSUANT TO SECTION 6.9.1.8(B) AS A VIOLATION TO TECH SPEC 3.3.3.4. THE AIR TEMPERATURE DELTA-T INSTRUMENT FAILED AS A RESULT OF A PINCHED ELECTRICAL CABLE. THE WIND DIRECTION INSTRUMENT FAILED AS A RESULT OF A MALFUNCTIONING CONVERTER CARD. BOTH FAILED COMPONENTS WERE PART OF TEMPORARY METEOROLOGICAL INSTRUMENTS UTILIZED DURING REPAIR OF THE PLANT INSTRUMENTS. WORK ON THE PLANT SYSTEMS WAS COMPLETED SUCH THAT THEY COULD BE RETURNED TO SERVICE.

[475] TROJAN DOCKET 50-344 LER 83-016
 ERRORS IN PRESSURIZER PRESSURE TRANSMITTER CALIBRATION.
 EVENT DATE: 101483 REPORT DATE: 111483 NSSS: WE TYPE: PWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

VENDOR: BARTON INSTRUMENT CO., DIV OF ITT

(NSIC 187561) THE TROJAN NUCLEAR PLANT WAS NOTIFIED BY WESTINGHOUSE ON OCT. 14, 1983 THAT DUE TO ERRORS IN ITT BARTON MODEL 763 PRESSURE TRANSMITTER TEMPERATURE COMPENSATION CALIBRATION METHODS AND CURRENT LEAKAGE PROBLEMS, THE PRESSURIZER LOW PRESSURE SAFETY INJECTION SHOULD BE SET TO 1829 PSIG. THE EXISTING VALUE WAS 1765 PSIG. THE ERRORS BY ITT BARTON COULD BE OF SIGNIFICANT MAGNITUDE TO PREVENT PRESSURIZER PRESSURE SAFETY INJECTION SETPOINT FROM BEING REACHED IN ACCIDENT CONDITIONS. THE APPARENT CAUSE WAS THE MANUFACTURER'S METHOD OF TEMPERATURE COMPENSATION AND AN ELECTRICAL LEAKAGE PATH WHICH LED TO POSSIBLE INACCURACIES IN TRANSMITTERS RESPONSE DURING POSTULATED ACCIDENT CONDITIONS. THE PRESSURIZER PRESSURE LOW PRESSURE SAFETY INJECTION SETPOINT WAS RESET TO 1835 PSIG.

[476] TURKEY POINT 3 DOCKET 50-250 LER 82-013 REV 1
 UPDATE ON AUXILIARY FEED PRESSURE CONTROL VALVE FAILURE.
 EVENT DATE: 091782 REPORT DATE: 072983 NSSS: WE TYPE: PWR
 SYSTEM: CONDENSATE & FEEDWATER SYS & CONT COMPONENT: VALVES
 VENDOR: FISHER GOVERNOR

(NSIC 184561) IN ACCORDANCE WITH THE INSERVICE INSPECTION AND TESTING PROGRAMS, A TEST WAS BEING PERFORMED ON AUXILIARY FEEDWATER PUMPS A & C. C AUXILIARY FEEDWATER PUMP FAILED TO RUN FOR THE REQUIRED 15 MINUTES. A AND B PUMPS WERE IN SATISFACTORY WORKING ORDER. THIS IS REPORTABLE IN ACCORDANCE WITH TECH SPEC 6.9.2.B.2. SIMILAR EVENTS WERE REPORTED AS LERS 250-81-4, 250-79-36, 250-79-28, 250-79-34, 250-79-17 AND 250-74-7. THE STEAM TURBINE PRESSURE CONTROL VALVE CV-3707 DID NOT CLOSE COMPLETELY. THIS RESULTED IN POOR CONTROL OF THE STEAM PRESSURE, CAUSING THE SAFETY RELIEF VALVE TO LIFT AND THE TRIP VALVE TO CLOSE. DISASSEMBLY OF CV-3707 REVEALED TWO PIECES OF FOREIGN METAL UNDER THE VALVE SEAT. THE VALVE WAS REPAIRED AND ITS CONTROLS ADJUSTED. THE PUMP WAS RETURNED TO SERVICE IN 44 HOURS.

[477] TURKEY POINT 3 DOCKET 50-250 LER 83-019
 RHR SYSTEM ISOLATION VALVE CLOSES.
 EVENT DATE: 100883 REPORT DATE: 110783 NSSS: WE TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOVAL SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE
 VENDOR: FISCHER & PORTER CO.

