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Director of Nuclear Reactor Regulation  
United States Nuclear Regulatory Commission  
Mail Station P1-137  
Washington, D.C. 20555

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Gentlemen:

Enclosed for your information is the annual report covering LaSalle County Nuclear Power Station for the period covering January, 1992 through December, 1992.

Very truly yours

  
for Gary F. Spedl  
Station Manager  
LaSalle County Station

Enclosure

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## I. INTRODUCTION

The LaSalle County Nuclear Power Station is a two-Unit facility owned by Commonwealth Edison Company and located near Marseilles, Illinois. Each unit is a Boiling Water Reactor with a designed net electrical output of 1078 Megawatts. Waste heat is rejected to a man-made cooling pond using the Illinois river for make-up and blowdown. The architect-engineer was Sargent and Lundy and the contractor was Commonwealth Edison Company.

Unit one was issued operating license number NPF-11 on April 17, 1982. Initial criticality was achieved on June 21, 1982 and commercial power operation was commenced on January 1, 1984.

Unit two was issued operating license number NPF-18 on December, 16 1983. Initial criticality was achieved on March 10, 1984 and commercial power operation was commenced on October 19, 1984.

This report was compiled by Michael J. Cialkowski, telephone number (815) 357-6761, extension 2427.

## II. Annual Reportable Documentation for Unit 1 and 2

### A. Summary of Operating Experience

The summary of the operating experience has been reported monthly in LaSalle's NRC Monthly Reports (Section II.A) dated January 1992 through December 1992. For safety related maintenance (non-outage related) performed during the period of January 1992 thru December 1992, see Attachment A.

### B. Unit Outages and Power Reductions

For unit outages, see Attachment B. For unit power reductions see Attachment C.

### C. Radiation Exposure

This information is reported annually for 1992 in the respective sections relating to numbers compiled for LaSalle Unit 1 and 2 in the 10 CFR 20.407 annual report submitted under a different cover.

### D. Indications of Failed Fuel Elements

This section has been reported monthly in LaSalle's NRC Monthly Reports (Section II.F.5) dated January 1992 through December 1992.

### E. Tests and Experiments not covered in the Safety Analysis Report

During this reporting period, January 1, 1992 through December 31, 1992 there were no tests or experiments conducted.

### F. Changes to Procedures Covered in the Safety Analysis Report

#### LLP-91-069, Unit 2 Division II Temporary 125VDC Power Supply

This special procedure provided a method of maintaining the Unit 2 Division II 125Vdc bus energized and operable while its battery was being replaced in accordance with M-1-2-88-003. This change allowed the Unit 2 Control Room Heating, Ventilation, and Air Conditioning, Standby Gas Treatment, and the Unit 2 Hydrogen Recombiner systems to remain operable to meet the Unit 1 LCO. The installation of a temporary cable was non-seismic which did not meet Updated Final Safety Analysis Report, Section 3.1.2 requirements. The cable was safety related material with most of cable run on the floor and roped off. Open fire doors required by procedure did not meet the fire protection requirements of Updated Final Safety Analysis Report, Section 9.4.1. A continuous fire watch was established for the open fire doors. During the replacement, the reactor was defueled. A failure of this temporary system had been analyzed to be only as likely as a failure of the original system. The system was returned to normal after the battery replacement.



F. Changes to Procedures Covered in the Safety Analysis Report--(continued)

LLP-91-108 Unit 2 Division 3 Temporary DC Power  
During Battery/Charger Replacement

This special procedure was written to provide DC power to Bus 213 while the Division 3 Battery and charger were replaced per modifications 1-1-90-009 and 1-1-90-010. The procedure also allowed the new Division 3 battery and charger to be tested without de-energizing Bus 213. The temporary charger was connected to Motor Control Center 232Y-2 cubical D3. Updated Final Safety Analysis Report, Section 8.3.2, requires three independent class 1E DC Power systems. Division 3 DC system did not meet the requirements of Updated Final Safety Analysis Report, Section 8.3.2, during this procedure. The temporary DC charger received AC power from Motor Control Center 232Y-2 which is fed from non-essential Bus 252. The additional AC load to Motor Control Center 232Y-2 was found to be acceptable per ELMS-AC. The system was returned to normal upon completion of the procedure.

LLP-91-136, Defeating The Unit 2 Mode Switch To Shutdown Scram

This special procedure was written to momentarily jumper-out the mode switch to the shutdown scram contacts while the mode switch was taken to the Shutdown position. This was done when all Control Rods were full-in and the jumpers were installed during the process of placing the mode switch to shutdown. This minimized "accumulator-pressurized" scrams during the refuel outage. Such pressurized scrams with the Control Rods at position 00, place high stresses on the Control Rod Drive mechanisms and disturbs reactor water chemistry. This Special procedure constituted a temporary change to the facility and its operation as described in the Updated Final Safety Analysis Report, but did not increase the risk to the plant.

LLP-92-029, Reactor Core Isolation Cooling System Pump Operability  
And Valve Inservice Tests In Conditions 1, 2, and 3

This Special Procedure was developed to remove the In-Service Tests for 1E51-F019 and 1E51-F021, by changing the procedure for shutting down the system at the end of the operability tests. This was done because the motor function of the minimum flow valve was inoperable. All automatic functions for the valve were not available. System shutdown was to be accomplished without the use of the minimum flow line. The primary containment integrity for the minimum flow valve remained intact, since the valve failed closed, and the valve remains out-of-service closed. The minimum flow bypass line to the suppression pool is provided to protect the pump during startup with no discharge valves open, shutdown performance evaluation, and/or testing. This protects the pump from the overheating that would be caused by discharging to a deadhead. The flow path for pump cooling during startup or shutdown of the system was still provided.

F. Changes to Procedures Covered in the Safety Analysis Report--(continued)

LLP-92-032, Reactor Core Isolation Cooling System Cold Quick Start In Condition 1, 2, and 3 With 1E51-F019 O.O.S. Closed.

This Special Procedure changed the procedure of shutting down the system at the end of the cold quick start. The motor function of the minimum flow valve was inoperable. All automatic functions for the valve were not available. System shutdown was accomplished without the use of the minimum flow line. The minimum flow bypass line to the suppression pool was provided to protect the pump during startup with no discharge valves open, and shutdown during performance evaluation and/or testing. The flow path for pump cooling during startup or shutdown of the system was provided using this procedure. The operability status of the Reactor Core Isolation Cooling System during normal unit operation condition was not compromised. The system was returned to normal following repairs to the 1E51-F019 valve motor.

LLP-92-055, RHR System Radiation Flush

This procedure allowed the flushing of various piping lines in the Residual Heat Removal System. The Residual Heat Removal Steam Condensing steam lines were filled with water, the "A" and "B" Residual Heat Removal loops were crosstied, and flow was diverted through the steam lines in the reverse direction in an attempt to reduce the general area radiation dose rates. This procedure operated the Residual Heat Removal system in a configuration not previously approved or evaluated in the Updated Final Safety Analysis Report. This procedure was performed when the reactor was defueled and the Residual Heat Removal system was not required to be operable in any mode. The system was returned to normal upon completion of the work.

LLP-92-072, Controlled Start of the Reactor Core Isolation Cooling System in the CST Test Mode with 1E51-F019 Out-of-Service Closed.

This Special Procedure was developed to modify procedure LOP-RI-06, Revision 10, to use the 1E51-F022 and 1E51-F059 valves as a minimum flow path. This was to provide minimum flow with valve 1E51-F019 out-of-service. The use of valves 1E51-F022 and 1E51-F059 as a minimum flow path was previously evaluated by LLP-92-029, Reactor Core Isolation Cooling (RCIC) System Pump Operability And Valve Inservice Tests In Conditions 1, 2, and 3.

LLP-92-082, Temporary DC Power for Relay House System 1

This procedure allowed temporary DC power to be provided to the Relay House System 1 so that maintenance on the battery and charger could be performed. The temporary battery's capacity was rated at 100 amp-hours instead of the 200 amp-hours described in the Updated Final Safety Analysis Report, Section 8.1.2.5. The temporary System 1 battery had less capacity, and therefore would not have been able to maintain loads if the temporary charger should have become deenergized. The switchyard is non-safety related and is not required for reactor safety.

## F. Changes to Procedures Covered in the Safety Analysis Report-(continued)

### LLP-92-101, Control Blade Pin And Roller Replacement Demonstration Procedure

This Special Procedure describes the assembly, operation, and disassembly of the ABB Equipment required for the removal of the pin and roller and installation of the replacement button for the control rod blades. This process took place in the fuel pool cask area with everything secured to the area walls. The Control Rod Blade selected for the demonstration was previously damaged and was to be returned to its original storage area afterwards. The purpose of the demonstration was to replace the stellite pin and rollers on the control blades with stainless steel buttons to reduce the amount of activated cobalt released to the plant. Considerations were given for chemical compatibility of the various process fluids and components, filtering of the process residue, and storage of the components afterwards. All measures for protection of the individuals and the site were followed to ensure radioactive material control.

### LLP-92-121, Defeating The Unit 1 Mode Switch To Shutdown Scram

This special procedure momentarily jumpered-out the mode switch to the shutdown scram contacts while the mode switch was taken to the Shutdown position. This was only done when all Control Rods were full-in and the jumpers were installed during the process of placing the mode switch to shutdown. This minimized "accumulator-pressurized" scrams during the refuel outage. Such pressurized scrams with the Control Rods at position 00, place high stresses on the Control Rod Drive mechanisms and disturbs reactor water chemistry. This Special procedure constituted a temporary change to the facility and its operation as described in the Updated Final Safety Analysis Report, but did not increase the risk to the plant.