(NSIC 187392) WHILE PERFORMING A HYDROSTATIC TEST ON UNIT 3 'A' HOT LEG SAMPLE LINE, PRESSURE TRANSMITTER (PT-3-405) WAS EXPOSED TO A HYDROSTATIC TEST PRESSURE OF APPROXIMATELY 3100 PSIG. THIS ACTIVATED THE INTERLOCK BETWEEN PT-3-405 AND MOV-3-751 (RESIDUAL HEAT REMOVAL RETURN FROM LOOP C HOT LEG) THUS ISOLATING RHR FLOW FOR APPROXIMATELY 6 MINUTES. UNIT 3 WAS AT REFUELING SHUTDOWN WITH THE REACTOR COOLANT SYSTEM DRAINED AT THE TIME OF THIS EVENT. THIS IS REPORTABLE PURSUANT TO TECH SPEC 6.9.2.B.2. THIS IS THE FIRST OCCURRENCE OF THIS KIND. THE ROOT CAUSE WAS DETERMINED TO BE AN UNCLEAR DRAWING CONFIGURATION OF THE LOOP 'A' SAMPLE LINE. THIS LED PERSONNEL PERFORMING THE HYDRO TEST TO BELIEVE THAT THERE WAS DOUBLE ISOLATION BETWEEN THE ISI TEST BOUNDARY AND INSTRUMENTATION COMING OFF THE SAMPLE LINE.

[478] TURKEY POINT 3 DOCKET 50-250 LER 83-020
 POTENTIAL INCORRECT ALIGNMENT OF COMPONENT COOLING WATER.
 EVENT DATE: 101183 REPORT DATE: 111083 NSSS: WE TYPE: PWR
 SYSTEM: COOL SYS FOR REAC AUX & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187527) WHILE REVIEWING THE OFF-NORMAL PROCEDURE FOR LOSS OF COMPONENT COOLING FLOW AS PART OF THE PLANT PROCEDURE REVIEW PROJECT, A DEFICIENCY WAS IDENTIFIED WHICH COULD HAVE LED OPERATORS TO INCORRECTLY ALIGN SEAL COOLING WATER TO RESIDUAL HEAT REMOVAL AND CONTAINMENT SPRAY PUMPS WHILE SWAPPING HEADERS.

THERE WAS NO IMMEDIATE SAFETY CONCERN SINCE THE COMPONENT COOLING SYSTEM WAS CORRECTLY ALIGNED AT THE TIME OF THE DISCOVERY. THIS IS REPORTABLE PER TECH SPEC 6.9.2.B.3. SIMILAR LER WAS REPORTED UNDER 250-81-09. THE ROOT CAUSE WAS DETERMINED TO BE PROCEDURE INADEQUACY IN THAT CERTAIN VALVE NUMBERS WERE INTERCHANGED BETWEEN THE A AND B HEADERS. A PROCEDURE CHANGE WAS MADE TO CORRECT THE DEFICIENCY. IN ADDITION, A DETAILED WALKDOWN AND REVIEW OF PROCEDURES AND DRAWINGS IS BEING UNDERTAKEN TO IDENTIFY, IF ANY, OTHER POSSIBLE INADEQUACIES IN THE COMPONENT COOLING WATER SYSTEM.

[479] TURKEY POINT 3 DOCKET 50-250 LER 83-021
 WRONG PIPE USED IN AFW STEAM LINE.
 EVENT DATE: 110983 REPORT DATE: 120983 NSSS: WE TYPE: PWR
 SYSTEM: CONDNSATE & FEEDWTR SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187504) DURING THE REPLACEMENT OF THE THREE AUXILIARY FEEDWATER STEAM SUPPLY STOP CHECK VALVES ON UNIT 3 (IN REFUELING SHUTDOWN), A 4-INCH PIPE SECTION BETWEEN THE MAIN STEAM LINE FROM A STEAM GENERATOR TO VALVE 3-119 AND A 4-INCH PIPE SECTION BETWEEN B'S MAIN STEAM LINE AND VALVE 3-219 WERE FOUND TO BE SCHEDULE 40 PIPING INSTEAD OF SCHEDULE 80. THIS IS REPORTABLE UNDER TECH SPEC 6.9.2.B.3. ULTRASONIC INSPECTION OF THE SAME PIPING ON UNIT 4 WAS INITIATED. A SECTION OF SCHEDULE 40 PIPING BETWEEN A MAIN STEAM LINE AND VALVE 4-119 WAS FOUND. AN ENGINEERING EVALUATION DETERMINED THAT THE LINES, AS FOUND, MEET THE FUNCTIONALITY ANALYSIS ACCEPTANCE CRITERIA. THE TWO 4-INCH SECTIONS OF PIPING ON UNIT 3 WERE REPLACED WITH THE REQUIRED SCHEDULE 80 PIPING. THE REMAINING 4-INCH SECTION OF PIPING ON UNIT 4 WILL BE REPLACED DURING THE NEXT OUTAGE OF SUFFICIENT DURATION.

[480] TURKEY POINT 4 DOCKET 50-251 LER 83-018
 RHR PUMP INOPERABLE.
 EVENT DATE: 101183 REPORT DATE: 111083 NSSS: WE TYPE: PWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187505) WHILE PERFORMING A ROUTINE SURVEILLANCE TEST OF THE 4B RESIDUAL HEAT REMOVAL PUMP, THE 4160 VOLT LEADS TO THE MOTOR FAILED RENDERING THE 4B RHR PUMP INOPERABLE. THE UNIT WAS BROUGHT TO HOT SHUTDOWN BECAUSE IT WAS ESTIMATED THAT REPAIRS WOULD TAKE SEVERAL DAYS AND EXCEED THE 24 HOUR TIME LIMIT ALLOWED BY TECH SPEC 3.4.1.B.4. THIS IS REPORTABLE PER TECH SPEC 6.9.2.B.2. THE ROOT CAUSE WAS DETERMINED TO BE WATER IN THE MOTOR LEAD CONNECTION BOX. THE SOURCE OF THE WATER WAS ELIMINATED AND CORRECTIVE ACTIONS WERE TAKEN TO PREVENT A REPEAT OCCURRENCE OF THIS TYPE. THE MOTOR LEADS WERE REPLACED, THE RHR PUMP WAS PUT BACK IN SERVICE, AND THE UNIT WAS RETURNED TO FULL POWER OPERATION.

[481] TURKEY POINT 4 DOCKET 50-251 LER 83-019
 RCS SAMPLE NOT TAKEN ON TIME.
 EVENT DATE: 111283 REPORT DATE: 121283 NSSS: WE TYPE: PWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187767) FOLLOWING A SHUTDOWN OF UNIT 4 FOR UNSCHEDULED MAINTENANCE, A REACTOR COOLANT SAMPLE TAKEN FOR ISOTOPIC ANALYSIS OF IODINE IN THE COOLANT, DID NOT SATISFY TECH SPEC SURVEILLANCE FREQUENCY AS SPECIFIED IN TABLE 4.1-2 ITEM 1.H.2. THE SAMPLE IN QUESTION WAS TAKEN PRIOR TO THE SPECIFIED 2 TO 6 HOUR TIME FRAME. THIS IS REPORTABLE PURSUANT TO TECH SPEC 6.9.2.B.3. THE ROOT CAUSE WAS DETERMINED TO BE PERSONNEL ERROR IN THAT THE LAB TECHNICIAN DID NOT FOLLOW INSTRUCTIONS SPECIFYING THE TIME FRAME TO TAKE THE REACTOR COOLANT SAMPLE. PERSONNEL INVOLVED WERE RE-INSTRUCTED IN THE IMPORTANCE OF PERFORMING SURVEILLANCE REQUIREMENTS WITHIN THE SPECIFIED PERIODS.

[482] VERMONT YANKEE DOCKET 50-271 LER 83-021
 DRYWELL PRESSURE INDICATOR SETPOINT DRIFTS.
 EVENT DATE: 083083 REPORT DATE: 092983 NSSS: GE TYPE: BWR
 SYSTEM: ENGNRD SAFETY FEATR INSTR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: ROSEMOUNT, INC.

(NSIC 186149) DURING NORMAL OPERATIONS WHILE PERFORMING SURVEILLANCE ON THE DRYWELL PRESSURE ECCS INDICATORS, PR-10-101D(M) ACTUATED AT A PRESSURE OF 2.57 PSIG. THIS IS IN EXCESS OF THE 2.5 PSIG REQUIRED BY TECH SPEC TABLE 3.2.1. THERE WERE NO SIGNIFICANT OCCURRENCES AS A RESULT OF THIS EVENT. THERE HAVE BEEN NO SIMILAR OCCURRENCES OF THIS TYPE REPORTED TO THE COMMISSION. PT-10-101D(M) IS A MODEL 501DU MASTER TRIP UNIT MANUFACTURED BY ROSEMOUNT, INC. THE TRIP UNIT WAS REPLACED WITH A CALIBRATED UNIT. THE REMOVED UNIT WILL BE TESTED, RECALIBRATED AND RETURNED TO STOCK. THE CAUSE OF THIS OCCURRENCE IS ATTRIBUTED TO INSTRUMENT DRIFT.

[483] VERMONT YANKEE DOCKET 50-271 LER 83-023E
 COBALT CONCENTRATION IN RIVER SILT EXCEEDS LIMIT.
 EVENT DATE: 092383 REPORT DATE: 101283 NSSS: GE TYPE: BWR
 SYSTEM: SYSTEM CODE NOT APPLICABLE COMPONENT: VALVES

(NSIC 187692) AIRBORNE RELEASE FROM TURBINE BUILDING. AN AUGMENTED HEALTH PHYSICS SAMPLING PROGRAM REVEALED THAT A CO-60 CONCENTRATION OF 620 PICOCURIES PER KILOGRAM RIVER SILT EXISTED AT THE NORTH STORM DRAIN OUTFALL. THIS RESULTED FROM THE TURBINE BUILDING ROOF VENTS. THE CO-60 IMPACTED ON THE GRAVEL ROOF SURFACE OF THE TURBINE BUILDING AND WAS SUBSEQUENTLY WASHED INTO THE STORM DRAIN BY RAIN. TECH SPEC TABLE 3.9.1 DID NOT SPECIFICALLY INCLUDE THE NORTH STORM DRAIN OUTFALL AS A RIVER SEDIMENT SAMPLE LOCATION. THEREFORE, THE EXTENT OF THE CO-60 RECONCENTRATION AT THE OUTFALL WAS NOT PERIODICALLY DETERMINED. THIS SAMPLE POINT WILL BE ADDED TO ADMINISTRATIVE PROCEDURES TO REQUIRE SEMIANNUAL MONITORING. THE TECH SPEC REQUIREMENT WILL BE SUBSEQUENTLY SUBMITTED WITH OUR 10 CFR 50 APPENDIX I PROPOSED CHANGE.