### LLP-92-143, Unit 1 Division 3 Temporary DC Power During Battery/Charger Replacement

This special procedure provided DC power to Bus 113 while the Division 3 Battery and charger were replaced per modifications 1-1-90-011 and 1-1-90-012. The procedure also allowed the new Division 3 battery and charger to be tested without de-energizing Bus 113. The temporary charger was connected to Motor Control Center 132B-1 cubical E6. The Moisture Separator Reheater 2nd Stage Reheat Steam High Load Valve RSHLV1 was disconnected to allow the temporary charger to be connected to Motor Control Center 132B-1 cubical E6. The Moisture Separator Reheater 2nd Stage Reheat Steam High Load Valves were closed. The Moisture Separator Reheater 2nd Stage Reheat is not required during plant operations and was not currently being used. The Updated Final Safety Analysis Report, Section 8.3.2 requires three independent class 1E DC Power systems. Division 3 DC system did not meet the requirements of the Updated Final Safety Analysis Report, Section 8.3.2 during this procedure. The temporary DC charger received AC power from Motor Control Center 132B-1 which is fed from non-essential Bus 152. The additional AC load to Motor Control Center 132B-1 was found to be acceptable per ELMS-AC. The system was returned to normal upon completion of the procedure.

F. Changes to Procedures Covered in the Safety Analysis Report-(continued)

LLP-93-014, Temporary DC Power for Relay House System 2

This procedure will allow temporary DC power to be provided to the Relay House System 2 so that maintenance on the battery and charger can be performed. The temporary battery's capacity will be rated at 100 amp-hours instead of the 200 amp-hours described in the Updated Final Safety Analysis Report, Section 8.1.2.5. The temporary System 2 battery will have less capacity, and therefore will not be able to maintain loads as long if the temporary charger should become deenergized. The switchyard is non-safety related and is not required for reactor safety.

LST-92-086, Relay House Battery BITE Test

This procedure provided a methodology for passing a 60 Hz AC signal through the Relay House Battery and measuring the AC voltage drop across each cell. The cell impedance is calculated from the measured voltage drop. The measurement of cell impedance will help in determining the adequacy of each cell. This procedure attaches an AC signal source to a non-safety related battery. The Updated Final Safety Analysis Report does not address this AC signal added to the battery, therefore this is a test. The loss of either relay house battery would not cause a loss of offsite power per Updated Final Safety Analysis Report, Section 8.1.2.5. The redundant protective relaying system protected faulted equipment. Operation of the battery being tested was unaffected by this test. Battery low impedance will prevent AC circulating currents from flowing into the loads or charger. Updated Final Safety Analysis Report, Section 15.2.6 covers the loss of AC power, which bounds the failure of the switchyard. This test did not affect the ability of the battery to perform its designed function.

LST-92-088, Division 2 Battery Charger 1(2)DC16E Capacity Test

This procedure provided the methodology for performing an eight hour capacity test on battery charger 1(2)DC16E. The battery charger was inspected to verify proper operation. The charger 1(2)DC16E was tested while charger 1(2)DC17E maintained the Division 2 loads. This procedure verified that the battery charger 1(2)DC16E met the Technical Specification surveillance requirements for an operable Division 2 Battery charger. The loading on the 1A(2A) Diesel Generator per Updated Final Safety Analysis Report, Table 8.3-1, was increased. An additional 10 kW of load was added to bus 136X-3(236X-3) while the capacity test was being performed. Battery charger 1(2)DC16E was isolated from the Division 2 DC Bus 1B(2B) by a class 1E breaker. All Technical Specifications relating to Division 2 AC and DC systems were adhered to during the test. The additional load for 136X-3(236X-3) was found to be acceptable per ELMS AC. The additional load on the 1A(2A) Diesel Generator was acceptable. The Division 2 battery was unaffected by this test.



**F. Changes to Procedures Covered in the Safety Analysis Report--(continued)**

**LST-92-119, Startup, Testing And Shutdown  
of the Unit 1 VT Evaporative Cooler**

This Special Test Procedure is for the startup, testing and shutdown of the Unit 1 Turbine Building Ventilation Evaporative Coolers during warm weather. This procedure will be used to allow the station to evaluate the feasibility of operating the Turbine Building Ventilation evaporative Coolers during warm weather. The Updated Final Safety Analysis Report indicates that the evaporative coolers are supplied with domestic water. This change will allow the use of MC water to supply the evaporative coolers. The evaporative coolers have no impact on plant safety.

**LST-92-126, Division 2 Battery Charger 1(2)DC16E Capacity Test**

This Special Test Procedure provided the methodology for performing an eight hour capacity test on battery charger 1(2)DC16E. The battery charger was inspected to verify proper operation. Charger 1(2)DC16E was tested while charger 1(2)DC17E maintained the Division 2 loads. This verified that battery charger 1(2)DC16E met the Technical Specification surveillance requirements for an operable Division 2 Battery Charger. This maintained the Division 2 DC system operable while testing the battery charger 1(2)DC16E. The loading on the 1A(2A) Diesel Generator per the Updated Final Safety Analysis Report was increased. An additional 10 kW of load was added to bus 136X-3(236X-3) while the capacity test was being performed. Battery Charger 1(2)DC16E was isolated from Division 2 DC Bus 1B(2B) by a class 1E breaker, therefore the operation of charger 1(2)DC16E did not affect Division 2 DC. All Technical Specifications relating to Division 2 AC and DC were adhered to during this test.

**LST-92-128, MSIV Leakage Control System  
Pressure Test For The 2E32-F009 Valve**

The purpose of this special test procedure was to pressure test the 2E32-F009 Main Steam Isolation Valve Leakage Control Outboard Depressurization Valve. The 2E32-F008 valve was opened during startup at approximately 35 psi steam pressure in order to allow the 2E32-F009 valve to experience the main steam line pressure for visual inspection. Normal operation of the outboard leakage control system does not allow the valves to open above 35 psi main steam line and reactor vessel pressure. The system was returned to a normal configuration after the test.



**F. Changes to Procedures Covered in the Safety Analysis Report--(continued)**

**LST-92-134, RHR System Pressure Response  
With Water Leg Pump Isolated**

This special procedure was used to record the system pressure response of the 1A Residual Heat Removal loop with the waterleg pump isolated. Response was recorded by use of a strip chart recorder connected across the inputs to control room indicator 1E12-R505A. The performance of this procedure required that the waterleg pump be isolated, which differs from the system description in the Updated Final Safety Analysis Report. This procedure resulted in a single loop being declared inoperable, which is an analyzed condition. This procedure would have been exited and the system would have been filled and vented immediately if a low pressure alarm condition was created.

**LST-92-141, Verification Of Main Turbine Shut-Off Valve Setpoints**

This special test procedure is to outline a method to set the shut-off valve for the main turbine intermediate stop valves. The Electro-Hydraulic Control will be placed on line and the turbine reset per station procedures. This procedure also governs the adjustment of system pressure and defeats low pressure trips. The resetting of the turbine normally opens the Intermediate Stop Valves. This procedure adjusts the Electro-Hydraulic Control pressure and will control the opening of these valves. The actions described in this procedure have no impact on reactor safety while the unit is shutdown. Electro-Hydraulic Control is non-safety related and is not required with the unit down. The low hydraulic turbine trips are defeated to allow for low pressure testing of the Electro-Hydraulic Control trip system. The reactor is in cold shutdown and the Electro-Hydraulic Control system is being operated within its design capability.

**LOP-AP-08, Removing System Auxiliary Transformer Sat 142 (242)  
From Service With Unit 1 (2) In Shutdown**

This is a temporary change to this procedure to allow liveness of 2W Main Power Transformer without auto deluge available. The fact that the transformer does not have auto deluge is in conflict with Section 9.5.1.2.3 of the Updated Final Safety Analysis Report. Manual Deluge is still available as is portable fire equipment. The Deluge Valve is currently out-of-service closed due to an identified problem with the deluge clapper. The system will be returned to normal following repairs.

**LOS-CS-Q1, Secondary Containment Damper Operability Test**

The change to procedure LOS-CS-Q1 added guidance for the installation of a jumper to bypass the Reactor Water Cleanup Area Temperature isolation signals for up to 1 hour while the Reactor Building Ventilation system is shutdown and isolated. The use of the jumper is limited to 1 hour, which is the time required by the Technical Specifications to return the system to normal. The system will be returned to normal upon completion of this surveillance.

**F. Changes to Procedures Covered in the Safety Analysis Report--(continued)**

**LOP-NB-01, Reactor Vessel Leakage Test**

This procedure change provided steps to allow the performance of Scram Insertion Timing during the vessel leakage test. This change also provided steps that provide guidance if a full reactor scram occurs during scram timing. During this evolution, the reactor will be in Mode 3 or 4, and the Reactor Mode Switch will be in Refuel with the head tensioned. The accumulators are not required. This procedure can trap hydro pressure in the accumulators and mask failure to achieve full travel of the accumulator piston. Controls are established in the scram timing procedure to ensure detection of over-charged accumulators which do not bottom out the accumulator piston. The accumulators are charged and operable prior to pulling a rod for scram time testing.