[484] VERMONT YANKEE DOCKET 50-271 LER 83-024
 RADIATION MONITOR IMPROPERLY REMOVED FROM SERVICE.
 EVENT DATE: 092683 REPORT DATE: 102683 NSSS: GE TYPE: BWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186793) DURING NORMAL OPERATIONS AIR EJECTOR OFF GAS RADIATION MONITOR (06-17-150A) WAS REMOVED FROM SERVICE WITHOUT FIRST IMPLEMENTING THE PROPER ADMIN. CONTROLS REQUIRED BY PLANT PROCEDURES TO TAKE EQUIPMENT OUT OF SERVICE FOR PREVENTATIVE MAINTENANCE. THE REDUNDANT MONITOR 06-17-150B WAS OPERATIONAL AT THE TIME. THERE WERE NO SIGNIFICANT OCCURRENCES AS A RESULT OF THIS EVENT. THERE HAVE BEEN NO SIMILAR OCCURRENCES REPORTED. THE CAUSE OF THIS OCCURRENCE WAS THE SHIFT SUPERVISOR'S FAILURE TO MAKE THE REQUIRED LOG ENTRIES AND DOCUMENT THE CHECKS REQUIRED BY PROCEDURE PRIOR TO REMOVING THE EQUIPMENT FROM SERVICE. THESE REQUIREMENTS HAVE BEEN REVIEWED WITH THE INDIVIDUAL. THIS IS CONSIDERED AN ISOLATED INCIDENT AND NO FURTHER ACTIONS ARE ANTICIPATED.

[485] VERMONT YANKEE DOCKET 50-271 LER 83-025
 MAIN STEAM LINE RADIATION MONITOR OUT OF CALIBRATION.
 EVENT DATE: 092883 REPORT DATE: 101283 NSSS: GE TYPE: BWR
 SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 186151) DURING NORMAL OPERATION MAIN STEAM LINE RADIATION MONITOR (RM-17-251A) WAS FOUND TO HAVE A TRIP SETPOINT GREATER THAN 3 TIMES THE NORMAL

BACKGROUND AT RATED POWER AS REQUIRED BY TECH SPEC TABLES 3.1.1 AND 3.2.2. RM-17-251A WAS PLACED IN A TRIPPED CONDITION UNTIL THE CORRECT SETPOINT COULD BE DETERMINED. THERE WERE NO SIGNIFICANT OCCURRENCES AS A RESULT OF THIS EVENT. THERE HAVE BEEN NO PREVIOUS SIMILAR OCCURRENCES. THE CAUSE OF THIS EVENT IS ATTRIBUTED TO A PROCEDURAL INADEQUACY IN THAT THE PROCEDURE DID NOT ADDRESS THE REQUIREMENT TO DETERMINE NORMAL FULL POWER BACKGROUND IN ORDER TO CALCULATE THE CORRECT SETPOINT. BACKGROUND WAS ESTABLISHED FOR ALL MONITORS AND THE TRIPS WERE RESET AS REQUIRED TO BE LESS THAN 3 TIMES THE BACKGROUND. THE PROCEDURE IS BEING REVISED TO ADDRESS THE SPECIFIC METHOD FOR BACKGROUND DETERMINATION.

[486] VERMONT YANKEE DOCKET 50-271 LER 83-027
 DIESEL GENERATOR INOPERABLE AND CORE SPRAY VALVE FAILS.
 EVENT DATE: 101283 REPORT DATE: 101383 NSSS: GE TYPE: BWR
 SYSTEM: EMERG GENERATOR SYS & CONTROLS COMPONENT: VALVES
 VENDOR: FAIRBANKS MORSE

(NSIC 186794) AFTER PERFORMING EMERGENCY DIESEL GENERATOR SURVEILLANCE ON THE "A" DIESEL GENERATOR, OPERATIONS NOTED WATER NEAR THE "A" DIESEL GENERATOR #1 AIR START CHECK VALVE. THE "A" DIESEL GENERATOR WAS DECLARED INOPERABLE PER 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.5 AND AN UNUSUAL EVENT WAS DECLARED. A SIMILAR EVENT OCCURRED ON 8/26/83 PER LER 83-20/1T. THE CAUSE OF THIS EVENT WAS ATTRIBUTED TO TWO FAILURES: 1) THE "A" DIESEL GENERATOR AIR START CHECK VALVE APPEARED TO BE STUCK OPEN. IT WAS SUBSEQUENTLY REPLACED, 2) THE CS-7B VALVE BREAKER TRIPPED WITH THE VALVE IN THE CLOSED POSITION. THE BREAKER WAS SUBSEQUENTLY RESET, THE CS-7B VALVE WAS CYCLED AND DECLARED OPERABLE. ADDITIONAL DETAILS WILL BE PROVIDED IN A FOLLOW-UP REPORT.