**LOP-RP-04, RPS Bus B Transfer**

The change to this procedure added a caution that taking the Group 1 Condenser Low Vacuum Bypass Keys from Bypass to Normal will/can cause a Group 1 Isolation with low main condenser vacuum present. This change is in accordance with the original intent of the procedure. There will be no effect with the Condenser Low Vacuum Bypass Keys in Bypass because the Group 1 Primary Containment Isolation System is interlocked to only be bypassed on low vacuum if 1) the mode switch is not in run, 2) the turbine stop valves are closed, and 3) reactor vessel pressure is less than 1043 psig. This change is consistent with the Updated Final Safety Analysis Report and the Technical Specifications.

**LOP-WE-01, Waste Collector Tank Processing To The Waste Sample Tank**

The change to this procedure eliminated the requirement for sampling prior to processing. Sampling in the waste collector is not required, by the Updated Final Safety Analysis Report, to ensure processed water will be of cyclized condensate quality. All water transferred into the collector from other tanks has been previously sampled and normal inputs are expected to be of a quality that allows processing to bring water chemistry within the specifications described in LCP-110-1, Chemical Analysis and Corrective Action Schedule, for cyclized condensate. A short recirculation and monitoring of the in line conductivity cell will still be required so abnormal inputs should be noticed prior to processing. A precaution was added to monitor the Waste Filter differential pressure and Demineralizer outlet conductivity for abnormal trends to protect these components from abnormal input. LCP-110-1, Chemical Analysis and Corrective Action Schedule, limits will be enforced for cyclized condensate so cyclized condensate chemistry is ensured.

**F. Changes to Procedures Covered in the Safety Analysis Report--(continued)**

LOP-WR-02, Startup and Operation of the Reactor Building  
Closed Cooling Water System

This procedure change authorized the startup of the Reactor Building Closed Cooling Water system without Service Water, in unusual circumstances. The system is normally operated with Service Water in operation and functional. Extraordinary circumstances may require the Shift Engineer to waive the prerequisite to have Service Water in operation with Reactor Building Closed Cooling Water Heat Exchangers valved in. The Reactor Building Closed Cooling Water system is not an Engineered Safety Feature and does not have a Safety Design Basis. This procedure change allows Reactor Building Closed Cooling Water system recovery before Service Water is restored. During extended Unit Shutdown, normal plant heat loads are not present, and operation without Service Water is permissible.

LOP-VG-02, Shutdown of the Standby Gas Treatment System (SBGT)

This procedure revision changed the minimum run time of the Standby Gas Treatment Train from 10 hours to 5 hours with the Standby Gas Treatment Wide Range Gas Monitor sample flow at or above 1.3 cubic feet per minute. The 10 hours of operation per month of the Standby Gas Treatment Train with the heaters on to dry out the charcoal filter is satisfied by LOS-VG-M1. Chemistry supervision has verified the minimum sample requirements can be met with 5 hours of operation with the Standby Gas Treatment Wide Range Gas Monitor sample flow rate at or above 1.3 cubic feet per minute. This revision did not change how the equipment operates, the alignment of the equipment, or the way the equipment is operated. This revision is an administrative change to an administrative limit that does not alter the design or function of any system.

LaSalle OnSite Review 92-039

This LaSalle OnSite Review determined the required review (whether Technical Review or Onsite Review) of each type of procedure. The basis for determination is Technical Specification amendment 86 (U-1) and 70 (U-2), and Regulatory Guide 1.33, Rev. 2. Each Department Head signature indicates concurrence with the evaluation of the department's procedures. Many procedures that previously required onsite review will now require Technical Review per the referenced Technical Specification amendment. Technical Reviewers must meet the same qualifications as an Onsite Review participant, but only those reviewers required by the procedure change/content are required to review a department's procedures. Technical Review requires only one reviewer, other than the writer and Department Head; an Onsite review requires a minimum of 2 reviewers. Technical Review is required to evaluate the need for either additional review disciplines or Onsite Review as needed, based on the particular change being made to a given procedure.

**F. Changes to Procedures Covered in the Safety Analysis Report--(continued)**

LaSalle OnSite Review 92-041, Revision 0

This LaSalle OnSite Review dealt with a Temporary Waiver of Compliance for Unit 2 Technical Specifications 3.6.3, Action Statement a.2, which requires that Unit 2 be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. This is required because the Primary Containment Isolation Valve 2G33-F040, Reactor Water Cleanup Return Isolation Valve, is inoperable due to an inadequate Local Leak Rate Test. The 2G33-F040 valve requires a satisfactory Type C test in order to be an operable Primary Containment Isolation Valve. The Type C test (Local Leak Rate Test) was determined to be performed with a potentially inadequate vent path during the test. The Updated Final Safety Analysis Report takes credit for the 2B21-F010A&B and 2B21-F032A&B Feedwater check valves, not the 2G33-F040 Reactor Water Cleanup Return Isolation Valve, which affects only a design leakage barrier (long term leakage). This test is to be performed during the next Unit 2 cold shutdown which has a duration of 2 weeks or more.

LaSalle OnSite Review 92-042, Revision 0

This LaSalle OnSite Review dealt with a Technical Specification amendment request to Unit 2 Technical Specification 3.6.3 for valve 2G33-F040, Reactor Water Clean-Up Return to Feedwater Stop Valve. This change will add a footnote to Table 3.6.3-1 for valve 2G33-F040, waiving the requirement for the Type C test to be current. It will also allow for its leakage not to be included in the totals for Type B and C Containment leakage, as required by Technical Specification 3.6.1.1 and 3.6.1.2, for the remainder of the Unit 2 Cycle 5, or until the first outage in which Unit 2 is in Cold Shutdown for a duration of two weeks or more. The 2G33-F040 valve requires a satisfactory Type C test in order to be an operable Primary Containment Isolation Valve. The Type C test (Local Leak Rate Test) was determined to be performed with a potential inadequate vent path during its last test. The non-conservative Type C test method for the 2G33-F040 valve puts in question the Containment Maximum Path Leakage Limit of  $0.6 L_g$  and thus the amount of radioactive effluent that could be released during analyzed accidents. The path used in its last test, Valves 2G33-F040 and 2G33-F039, is likely to provide a leakage barrier if needed. With no credit taken for the 2G33-F040 valve, the containment leakage through the feedwater lines still meets Containment Leakage Criteria in Appendix J in the event of a single failure.

G. Summary of Changes to the Facility Which are Described in the Safety Analysis Report

Temporary System Change 1-1719-88

The Unit 1 Off Gas High Flow alarm setpoint was changed from 20 scfm to 80 scfm. The High High Flow alarm was bypassed. The present Off Gas Flow is 58 scfm, rendering the High Flow alarm useless and the alarm is a nuisance in the Control Room. The Updated Final Safety Analysis Report states that the High Flow setpoint is 20 scfm and the High High Flow alarm setpoint is 256 scfm. Neither alarm is Technical Specification related. The Off Gas Post Treatment Radiation Monitor isolates valve 1N62-F057, Off Gas Discharge to the Stack, upon excess radiation release. The flow rate was evaluated to be acceptable per LTP-900-1. Raising the setpoint for the High Flow alarm will not affect the safety function of the Off Gas Post Treatment Radiation Monitor. A Modification and Setpoint Change Request were initiated to eliminate this Temporary System Change.

Temporary System Change 1-0090-92

This Temporary System Change defeated the trips of the Unit 2 "A" and "B" Control Room Ventilation Radiation Monitors, each one on a different occasion. This was done by lifting leads at panel OPM15J to prevent an auto start of the "B" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in Engineered Safety Feature equipment actuation. The "A" and "B" Monitors still indicate and the Emergency Makeup trains could still start from a high radiation signal from the other detectors. This change was still in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "A" and "B" Radiation Monitors were returned to service after repairs.

Temporary System Change 1-0335-92

This Temporary System Change defeated the Unit 1 Drywell Floor Drain Sump Trouble Alarm. This was done by defeating R-point 0065 for the Drywell Floor Drain Sump Trouble Alarm to prevent spurious nuisance alarms. These alarms were caused by the failing of the Drywell Floor Drain Sump Fillup Rate Transmitter. The Drywell Floor Drain Sump inleakage was still monitored by floor drain totalizers which backup the Drywell Floor Drain Sump Fillup Rate Transmitter alarm. The Control Room monitored the totalizers every four hours. In addition, there were other Containment instruments still available with their alarm units. The Drywell Floor Drain Sump Trouble Alarm was returned to service after repairs.



G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)

Temporary System Change 1-0386-92

This Temporary System Change is to defeat the trip of the Unit 2 "C" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM15J to prevent an auto start of the "B" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in Engineered Safety Feature equipment actuation. The "C" Monitor still indicates and the Emergency Makeup train can still start from a high radiation signal from the other detectors. This change was still in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "C" Radiation Monitor was returned to service after repairs.

Temporary System Change 1-0402-92

This Temporary System Change installed a switched jumper at the 1FP04JA panel to allow for taking detection Zone 1-33 out-of-service during welding operations for Work Request L71269 to prevent false alarms. The fire detection zone 1-33 was only out-of-service when work was being performed for work request L71269. When zone 1-33 was out-of-service, a continuous fire watch was provided. The fire loading in the detection zone did not increase and manual fire protection equipment was still available. The area was returned to normal after the completion of welding.

Temporary System Change 1-0404-92

This Temporary System Change defeated the trip of the Unit 1 "D" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM14J to prevent an auto start of the "A" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in an Engineered Safety Feature equipment actuation. The "D" Monitor still gave indication and the Emergency Makeup train could still start from a high radiation signal from the other detectors. This change was still in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "D" Radiation Monitor was returned to service after repairs.

Temporary System Change 1-0565-92

This Temporary System Change installed a switch jumper to bypass the Unit 1 "A" and "B" Reactor Recirculation Flow Control Valve Actuator Drain Alarm. The Unit 1 "A" and "B" Reactor Recirculation Flow Control Valve Actuator Drain alarms were up solid and masking other alarm signals. By bypassing these alarms the other alarms could initiate the annunciator in the control room identifying other problems. The alarm signal is initiated from a leaky actuator. The system was returned to normal after repairs.

G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report-(continued)

Temporary System Change 1-0609-92

This Temporary System Change prevented moisture intrusion into the Standby Gas Treatment Wide Range Gas Monitor by temporarily adding a mechanical moisture separator to the sample line. The Standby Gas Treatment Wide Range Gas Monitor stack particulate and Iodine sampling was inoperable with this Temporary System Change in place. The Noble Gas activity monitor was also inoperable with this Temporary System Change in place. The Wide Range Gas Monitor does not have a safety function as it is only a monitoring system. Radioactive release was not affected by this Temporary System Change. Sampling was still maintained in accordance with the Technical Specifications.

Temporary System Change 1-0617-92

This Temporary System Change installed switch jumpers at the 1FP04JA panel for Detection Zones 1-30, 1-31, and 1-32 to aid in taking detectors out-of-service during welding operations in these detection zone. Welding in the vicinity of the in-service detector could result in false alarm at the fire protection control panels. A one hour fire watch was maintained in the area while the detection zones were out-of-service. A continuous fire watch was posted when welding, cutting, or grinding was occurring. This Temporary System Change was removed upon completion of the welding and grinding in these fire detection zones.

Temporary System Change 1-0634-92

This Temporary System Change prevented moisture intrusion into the Standby Gas Treatment Wide Range Gas Monitor by temporarily adding a mechanical moisture separator to the sample line. The Standby Gas Treatment Wide Range Gas Monitor stack particulate and Iodine sampling was inoperable with this Temporary System Change in place. The Noble Gas activity monitor was also inoperable with this Temporary System Change in place. The Wide Range Gas Monitor does not have a safety function as it is only a monitoring system. Radioactive release was not affected by this Temporary System Change. Sampling was still maintained in accordance with the Technical Specifications.

G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report--(continued)

Temporary System Change 1-0648-92

This Temporary System Change defeated the trip of the Unit 1 "A" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM14J to prevent an auto start of the "A" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in an Engineered Safety Feature equipment actuation. The "A" Monitor still gave indication and the Emergency Makeup train could still start from a high radiation signal from the other detectors. This change was in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "A" Radiation Monitor was returned to service after repairs.

Temporary System Change 1-0681-92

This Temporary System Change plugged various floor drains on the Turbine Deck 768' elevation. This assisted in keeping debris out of the floor drains system during the turbine outage. These drains are not a flood protection barrier and not all drains in the area were plugged. The floor drains were returned to normal upon completion of the turbine outage.

Temporary System Change 1-0687-92

This Temporary System Change installed water supply piping and pumps for mechanically cleaning the Main Condenser tubes. The water supply was tapped from 1WS158, Generator Hydrogen and Stator Winding Cooler Influent Low Pressure Drain. The Hydrogen coolers were inoperable during this period, but this was acceptable since the Hydrogen Coolers were in an outage condition. The system was returned to normal following this evolution.

Temporary System Change 1-0693-92

This Temporary System Change defeated the trip of the Unit 1 "D" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM14J to prevent an auto start of the "B" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in an Engineered Safety Feature equipment actuation. The "D" Monitor still gave indication and the Emergency Makeup train could still start from a high radiation signal from the other detectors. This change was in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "D" Radiation Monitor was returned to service after repairs.

G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report-(continued)

Temporary System Change 1-1112-92

This Temporary System Change allowed the OVD04Y, OVD05Y, OVD40Y, and OVD41Y ventilation dampers, located within the "0" Diesel Generator Room, to be wired in the open position. These dampers were wired open to allow for the "0" Diesel Generator to be operated with Carbon Dioxide Fire Protection System inoperable. Normally the "0" Diesel Generator Room Ventilation dampers would be closed by its electro-thermal links, if the Carbon Dioxide system was initiated. These electro-thermal links required replacement. The dampers were wired open to allow repairs to these electro-thermal links at the same time that the "0" Diesel Generator was undergoing maintenance runs. A fire watch was put in place until the Temporary System Change was removed.

Temporary System Change 1-0027-93

This Temporary System Change wired the 1VX08Y Recirculation damper in the open position after being disconnected from the actuator. The Operating Department adjusted the damper manually as needed per the Shift Engineer. This system was still able to perform its function. This Temporary System Change was removed when the repairs were completed.

Temporary System Change 2-0214-92

This Temporary System Change utilized switch jumpers to jumper out the trip signals from the Reactor Building Ventilation and Fuel Pool Ventilation Radiation Monitors. This prevented a Group IV Primary Containment Isolation System isolation during replacement and maintenance of the 2D18-K609A, B, C, and D and 2D18-K615A, B, C, and D detectors. The High Radiation Trip Signal was bypassed on the channel whose detector is being replaced via a switch type jumper. While the jumpers were installed and the switches are closed, no irradiated fuel moves or core alterations, or operations that present the possibility for draining the reactor vessel took place. The system was restored to normal after the work was complete.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report-(continued)

Temporary System Change 2-0403-92

This Temporary System Change will wire the breaker contacts off the 2B Diesel Generator output breaker, ACB 2433, in series with the power directional relay, 2E22B-K32. The Power Direction Relay is tripping the 2E22B-K1 Lockout Relay when the 2B Diesel Generator is coasting down after a shutdown. This trip is due to an adjustment made to the VAR protection supplied by the relay that affects the frequency setting of the relay. By wiring the breaker contacts in, the relay will be disabled when the breaker is open. The addition of the auxiliary breaker contacts into the Reverse Power relay logic will prevent the relay from energizing unless the 2B Diesel Generator is synchronized to the power grid. The Updated Final Safety Analysis Report, Table 8.3-2, item 3i states that the Reverse Power relay will send a trip signal to ACB 2433. With this change installed, the Reverse Power relay will send a trip signal to ACB 2433 only when ACB 2433 is closed such as described for the Loss of Field relay. This change does not affect the operation of the 2B Diesel Generator during the time it is required by Technical Specifications to function in the event of an emergency.

Temporary System Change 2-0412-92

This Temporary System Change disconnected the sight glass on the "2B" Reactor Recirculation Pump Below Seat Drain Line to facilitate draining. A Chicago fitting with a blank flange was installed upstream and a blank flange was installed downstream. The sight glass was believed to be plugged. This will facilitate draining of the Reactor Recirculation system and troubleshooting of the sight glass. The reactor was defueled, the fuel pool gates were installed, and the "2B" Reactor Recirculation system was isolated. The system was returned to normal upon completion of the work.

Temporary System Change 2-0776-92

This Temporary System Change installed a switch jumper to bypass the Unit 2 "A" Reactor Recirculation Flow Control Valve Actuator Drain Alarm. The Unit 2 "A" Reactor Recirculation Flow Control Valve Actuator Drain alarms were up solid and masking other alarm signals. By bypassing these alarms, the other alarms can initiate the annunciator in the control room identifying other problems. The alarm signal was initiated from a leaky actuator. The system was returned to normal after repairs.



G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report--(continued)

Temporary System Change 2-0812-92

This Temporary System Change defeated the trip of the Unit 2 "D" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM15J to prevent an auto start of the "B" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in an Engineered Safety Feature equipment actuation. The "D" Monitor still gave indication and the Emergency Makeup train could still start from a high radiation signal from the other detectors. This change was in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "D" Radiation Monitor was returned to service after repairs.

Temporary System Change 2-0867-92

This Temporary System Change defeated the trip of the Unit 2 "A" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM15J to prevent an auto start of the "B" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in an Engineered Safety Feature equipment actuation. The "A" Monitor still gave indication and the Emergency Makeup train could still start from a high radiation signal from the other detectors. This change was in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "A" Radiation Monitor was returned to service after repairs.

Temporary System Change 2-0908-92

This Temporary System Change defeated the trip of the Unit 2 "B" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM15J to prevent an auto start of the "B" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in an Engineered Safety Feature equipment actuation. The "B" Monitor still gave indication and the Emergency Makeup train could still start from a high radiation signal from the other detectors. This change was in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "B" Radiation Monitor was returned to service after repairs.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)

Temporary System Change 2-0910-92

This Temporary System Change defeated the trip of the Unit 2 "C" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM15J to prevent an auto start of the "B" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in an Engineered Safety Feature equipment actuation. The "C" Monitor still gave indication and the Emergency Makeup train can still start from a high radiation signal from the other detectors. This change was in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "C" Radiation Monitor was returned to service after repairs.

Temporary System Change 2-0969-92

This Temporary System Change installed an oil pressure gauge in the supply line to pressure switches 2PS-TO-018A(B), and also an oil pressure gauge in the supply line to pressure switches 2PS-TO-019A(B). The gauges were connected to the permanently installed tees in place of the installed plugs. An isolation valve was installed between the tee and the gauge on each of the supply lines. These gauges monitor Turbine Oil Pressure while operating. The system was returned to normal after this check was completed.