[487] VERMONT YANKEE DOCKET 50-271 LER 83-028
 RHR PUMP REMOVED FROM SERVICE.
 EVENT DATE: 101483 REPORT DATE: 110983 NSSS: GE TYPE: BWR
 SYSTEM: RESIDUAL HEAT REMOV SYS & CONT COMPONENT: HEATERS, ELECTRIC
 VENDOR: GENERAL ELECTRIC CO.

(NSIC 187511) DURING NORMAL OPERATION SMOKE WAS OBSERVED COMING FROM THE JUNCTION BOX ON RHR PUMP 1D MOTOR. THE OPERATOR IMMEDIATELY REMOVED ALL FUSES FROM THE PUMP MOTOR BREAKER WHICH INCLUDED THE BREAKER CONTROL POWER FUSES MAKING LPCI INOPERABLE CONTRARY TO TECH SPEC 3.5.A. AFTER DETERMINING THAT THE SMOKE WAS FROM THE MOTOR HEATER THE CONTROL POWER FUSES WERE REPLACED. THE OTHER PUMP IN THIS RHR LOOP WAS OPERABLE AT ALL TIMES AS WERE BOTH PUMPS IN THE OTHER RHR LOOP. THERE HAVE BEEN NO SIMILAR OCCURRENCES. THE CAUSE OF THE EVENT WAS A DIRT AND OIL FILM ON THE MOTOR HEATER THAT STARTED SMOKING WITH THE HEATER ENERGIZED. AFTER BEING DEENERGIZED THE HEATER WAS REMOVED, CLEANED, AND REINSTALLED. THIS SITUATION WAS UNIQUE TO RHR PUMP 1D. OPERABILITY TESTING WAS PERFORMED ON THE PUMP AFTER REPLACEMENT OF THE FUSES. THE OPERATOR ACTION TO REMOVE ALL THE FUSES WAS APPROPRIATE SINCE THE CAUSE OF THE SMOKE WAS NOT KNOWN.

[488] VERMONT YANKEE DOCKET 50-271 LER 83-032
 BOTH RCIC AND HPCI INOPERABLE.
 EVENT DATE: 111783 REPORT DATE: 111883 NSSS: GE TYPE: BWR
 SYSTEM: EMERG CORE COOLING SYS & CONT COMPONENT: VALVE OPERATORS
 VENDOR: LIMITORQUE CORP.
 WALWORTH COMPANY

(NSIC 187777) DURING NORMAL OPERATION, WHILE PERFORMING OPERABILITY TESTING ON THE HIGH PRESSURE COOLANT INJECTION (HPCI) SYSTEM DUE TO THE REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM BEING INOPERABLE FOR CORRECTIVE MAINTENANCE,

INDICATION WAS LOST ON MOV 23-20. THIS CAUSED THE HPCI SYSTEM TO ALSO NOT BE OPERABLE AS REQUIRED BY TECH SPEC 3.5.E. AN UNUSUAL EVENT WAS DECLARED AND A REDUCTION IN POWER WAS COMMENCED IN PREPARATION FOR A REACTOR SHUTDOWN. THERE HAVE BEEN NO SIMILAR OCCURRENCES REPORTED TO THE COMMISSION. THE LOSS OF INDICATION WAS FOUND TO BE A MALFUNCTION OF THE VALVE LIMIT SWITCH RATHER THAN A TRIPPED BREAKER. THE LIMIT SWITCH WAS CLEANED AND READJUSTED AFTER WHICH THE VALVE WAS TESTED SATISFACTORILY. MOV 23-20 IS A WALWORTH 14" GATE VALVE WITH A LIMITORQUE SMB-4 OPERATOR. THE MALFUNCTION IS BELIEVED DUE TO DIRT OR CORROSION ON THE LIMIT SWITCH CONTACT COMBINED WITH A WEAK SPRING SETTING ON THE STATIONARY CONTACT.

[489] YANKEE ROWE DOCKET 50-029 LER 83-035
 SG BLOWDOWN RADIATION MONITOR FAILS.
 EVENT DATE: 100383 REPORT DATE: 110283 NSSS: WE TYPE: PWR
 SYSTEM: PRCS & EFF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: NUCLEAR RESEARCH CORP.