Temporary System Change 2-1006-92

This Temporary System Change is to install a switch jumper to bypass Unit 2 "A" and "B" Reactor Recirculation Flow Control Valve Actuator Drain Alarm. The Unit 2 "A" and "B" Reactor Recirculation Flow Control Valve Actuator Drain alarms are up solid and masking other alarm signals. By bypassing these alarms, the other alarms can initiate the annunciator in the control room identifying other problems. The alarm signal is initiated from a leaky actuator. The system will be returned to normal after repairs.

Temporary System Change 2-1007-92

This Temporary System Change is to defeat the trip of the Unit 2 "B" Control Room Ventilation Radiation Monitor. This was done by lifting a lead at panel OPM15J to prevent an auto start of the "B" Emergency Make Up Train due to spurious instrument spikes. These spurious spikes resulted in an Engineered Safety Feature equipment actuation. The "B" Monitor still indicates and the Emergency Makeup train can still start from a high radiation signal from the other detectors. This change was still in compliance with Technical Specifications since the minimum number of channels was still operable and the related equipment was still operable. The "B" Radiation Monitor was returned to service after repairs.

G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report-(continued)

Temporary System Change 2-0015-93

This Temporary System Change will install switch jumpers to allow either one or both Drywell Equipment Drain Sump Transfer Pumps to be run continuously to provide additional cooling. The installation of the Switch Jumper will bypass the High Temperature Interlock of valve 2RE035, to allow emergency sump pump down with a high temperature in the sump. Section 9.3.3.2.1 of the Updated Final Safety Analysis Report states that the sump pumps auto start on high sump level. This will not be true while the switch jumper is installed and closed. This condition will exist until the automatic temperature control circuit can be repaired.

Safety Evaluation, Construction Of Temporary  
Wooden Duct In U-2 Steam Tunnel

This Safety Evaluation was to allow the construction of a temporary wooden duct immediately upstream of damper 2VT79YC to test the resistance characteristics of 2VT79YC when enclosed in ductwork. The construction of this duct increased the fire loading in the affected zone above those allowed for in the area, even though this additional loading is below a negligible fire load as defined by the Updated Final Safety Analysis Report, Section H.1.1.h. The wooden duct is to be removed upon completion of the test.

Safety Evaluation, Facilities Improvement Program  
Security Fence Relocation

This Safety Evaluation was performed for rerouting the security fence and to install the intrusion and alarm assessment equipment for the new Main Access Facility. The new equipment was fully compatible with the existing security system. The temporary fence relocation was to allow for the construction of the new Main Access Facility outside the protected area. This change required the LaSalle Security Plan to be revised. This change to the security system was not described in the Updated Final Safety Analysis Report, and does not affect anything provided by the Updated Final Safety Analysis Report.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)

Operability Evaluation, Operation Of The 1A Emergency Diesel Generator Without Automatic Prelubing

This Operability Evaluation does describe a change to the Updated Final Safety Analysis Report. The 1A Diesel Generator AC Soakback Pump will be out-of-service because its control transformer failed and must be repaired. During this period, the DC Soakback Pump will be used. This evaluation addressed the total loss of prelubing. This change in no way affects the ability of the 1A Diesel Generator to perform its design function. The DC Soakback Pump is capable of providing lube oil to the Diesel Generator turbocharger bearings in the same capacity as the AC Soakback Pump. The DC Soakback pump load current is already assumed in the Loss-of-Offsite/Onsite AC Power Division 2 battery load profile as described in the Updated Final Safety Analysis Report. The prelubing system is used to prevent long term wear caused by frequent dry starting of the engine, therefore this subsystem is not required to meet the definition of operability as defined by the Technical Specifications.

Operability Evaluation, 1CM025A Post LOCA Sample Valve

This Operability Evaluation addressed the results of taking the containment valve 1CM025A, Post Loss Of Coolant Accident Sample Valve, out-of-service open. The purpose of the change is to ensure that no adverse affects exist on safety functions for the valve and system. The Updated Final Safety Analysis Report requires the system to automatically actuate on the occurrence of a Loss Of Coolant Accident and to remain in operation after initiation unless turned off with a handswitch. With the 1CM025A valve in the open position, sampling of the primary containment with the H<sub>2</sub>/O<sub>2</sub> Monitor is allowed and therefore operable. Primary containment integrity will not be affected since the system is a closed loop with the isolation valves in the open position and the system was designed to operate on the occurrence of and during a Loss Of Coolant Accident.

Operability Evaluation, 2CM025A Post LOCA Sample Valve

This Operability Evaluation addressed the results of taking the Containment Valve 2CM025A, Post Loss Of Coolant Accident Sample Valve, out-of-service open. The purpose of the change is to ensure that no adverse affects exist on safety functions for the valve and system. The Updated Final Safety Analysis Report requires the system to automatically actuate on the occurrence of a Loss Of Coolant Accident and to remain in operation after initiation unless turned off with a handswitch. With the 2CM025A valve in the open position, sampling of the primary containment with the H<sub>2</sub>/O<sub>2</sub> Monitor is allowed and therefore operable. Primary containment integrity will not be affected since the system is a closed loop with the isolation valves in the open position and the system was designed to operate on the occurrence of and during a Loss Of Coolant Accident.

G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report-(continued)

Operability Evaluation, Actions For Inoperable Water Tight Door

This Operability Evaluation is to specify the actions to be taken when a water-tight door which is not specifically addressed in the Technical Specifications is inoperable. This interpretation is intended to provide guidance to the plant reactor operators for compliance with Station Technical Specifications. This guidance will allow the operators a maximum degree of operational flexibility while helping to ensure that the Technical Specification requirements are adhered to. The Updated Final Safety Analysis Report describes the safety evaluation of the Core Spray Cooling System cooling water systems affected by the doors. The worst case failure could result in the loss of redundant divisions and this would require going to a 72 hour time clock Limiting Condition for Operation.

Operability Evaluation, Standby Gas Treatment Train  
Operable With Cooling Fan Inoperable

This Operability Evaluation is to allow the Standby Gas Treatment Train to be considered operable while the LVG02C Cooling Fan is inoperable. The Standby Gas Treatment Cooling Fan is described in the Updated Final Safety Analysis Report. The Cooling Fan is not required for Technical Specification operability requirements per Technical Specification 3.6.5.3. The Cooling Fan is classified as Auxiliary Safety and is not referred to in the Technical Specifications. The inoperable Cooling Fan on the Standby Gas Treatment Train will not effect the performance of the train during an accident. The Standby Gas Treatment Train can still be operated for Technical Specification Surveillances and will not be prevented from auto starting should the need arise.

Operability Evaluation, Unit 2 Diesel Generator Operability Test

This Operability Evaluation is to allow the 2B Diesel Generator to be used while the thermocouple from the # 10 cylinder is missing. The # 10 Cylinder thermocouple monitors the Diesel Generator exhaust temperature. The exhaust temperature will not be monitored until a permanent repair can be performed. The old thermocouple can not be completely removed from the exhaust manifold at this time. Therefore, the hole created by this partially removed thermocouple will be welded shut until a permanent fix can be done. The Updated Final Safety Analysis Report states in section 7.3.6.2 that thermocouples were provided to monitor cylinder exhaust temperatures. The thermocouples are used for indication only and do not affect any of the designed functions of the Diesel Generator.



G. Summary of Changes to the Facility Which are described in the Safety Analysis Report-(continued)

Out Of Service 1-1499-92

This Out-Of-Service took 1E12-F068B out-of-service open as an administrative control during valve maintenance. One division of Residual Heat Removal was still available for decay heat removal. The Control Room Operator was unable to operate the valve, but it could be isolated from the Service Water tunnel for flood control. Detection and isolation of a tube leak via Process Radiation Monitor was not available, but this was not a change to its normal idle configuration. The system was returned to normal upon completion of the valve maintenance.

Out-Of-Service 1-1905-92

The Safety Evaluation for this Out-Of-Service determined the operability of the 'A' Residual Heat Removal Service Water and Shutdown Cooling with the 1E12-F068A valve taken Out-Of-Service open. The Out-Of-Service applied to the electrical operation of the valve only. This change prevented the 1E12-F068A valve from being operated remotely. The capability to manually operate this valve was not affected. This change was only in effect during Refuel or Cold Shutdown conditions. The Suppression Pool Cooling mode of Residual Heat Removal was not affected.

Out-Of-Service 2-1079-92

This Out-Of-Service allowed opening the 2E12-F068A Valve for repacking. The Residual Heat Removal Service Water Heat Exchanger Outlet Valve was taken out of service open against its backseat to allow for replacement of the valve packing. The out-of-service boundary consisted of valves 2E12-F003A (full closed manually), 2E12-F047, 2E12-F052A, and 2E12-F014A, all which were closed, and 2E12-F068A, which was open. This change did not affect the operation of the Residual Heat Removal system as described in the Updated Final Safety Analysis Report, however valve 2E12-F068A is described as a normally closed valve. This change was made with Unit 2 defueled and with no potential flow paths through the Residual Heat Removal heat exchanger. The system was returned to normal upon completion of the work.

UFSAR Chapter 3 - Design of Structures,  
Components, Equipment and Systems

Table 3.2-1 of the Updated Final Safety Analysis Report (UFSAR) was updated to reflect an administrative change to delete reference to the Control Rod Drive System water being returned to Feedwater. The actual flowpath is described in the System Description portion of the UFSAR Section 4.6.1.1.2.4.2.5 and has been approved by the Nuclear Regulatory Commission. This change has been fully evaluated in a previously approved Evaluation.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)

UFSAR Chapter 3 - Design of Structures,  
Components, Equipment and Systems

Section 3.9.1.2.2 of the Updated Final Safety Analysis Report (UFSAR) was updated to include a new section, Section 3.9.1.2.2.13 which describes the Piping Analysis Program SUPERPIPE, related to the the Snubber Reduction Modification, M-1-2-90-008, for 2MSO9. This is a comprehensive computer program developed for the structural analysis and design checking of piping systems. The snubber reduction involved non-safety related snubbers and will not affect the mode of operation. This modification does not create a transient/accident of a different type from those previously evaluated in the Final Safety Analysis Report or the Updated Final Safety Analysis Report.

UFSAR Chapter 4 - Reactor

An administrative change was made to replace the incorrect Figure 4.2-4 of the Updated Final Safety Analysis Report (UFSAR) with the correct Figure 4.2-4 to reflect the actual number of boron carbide tubes per wing of a control rod. The Safety Evaluation concluded that there is no new possibility for an accident or malfunction of a different type; the correction is of a typographical nature only which solely affects the Figure.

UFSAR Chapter 5 - Reactor Coolant System and Connecting Systems

The Updated Final Safety Analysis Report (UFSAR) was updated to reflect deletion of the Residual Heat Removal Steam Condensing Mode through administrative controls and to provide for an alternate method of shutdown cooling which will be controlled by procedures. The probability of an accident or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR have not increased.

UFSAR Chapter 6 - Engineered Safety Features

Chapter 8 and Appendix H of the Updated Final Safety Analysis Report (UFSAR) were revised due to Minor Change P01-2-91-513, Changing the Operating Gear Ratio of Valve 2E21-F012. This Minor Change replaced the motor pinion gear and worm shaft gear to change the operator gear drive ratio to improve valve reliability. The Safety Evaluation concluded that the change does not create or increase the probability of an occurrence or the consequences of an accident or malfunction previously evaluated in the UFSAR.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)

UFSAR Chapter 6 - Engineered Safety Features

Table 6.2-21 of the Updated Final Safety Analysis Report (UFSAR) was updated to reflect an administrative change to permit local leak rate testing of the Unit 1 reactor water cleanup return valve 1G33-F040 in the "reverse" direction. The Safety Evaluation for this administrative change concluded that no unreviewed safety question exists.

Table 6.2-21, Sheet 1 of 24, of the Updated Final Safety Analysis Report (UFSAR) was revised to reflect the normal valve positions for 1(2)B21-F067A,B,C,D from "Closed" to "Open". The valves basic function remains unchanged and they will continue to operate as described in the UFSAR. The probability of an accident or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR have not increased.

A revision was required to Table 6.2-21 and Figure 6.2-31 of the Updated Final Safety Analysis Report (UFSAR) due to Component Replacements CR-90-124, CR-90-125, CR-90-126 and CR-90-127 which replaced the 2B21-F067A/B/C/D Main Steam Drain Globe Valves with Disk Gate Valves. This was done to reduce through-seat leakage, increasing the ability to meet the leakage requirements stipulated in 10CFR50 Appendix J, and to decrease maintenance requirements. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

UFSAR Chapter 7 - Instrumentation and Control systems

Figure 7.3-7 of the Updated Final Safety Analysis Report (UFSAR) has been revised to reflect the removal of miscellaneous electrical items associated with the gland seal leak-off lines for 2B33-F067A/B which were removed by Modifications M-1-2-84-067 and M-1-2-89-001. The items removed were non-safety related and non-functional conduit and cable which were previously abandoned in place.

An administrative change was made to Sections 7.6.2.2.4 and 7.6.2.2.5 as well as Figure 7.3-7 of the Updated Final Safety Analysis Report (UFSAR) to clarify the description of the RCIC and RHR leak detection systems. The changes were identified during review for modification M01-1-88-052, Deletion of RHR and RCIC Line Break Switches 1E31-N007AB/BB, 1E31-N012AB/BB, and 1E31-N013AB/BB. The change is not due to the installation of the modification. The Safety Evaluation concluded that there were no unreviewed safety questions.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)

UFSAR Chapter 7 - Instrumentation and Control Systems

A revision was required to Figure 7.3-7 of the Updated Final Safety Analysis Report (UFSAR) due to Minor Change P01-2-91-506 which replaced the body and internals of the 2G33-F001 Reactor Water Cleanup Valve from a flexible wedge gate to a double disk gate design. This was done to reduce through-seat leakage, increasing the ability to meet the leakage requirements stipulated in 10CFR50 Appendix J, and to decrease maintenance requirements. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

Section 7.3 of the Updated Final Safety Analysis Report (UFSAR) required a revision due to modification M01-2-90-002, Replacement of 2B Diesel Generator Instrument Tubing. The 1/4 inch copper instrument tubing was replaced with stainless steel tubing. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

Section 7.3 of the Updated Final Safety Analysis Report (UFSAR) required revision due to modifications M01-0-90-001B, M01-1-90-001 and M01-1-90-002, Replacement of the 0, 1A and 1B Diesel Generators Instrument Tubing. The 1/4 inch copper instrument tubing was replaced with stainless steel tubing. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

Chapter 7 of the Updated Final Safety Analysis Report (UFSAR) required revision to add guidance for the installation of a switched jumper to bypass the Reactor Water Cleanup System (RWCU) Delta Flow signals for up to 1 hour during startup and shutdown conditions. This is to prevent undesirable RWCU isolations during startup and shutdown due to density differences from normal operating conditions. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

UFSAR Chapter 8 - Electric Power

Section 8.3.3.1 of the Updated Final Safety Analysis Report (UFSAR) was updated to reflect the installation of new level instrumentation for the radwaste Ultrasonic Resin Cleaner/Waste Sample Tank/Spent Resin Tank using control cables lower in voltage than those described in UFSAR 8.3.3.1.b. The higher voltage used in the UFSAR is more conservative from a safety evaluation perspective, and there is therefore no possibility for an accident or malfunction of a different type than any previously evaluated.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)

UFSAR Chapter 8 - Electric Power

An administrative change was made to Sections 8.2.3.2.2 of the Updated Final Safety Analysis Report (UFSAR) to revise the minimum acceptable starting voltages supplied from 480 VAC MCC's to reflect the findings of the Degraded Voltage Steady State Analysis (Chron #196647). The Safety Evaluation concluded that there were no unreviewed safety questions.

Section 8.3.2 of the Updated Final Safety Analysis Report (UFSAR) was revised to reflect the replacement of the 60 lead-antimony FPS-15 Plante battery cells of the 125 VDC Division II battery with 58 GNB NCX-17 lead-calcium cells per modification M01-2-88-003. The battery capacity will increase from 581 A-hr. to 1128 A-hr. A new battery rack arranged in two tiers was installed to accommodate the larger cells. Ammeter scales in the Main Control Room and at the bus will be replaced to be consistent with other station battery ammeters due to human factors concerns. This requires replacement of the signal converter and recalibration of the DC alarm unit. The new batteries and modified racks meet all the requirements specified by the UFSAR.

Table 8.3 of the Updated Final Safety Analysis Report (UFSAR) required revision due to modification M-01-2-90-009, Replacement of the 125 Volt Division III Battery, Rack and Main Feed Breaker. This was due to increased DC loads as well as to improve breaker reliability and coordination. The Safety Evaluation concluded that the change does not create or increase the probability of an occurrence or the consequences of an accident or malfunction previously evaluated in the UFSAR.

UFSAR Chapter 9 - Auxiliary Systems

An update was made to Section 9.1.3.2.1 of the Updated Final Safety Analysis Report (UFSAR) to correct a numerical error in the value of the Maximum Normal Heat Load for the Unit 2 Fuel Pool. This error correction is not a change to the plant, but a correction to the description of the plant. The plant was previously analyzed with the correct information. The probability of an accident or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR have not increased.

Chapter 9 of the Updated Final Safety Analysis Report (UFSAR) has been updated due to Minor Change P01-1-91-532, Replacement of the Unit 1 Refuel Platform Triangular Refueling Mast with a GE NF-500 Circular Mast. The Safety Evaluation concluded that the change does not create a new or different kind of accident or malfunction from any accident previously evaluated.



G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report--(continued)

UFSAR Chapter 9 - Auxiliary Systems

Section 9.5.4.2 of the Updated Final Safety Analysis Report (UFSAR) has been updated to reflect the exception to ANSI N-195. This change is administrative only. This exception involves the permanent connection between the High Pressure Core Spray (HPCS) Storage Tank and the Fire Protection Diesel Fuel Oil Transfer System. This permanent connection and its function is described in the UFSAR Section 9.5.4.2. The permanent connection does not affect the HPCS Emergency Diesel Generator seven day fuel oil inventory Technical Specifications requirement. The Safety Evaluation concluded that there were no unreviewed safety questions.

Section 9.4.1.2 of the Updated Safety Analysis Report (UFSAR) was updated to reflect the deletion of the reference to humidity control and isolation dampers for the computer room. The dampers and humidity control were never installed. Humidity control is not necessary because the computer room does not take in outside air. Isolation dampers are not required because there are no habitability requirements for the computer room. The Safety Evaluation concluded that there were no unreviewed safety questions.