(NSIC 186783) WHILE IN MODE 1, OPERATING AT FULL POWER, THE NUMBER 4 STEAM GENERATOR BLOWDOWN MONITOR FAILED. THIS IS CONTRARY TO TECH SPEC TABLE 3-3-4. PREVIOUS FAILURE OF THIS NATURE WAS REPORTED IN LER 82-11. A REDUNDANT CHANNEL, STEAM GENERATOR BLOWDOWN TANK MONITOR, WAS AVAILABLE AND OPERATIONAL DURING THIS TIME. THIS EVENT HAS BEEN ATTRIBUTED TO BUILDUP OF DIRT/TARNISH ON THE ELECTRICAL CONTACTS ON THE RATEMETER CARD, PB-3, AND ON THE HIGH VOLTAGE OPERATE AND TEST SWITCH, S-3. THE RATEMETER IS A MODEL AR2S, MADE BY NUCLEAR RESEARCH CORP. ALL CONTACTS WERE CLEANED AND POLISHED AND THE COMPONENTS RETURNED TO SERVICE. NO FURTHER ACTIONS ARE DEEMED NECESSARY.

[490] YANKEE ROWE DOCKET 50-029 LER 83-037
 OFFSITE POWER LOST.
 EVENT DATE: 100583 REPORT DATE: 110483 NSSS: WE TYPE: PWR
 SYSTEM: OFFSITE POWER SYSTEMS & CONTROL COMPONENT: COMPONENT CODE NOT APPLICABLE

(NSIC 187375) DURING FULL POWER OPERATION, IN MODE 1, THE Z-126 TRANSMISSION LINE WAS DE-ENERGIZED BY AUTOMATIC RELAY OPERATION WHEN HIGH WINDS CAUSED A TREE TO FALL ON THE LINE OFF SITE. DE-ENERGIZATION OF THE Z-126 LINE CONSTITUTED A LOSS OF ONE INDEPENDENT CIRCUIT BETWEEN THE ONSITE CLASS 1E DISTRIBUTION SYSTEM AND THE OFFSITE TRANSMISSION NETWORK. THIS IS CONTRARY TO TECH SPEC 3.8.1.1.A. THIS EVENT WAS CAUSED BY A TREE TAKING DOWN ONE PHASE OF THE Z-126 TRANSMISSION LINE. THE EVENT OCCURRED DURING AN ELECTRICAL STORM ACCOMPANIED BY HIGH WINDS. DE-ENERGIZED BUSSES AND INOPERABLE EQUIPMENT WERE PROMPTLY RETURNED TO SERVICE BY PLANT PERSONNEL. THE TRANSMISSION LINE WAS RETURNED TO SERVICE UPON COMPLETION OF REPAIR AT 0906 HOURS ON 10/06/83.

[491] YANKEE ROWE DOCKET 50-029 LER 83-038
 VITAL BUS TRANSFER SWITCH FAILS TO OPERATE.
 EVENT DATE: 100683 REPORT DATE: 110483 NSSS: WE TYPE: PWR
 SYSTEM: AC ONSITE POWER SYS & CONTROLS COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: RTM INC.

(NSIC 187376) DURING NORMAL STEADY STATE OPERATION IN MODE 1, 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 1 BUS. THE 120 VOLT 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 MANUFACTURED BY ELECTRO SWITCH CORP., PART NO. 105602A-ZAS. THE SWITCH WAS

REPAIRED, INSTALLED AND SATISFACTORILY TESTED. NO. 1 INVERTER WILL BE INSPECTED NEXT REFUELING OUTAGE.

[492] YANKEE ROWE DOCKET 50-029 LER 83-039
TWO FIRE DETECTION SYSTEMS REMOVED FROM SERVICE.
EVENT DATE: 101183 REPORT DATE: 111083 NSSS: WE TYPE: PWR
SYSTEM: FIRE PROTECTION SYS & CONT COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: PYROTRONICS

(NSIC 187377) WHILE IN MODE 1, DURING INSTALLATION OF AN APPROVED DESIGN CHANGE, THE FIRE DETECTION SYSTEM FOR THE CABLE TRAY HOUSE AND NON-RETURN VALVE ENCLOSURE WAS DEENERGIZED ON TWO OCCASIONS. THIS IS CONTRARY TO TECH SPEC 3.3.3.4. THIS IS THE FIRST EVENT OF THIS NATURE. THESE WERE PLANNED OUTAGES OF ZONE 4 TO ALLOW PERFORMING THE DESIGN CHANGE. THE TECH SPEC ACTION STATEMENTS WERE COMPLIED WITH DURING THE TWO OUTAGES WHICH LASTED A TOTAL OF 3.25 HOURS. THE CAUSE OF THIS OCCURRENCE WAS REMOVAL OF ZONE 4 OF THE FIRE DETECTION SYSTEM FROM SERVICE TO FACILITATE THE IMPROVEMENT OF THE FIRE DETECTION SYSTEM THROUGH AN APPROVED DESIGN CHANGE. THE DESIGN CHANGE WAS COMPLETED AND FUNCTIONALLY TESTED BEFORE RETURN TO SERVICE. FIRE WATCHES WERE STATIONED THROUGHOUT THE OUTAGES. NO FURTHER ACTIONS ARE NECESSARY.

[493] ZION 1 DOCKET 50-295 LER 83-014
ERROR IN DEPLETION CALCULATION FOR CORE.
EVENT DATE: 052183 REPORT DATE: 060383 NSSS: WE TYPE: PWR
SYSTEM: REACTOR CORE COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 183493) DURING A PROLONGED FORCED REDUCTION IN POWER, A ROUTINE EXTENDED CYCLE ANALYSIS REVEALED THE ORIGINAL FAC ANALYSIS WAS NOT STILL BOUNDING. THUS LOAD FOLLOW OPERATIONS COULD CREATE CORE PEAKING FACTORS GREATER THAN THE SAFETY ANALYSIS, REPORTABLE PER TECH SPEC 6.2.A.8. SINCE THE UNIT WAS BEING DERATED, THE POSSIBILITY OF EXCEEDING CORE PEAKING FACTORS WAS PRECLUDED, ALTHOUGH THE LONG DERATE CREATED THE PROBLEM. DUE TO BURNUP CONSIDERATIONS AND A TRANSFORMER PROBLEM THE ORIGINAL CORE DEPLETION MODELS WERE INACCURATE. THE EXTENDED ANALYSIS ACCURATELY MODELED OPERATIONS CREATING A MORE BOTTOM PEAKED AXIAL FLUX DISTRIBUTION. THE NEW FAC CALLS FOR 94% AXIAL POWER DISTRIBUTION MONITOR SIGNAL TURN-ON POWER. UNIT OPERATION WILL NOW BE LIMITED TO AVOID EXCESSIVE PEAKING FACTORS.

[494] ZION 1 DOCKET 50-295 LER 83-042
FEEDWATER FLOW TRANSMITTER HAS SETPOINT DRIFT.
EVENT DATE: 100383 REPORT DATE: 103183 NSSS: WE TYPE: PWR
SYSTEM: REACTOR TRIP SYSTEMS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: FISCHER & PORTER CO.

(NSIC 186454) DURING REFUELING CALIBRATION, LOOP 1D FEEDWATER FLOW TRANSMITTER 1FT-530 WAS FOUND TO BE 4.05% OUT-OF-TOLERANCE HIGH. THIS WAS A NONCONSERVATIVE FAILURE FOR STEAM/FEED FLOW REACTOR TRIP. THE OTHER REDUNDANT TRANSMITTER ON LOOP D WAS OPERABLE. PREVIOUS LER: 50-304/83-008. INSTRUMENTATION ZERO SHIFT WAS RESPONSIBLE FOR THE (FISCHER/PORTER MODEL #10B2496PBABBB-NS) BEING OUT-OF-TOLERANCE. THE TRANSMITTER WAS RECALIBRATED, THE OSCILLATOR TUNED AND THE TRANSMITTER WAS RETURNED TO SERVICE. F/P TRANSMITTER DRIFTING HAS BEEN A RECURRING PROBLEM. REPLACEMENT IS BEING CONSIDERED PER A.I.R. #22-82-18.

[495] ZION 1 DOCKET 50-295 LER 83-048
 ERROR DURING TESTING OF CONTAINMENT VENT VALVES.
 EVENT DATE: 110583 REPORT DATE: 120583 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: CIRCUIT CLOSERS/INTERRUPTERS
 VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187519) WHILE PERFORMING PT-17, PRIOR TO PURGING UNIT 1, VACUUM VENT VALVES 1RV0005 AND 1RV0006 FAILED TO CLOSE ON A HIGH RAD CONDITION FROM EITHER 1RT-AR04 A OR B. CONTAINMENT VENTILATION ISOLATION WAS ACTUATED. AT THE TIME, PURGE VALVES 1RV0001 THRU 1RV0004 DID CLOSE AND REACTOR CONTAINMENT FAN COOLER DAMPERS SHIFTED TO ACCIDENT MODE. NO RADIOACTIVE RELEASE WAS MADE AND THE PATH OF RELEASE WAS CONTINUOUSLY MONITORED BY 1RT-PR09A, B, & C. DC POWER TO SAFEGUARDS CABINETS 27 & 28 WAS TURNED OFF TO REPLACE HFA RELAYS. AT THE SAME TIME, PT-17 WAS PERFORMED AND RV0005 & 1RV0006 FAILED TO CLOSE. THE VALVES NEED DC POWER TO OPERATE; BUT WILL FAIL CLOSED ON LOSS OF AC. PRECAUTIONS TO PT-17 NOW REQUIRE A CHECK OF DC POWER SUPPLY PRIOR TO PERFORMING THE PT. NO FURTHER ACTIONS ARE NECESSARY.

[496] ZION 1 DOCKET 50-295 LER 83-049
 PIPE TUNNEL IODINE MONITOR FAILS LOW.
 EVENT DATE: 111783 REPORT DATE: 120983 NSSS: WE TYPE: PWR
 SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS

(NSIC 187782) DURING INSPECTION AND REFUELING SHUTDOWN, A MAINTENANCE CHECK ON PIPE TUNNEL IODINE MONITOR 1RT-PR07B REVEALED THE MONITOR WAS FAILED LOW, A VIOLATION OF TECH SPEC 3.14.1.A. THE MONITOR WAS TAKEN OUT OF SERVICE AND SHIFTLY GRAB SAMPLING AS REQUIRED BY TECH SPEC 3.14.1.C WAS INITIATED. THE CAUSE OF THE MONITOR FAILURE WAS A DEFECTIVE TUBE WHICH IS MANUFACTURED BY EMI GENCON, INC. THE TUBE WAS REPLACED AND THE MONITOR WAS RETURNED TO SERVICE ON 11-19-83. NO FURTHER CORRECTIVE ACTION IS NECESSARY.