Section 9.5.3 of the Updated Final Safety Analysis Report (UFSAR) has been updated to reflect the installation of Emergency Lighting Battery Packs (ELBP's), lamps, and associated hardware throughout the Reactor, Auxiliary, and Turbine Buildings. This change is required in accordance with 10 CFR 50 Appendix R, Section III.J which requires 8-hour battery packs to illuminate Safe Shutdown equipment along with access and egress routes to and from this equipment. The scope of work in this change does not result in a functional design change which could adversely affect any safety system, nor does it create an accident of a different type from those previously evaluated in the Final Safety Analysis Report or the Updated Final Safety Analysis.

Chapter 9 of the Updated Final Safety Analysis Report (UFSAR) specifying the manual method of resin regeneration requires revision. An unreviewed safety question does not exist.

UFSAR Chapter 10 - Steam and Power Conversion System

A revision to Chapter 10 of the Updated Final Safety Analysis Report (UFSAR) to clarify the present function of the regeneration subsystem and provide flexibility when ultrasonic resin cleaners are used was required. An unreviewed safety question does not exist.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report-(continued)

UFSAR Chapter 11 - Radioactive Waste Management

Section 11.4 and Table 11.4-1 of the Updated Final Safety Analysis Report (UFSAR) was updated to reflect an administrative change referencing on-site use of the dry active waste interim storage facility. The Safety Evaluation for the interim storage facility concluded that no unreviewed safety question exists.

Section 11.4.2.9 to the Updated Final Safety Analysis Report (UFSAR) was added for an Over the Wall Modification which added concrete cubicles to the intermediate storage level, processing penetrations in the outside wall, and removed upper blocks of walls to facilitate movement of containers. All this to help provide an efficient manner for processing radwaste liners and high integrity containers. The Safety Evaluation concluded that there were no unreviewed safety questions.

UFSAR Chapter 13 - Conduct of Operations

Changes were made to Section 13.1.2.2 of the Updated Final Safety Analysis Report (UFSAR) to reflect changes in the function, responsibilities, and authorities of the Plant Manager, Production Superintendent, and Technical Superintendent; also several changes to some LaSalle organizational titles. These are administrative changes not affecting plant safety. Therefore, the probability of an accident or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR have not increased.

A revision to Chapter 13 of the Updated Final Safety Analysis Report (UFSAR) to update the description of the station Training Department and its programs was required. An unreviewed safety question does not exist.

Page 13.0-iii of the Updated Final Safety Analysis Report (UFSAR) required an administrative change to remove the reference to Table 13.5-5. Table 13.5-5 was removed from the UFSAR in the Revision 8 update. The Safety Evaluation concluded that the change does not create or increase the probability of an occurrence or the consequences of an accident or malfunction previously evaluated in the UFSAR.

UFSAR Chapter 15 - Accident Analyses

Section 15.7.4 of the Updated Final Safety Analysis Report (UFSAR) required an administrative change to correct a typographical numerical error in the number of fuel rods that fail as a result of a fuel handling accident. The correct number of failed fuel rods as a result of this accident was correctly stated in a previous discussion in this section. This is a correction to the plant description and not a change to the plant itself. The Safety Evaluation concluded that the possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created.

**G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)**

**Appendix G - Reactor Recirculation System**

A revision to Appendix G.3.1.2.2 of the Updated Final Safety Analysis Report (UFSAR) due to the Anticipated Transient Without Scram - Recirculation Pump Trip (ATWS-RPT) Logic Change installed by modifications M-1-1-89-026 and M-1-2-89-021. These modifications replaced the 1-out-of-4 logic with 1-out-of-2 taken twice for tripping each Reactor Recirculation Pump during an ATWS condition. The Safety Evaluation concluded that the change does not create or increase the probability of an occurrence or the consequences of an accident or malfunction previously evaluated in the UFSAR.

A revision to Appendix G of the Updated Final Safety Analysis Report (UFSAR) due to minor change P01-1-91-529 which replace the RR Flow Control Valve actuators hard piped hydraulic lines with flexible hoses. The double-block drain valve located near each connection will be replaced by a lighter single glove valve. These actions will reduce vibration. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

A revision to Appendix G of the Updated Final Safety Analysis Report (UFSAR) due to minor changes MC1-1-90-028 and MC1-2-90-013 which add a clamp and beam assembly to jet pumps #5 and #15 to prevent vibration induced fatigue failure in the lower support brackets. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

**UFSAR Appendix H - Fire Hazards Analysis**

An administrative change to Appendix H of the Updated Final Safety Analysis Report (UFSAR) was required due to the installation of modifications M1-0-90-008, M1-1-90-014 and M1-1-90-015 which removed Solenoid Valves 0D0004, 1D0004, and 1D0014 from the Diesel Fuel Oil Transfer System and replaced them with 1.5" diameter piping. The Safety Evaluation concluded that the possibility of an accident or malfunction of a different type than any previously evaluated in the UFSAR doesn't increase.

An administrative change was required to Section H.3 of the Updated Final Safety Analysis Report (UFSAR) to reflect the installation of Minor Change P01-1-90-571, Unit 1 CRD HCU Drain Header Minor Plant Change Modification. This Minor Change installed drain hoses at all Control Rod Drive Hydraulic Control Unit Accumulator Drain Valves which are routed to local RF floor drains to minimize the spread of contamination from water spills which occur when the accumulators are drained for maintenance or nitrogen charging. The Safety Evaluation concluded that the probability of an accident or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR have not increased.

G. Summary of Changes to the Facility Which are described in the Safety Analysis Report--(continued)

UFSAR Appendix H - Fire Hazards Analysis

Section H.3.5.1 was updated to reflect the removal of the 3-hour fire rating for steel beams supporting slabs at elevation 768 feet-0 inch. The fireproofing on these beams was removed under Work Request L08569 and the beams now are protected to a 1-hour fire rating. This change was necessary because the fireproofing on these beams continued to fall off and onto the Turbine Drive Reactor Feed Pump. The Safety Evaluation concluded there was no unreviewed safety question since the equipment is non-safety related and feedwater is not assumed to be available.

An administrative change to Section H.3.7 of the Updated Final Safety Analysis Report (UFSAR) to make it consistent with the as-built configuration of the sprinkler systems for Diesel Generator Day Tank Room fire zones was required. The possibility of an accident or malfunction of a different type than previously evaluated has not been created because the configuration of the sprinkler systems and barrier remain unchanged.

Sections H.3.1, H.3.2, and H.3.5 of the Updated Final Safety Analysis Report (UFSAR) required revision to reflect the derating of non-Tech Spec fire walls. The probability of an accident or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR have not increased.

Section H.3.1.1 - Currently there is no separation between Fire Zone 1 at Elevation 843'-6" and 2B and 3B at Elevation 820'-6" due to non-rated floor and open stairwells. The stairwell walls, elevator walls, and vestibule walls, therefore, are not providing any added protection between Fire Zone 1 and the adjacent Fire Zones.

Section H.3.2.1 - Currently there is no separation between Fire Zones 2A and 3A at Elevation 832'-0" and Fire Zone 1 at Elevation 843'-6" or Fire Zones 2B2 and 3B2 at Elevation 820'-6" due to non-rated floor and ceiling slabs at Elevation 832'-0" within Fire Zones 2A and 3A. The north, south and east walls at Elevation 832'-0" within Fire Zones 2A and 3A are not providing any added protection between Fire Zones 2A and 3A at Elevation 832'-0" and the adjacent Fire Zones.

Section H.3.5.29 - The doors which are currently installed are U.L. labeled "A" fire doors and the frames have been rated as a result of the U.L. testing program.

An administrative change to Section H.3.8 of the Updated Final Safety Analysis Report (UFSAR) for wording changes to state that the floor/ceiling separating Fire Zone 8A1 from 8B1, and Fire Zones 7A1, 7A2, and 7A3 are three hour fire rated except for an untested exhaust stack fire penetration seal. This seal is of the same materials and construction as other rated penetration seals, but must be considered unrated because it is of a larger size than what has been tested. The probability of an accident or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR have not increased.

G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report--(continued)

UFSAR Volume XI

A revision to Drawing M-142 Sheet 2 of the Updated Final Safety Analysis Report (UFSAR) was required due to Minor Change P01-2-90-039, Installation of Four Hydrolazing Ports. Hydrolazing ports were installed on RHR injection lines 2RH40CB-16 and 2RH40AB-12 and Globe valves at the low point of 2RH40CB. This will permit the flushing of water and crud from the RHR pipe to the floor drain or a collection tank, and to reduce the dose associated with these activities. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

Appendix H - Fire Hazards Analysis  
Chapter 8 - Electric Power

Chapter 8 and Appendix H of the Updated Final Safety Analysis Report (UFSAR) required revision due to the replacement of the existing 50 amp C & D power systems battery charger with a new Power Conversion Products charger also rated at 50 amps (Modification M01-2-90-010). The Safety Evaluation concluded that the change does not create or increase the probability of an occurrence or the consequences of an accident or malfunction previously evaluated in the UFSAR.

A revision to Chapter 8 and Appendix H of the Updated Final Safety Analysis Report (UFSAR) was required due to the addition of the 125 Volt Division II Battery Charger of a 200 Ampere rating (Modification M01-2-88-002). This Modification consisted of upgrading to a larger capacity charger for the 125 Volt Division II Battery. The Safety Evaluation concluded that the change does not create or increase the probability of an occurrence or the consequences of an accident or malfunction previously evaluated in the UFSAR.