[497] ZION 2 DOCKET 50-304 LER 83-037
 PASSIVE GAS FAILURE MONITOR FAILS.
 EVENT DATE: 091583 REPORT DATE: 101483 NSSS: WE TYPE: PWR
 SYSTEM: AIRBORNE RADIOACT MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
 VENDOR: RAYMOND CONTROLS

(NSIC 186156) DURING SURVEILLANCE TESTING OF PASSIVE GAS FAILURE MONITOR 2RT-PR15, NO FLOW WAS OBSERVED THROUGH THE MONITOR. AS THE FLOWMETER IS NOT DISPLAYED IN THE CONTROL ROOM, OPERATORS WERE UNAWARE THAT THE RADIATION MONITOR WAS INOPERABLE UNTIL 10/14, AT WHICH TIME SHIFTLY GAS SAMPLING WAS INITIATED AS REQUIRED BY TECH SPEC 3.14.1.C. OTHER RADIATION MONITORS SAMPLING THE SAME AREAS SHOWED NORMAL ACTIVITY DURING THIS PERIOD. THE CAUSE OF LOSS OF FLOW IS PRESENTLY UNKNOWN. LACK OF COMMUNICATION BETWEEN STATION DEPARTMENTS REGARDING THE INOPERABILITY OF THE RADIATION MONITOR RESULTED IN THE SURVEILLANCE BEING MISSED. ADMINISTRATIVE MEANS TO CORRECT THIS PROBLEM WILL BE PURSUED. A FOLLOW-UP LER WILL BE ISSUED.

[498] ZION 2 DOCKET 50-304 LER 83-039
 PENETRATION PRESSURIZATION RUPTURE DISC BLOWS.
 EVENT DATE: 102983 REPORT DATE: 112883 NSSS: WE TYPE: PWR
 SYSTEM: CNTNMNT ISOLATION SYS & CONT COMPONENT: OTHER COMPONENTS

(NSIC 187538) WHILE ADJUSTING THE NITROGEN PRESSURE TO ZONE 1 OF THE ELECTRICAL PENETRATIONS, THE INDUCED PRESSURE VARIATION CAUSED THE ZONE 1 RUPTURE DISC TO BLOW. ZONE 1 WAS DECLARED INOPERABLE, PLACING THE UNIT IN A DEGRADED MODE PER TECH SPEC 3.9.2.A. THE OTHER 3 ZONES WERE OPERATING PROPERLY. PREVIOUS LERS: 50-295/77-14, 50-304/76-13, 83-04, 83-05. THE CAUSE WAS OPERATOR ERROR. THE

SETPOINT FOR PRESSURE CONTROL VALVE UPSTREAM OF RUPTURE DISC WAS OVERADJUSTED WHILE INCREASING ZONE PRESSURE. A REQUIRED READING PACKAGE WAS WRITTEN FOR OPERATORS GIVING PRECAUTIONS REQUIRED WHILE RETURNING TO SERVICE OR ADJUSTMENT OF THESE PRESSURE CONTROL VALVES. THE RUPTURE DISC WAS REPLACED.

[499] ZION 2 DOCKET 50-304 LER 83-042
DRIFT IN COMPONENT COOLING RADIATION MONITOR.
EVENT DATE: 110883 REPORT DATE: 120683 NSSS: WE TYPE: PWR
SYSTEM: PRCSS & EPF RADIOL MONITOR SYS COMPONENT: INSTRUMENTATION AND CONTROLS
VENDOR: WESTINGHOUSE ELECTRIC CORP.

(NSIC 187784) DURING NORMAL OPERATION OF UNIT 2, 2RE-0017 (THE UNIT 2 COMPONENT COOLING HEAT EXCHANGER RADIATION MONITOR) WAS FOUND OUT-OF-TOLERANCE LOW. THE MONITOR WAS NOT OUT-OF-SERVICE FOR AN ENTIRE SHIFT; THEREFORE, SHIFTLY LIQUID GRAB SAMPLES AS PER TECH SPEC 3.14.1.C WERE NOT REQUIRED. NO UNUSUAL PLANT CONDITIONS OCCURRED DURING THE FAILURE. THE FAILURE WAS DUE TO DRIFT IN THE MONITOR'S HIGH VOLTAGE PLATEAU. NO APPARENT REASON FOR THE DRIFTING COULD BE FOUND. THE HIGH VOLTAGE PLATEAU WAS RE-ADJUSTED TO WITHIN TOLERANCE. THE MONITOR WAS RECALIBRATED AND RETURNED TO SERVICE AND NO FURTHER ACTION IS NECESSARY.

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