Appendix H - Fire Hazards Analysis  
Corrective Action Record - 91-037

LaSalle Corrective Action Record (CAR) 91-037 was issued to resolve the discrepancy of plugged floor drains under the Turbine Driven Reactor Feed Pump Room (TDRFP) which have no record of documentation as to why they are plugged. Under this CAR the floor drains will be maintained in their existing plugged condition on a permanent basis. The plugged drains will prevent lubrication oil from the Unit 1 and Unit 2 TDRFP Rooms from entering the Radwaste Liquid Processing System. The rooms do not contain safety related equipment and have a low fire loading. They are protected with an automatic sprinkler system. No new accidents or malfunctions are created.



G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report-(continued)

UFSAR Chapter 3 - Design of Structures, Components, Equipment and Systems  
UFSAR Chapter 10 - Steam and Power Conversion System

Chapters 3 and 10 of the Updated Final Safety Analysis Report (UFSAR) required revision due to Component Replacements 90-157 and 92-013. Replacement of the Unit 1 and 2 Low Pressure Turbine Rotors. Both Unit 1 and 2 low pressure turbine rotors were replaced. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

UFSAR Chapter 5 - Reactor Coolant System and Connected Systems  
UFSAR Chapter 7 Instrumentation and Control Systems

Chapters 5 and 7 of the Updated Final Safety Analysis Report (UFSAR) required a revision due to ECCS Testable Check Valve Upgrades by Partial Modifications M-1-1-87-098-02, 03, 04, 05, 06, 07, 08, 09, M-1-2-87-087-01, 02, 05, and 06. These Modifications involved the following, where applicable: valve packing to reduce valve shaft friction; leakoff line removed; stuffing box connection plugged; limit switch replacement. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

UFSAR Chapter 8 - Electric Power  
Appendix H - Fire Hazards Analysis

An administrative change to Tables 8.3-14, H.3-2, H.4-73 and page H.3-136 of the Updated Final Safety Analysis Report (UFSAR) to reflect the upgrading of the capacity of the 125 Volt Division 3 Battery per modification M01-1-90-011 was required. The probability of an accident or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR have not increased.

UFSAR Chapter 9 - Auxiliary Systems  
UFSAR Appendix H - Fire Hazards Analysis

Section 9.5 and Appendix H of the Updated Final Safety Analysis Report (UFSAR) was updated to reflect an administrative change making the fire hazards analysis consistent with present plant conditions. Plant safety is not affected by these administrative changes. The Safety Evaluation concluded that an unreviewed safety question does not exist.

G. Summary of Changes to the Facility Which are described in the  
Safety Analysis Report--(continued)

UFSAR Chapter 4 - Reactor  
UFSAR Chapter 7 - Instrumentation and Control Systems

A revision to Chapters 4 and 7 of the Updated Final Safety Analysis Report (UFSAR) due to modification M-1-2-87-083, Replacement of Scram Discharge Volume Level Transmitter was required. This Modification replaced the existing Rosemont Transmitters with the 1153 Capillary Style transmitter which have sealed reference legs to provide more reliable level indication. The Safety Evaluation concluded that the change does not create or increase the probability of an occurrence or the consequences of an accident or malfunction previously evaluated in the UFSAR.

UFSAR Chapter 5 - Reactor Coolant System and Connected Systems  
UFSAR Chapter 6 - Engineered Safety Features  
UFSAR Chapter 7 Instrumentation and Control Systems  
UFSAR Chapter 8 - Electric Power  
UFSAR Chapter 9 - Auxiliary Systems  
UFSAR Appendix H - Fire Hazards Analysis

Chapters 5, 6, 7, 8, 9, and Appendix H of the Updated Final Safety Analysis Report (UFSAR) were revised due to modifications M-1-1-86-072, M-1-2-86-049, M-1-1-87-095 and M-1-2-87-082. These Modifications abandoned the High Pressure Core Spray (HPCS) system suction and return lines to the CST and aligned the RCIC system to the Suppression Pool. The Safety Evaluation concluded that the probability or consequences of an accident previously evaluated will not be increased, nor will it create an accident or malfunction of a different type than any previously analyzed in the UFSAR.

#### H. Summary of Safety Related Modifications

M01-0-84-031

This modification involved rerouting the backflow of condensate drainage from the Control Room and Auxiliary Electric Equipment Room HVAC cooling coils to the equipment drains instead of the common header floor drains. This required extensive piping changes from the evaporator to the equipment drain header. This modification also changed the solenoid valves to fail closed instead of fail open by changing the wiring at the affected control panels and by replacing the valve solenoids and internals to the normally closed type. The purpose of modifying the drainage is to lessen the burden on radwaste which had difficulty in handling the existing supply of water from the floor drains. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-0-89-003-01

M01-0-89-003-02

These modifications removed the initiation function of the Train A and Train B VC/VE recirculation mode upon detection of high ammonia concentration by disconnecting the interlocks between ammonia detectors and the VC/VE dampers at panel OPL15(16)J. These modifications also installed a manual pushbutton with protective collar ring and an indicating light for manual actuation of the recirculation mode when a detector alarms on Control Room panel 1(2)PM05J. Also, a selector switch and two indicating lights are provided to allow either one of the ammonia detector to be bypassed if, by reading the recorder tapes of each ammonia detector, a control room high ammonia alarm is determined to have been activated. The Safety Evaluations concluded that there were no unreviewed safety questions. However there were Technical Specification Amendments, Numbers 61 and 42 to Facility Operating License Number NPF-11 and NPF-18. The Technical Specifications have been revised as described in the Amendments. The changes to the UFSAR Chapter 6, "Engineered Safety Features", subsection 6.4.3 "System Operational Procedures" addresses the automatic actuation function of the Control Room HVAC system upon detection of high ammonia. This subsection required revision to reflect the removal of the automatic initiation function of the recirculation mode.

M01-0-89-006

This modification involved upgrading the existing 0 Diesel Generator Room Carbon Dioxide system from an unsupervised detection system to a class "A" supervised detection system. This also provides protection of the DG CO2 system against fire/water damage in order to prevent a single fire in the DG Corridor from causing a CO2 discharge in both the division 1 and division 2 DG rooms. The existing control panels were replaced with seismically qualified NEMA Type 4 CO2 control panels. The alarm horns, pushbutton stations, and electrol manual pilot cabinets were also replaced with NEMA Type 4 alarm horns, pushbutton stations, and electrol manual pilot cabinets. The conduits containing associated cables were fire wrapped so if damaged, would not spuriously initiate a CO2 discharge or adversely affect their respective DG ventilation system. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

#### H. Summary of Safety Related Modifications

M01-0-89-010

This modification involved rerouting portions of the Fire Protection piping because the new structures, i.e. service building, warehouse, etc., were located over the existing buried fire protection yard loop. This modification also provided two supply lines for the new service building, two for the new main warehouse, one for the MAF building, and one for the new receiving warehouse. Additional hydrants were installed for manual fire fighting capability. A main fire protection system flushing line has been provided to enhance station FP flushing performance. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-0-89-017-A

This modification involved the installation of conduit, supports, and antenna cable between locations in the Auxiliary buildings, Turbine buildings and the south end of the Unit 1 Turbine Building Trackway. A junction box joined the raceway conduit and the new FIP underground ductbank system. This provided communication cables to the new service building, warehouse, and MAF. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-0-89-018

This modification involved a revision to the fuel filter restricted alarm circuit for the "0" Diesel Generator to meet the "blackboard" concept. The design eliminated spurious activation of this alarm. Fuel filter high differential pressure switch OPDS-DG051 will be interlocked with 50-second time delay relay K33 which is energized when DG engine speed reaches 150 rpm. This interlock prevents the alarm from annunciating for 50 seconds after a DG start. This alarm will only appear when fuel oil flow through the fuel filter becomes restricted during DG operation. The main function of the alarm remains unchanged. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-0-90-001-A

M01-0-90-001-B

M01-0-90-001-C

This modification involved the upgrade of the 1/4 inch instrumentation tubing connected to the "0" Diesel Generator. The modification was split into three (3) separate partials:

Partial A, removal and replacement of portions of the air box pressure tubing and lube oil tubing, removal and replacement of plastic tie wraps with cushioned metal tie wraps, adding a tubing support to the air box pressure tubing, adding the crankcase pressure gauge mounting plate and mounting the gauge in place.

Partial B, removal and replacement of crankcase pressure tubing to the new pressure gauge OPI-DG122.

Partial C, installation of the crankcase pressure gauge mounting plate, mounting the gauge in place, and addition of a support to the existing air box pressure tubing.

The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

#### H. Summary of Safety Related Modifications

M01-0-90-006

This modification involved the upgrade of the ventilation and fire protection/detection systems for Building 30, QA Records Storage Vault. This included installation of conventional four ton HVAC system, comprised of a 1600 CFM air handling unit and a condensing unit. This will control the temperature and humidity levels inside the Vault by a fully automatic, climate control system. An extension of the fire detection signal from the Vault's Halon panel and Building 30 detectors to the plant's main fire detection panel, 2FP04JA, in the Auxiliary Electrical Equipment Room. Also, three (3) new Building 30 detectors were added to monitor for smoke outside the Vault so that appropriate measures could be established to prevent outside fires from propagating to inside the Vault. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-0-90-008

This modification involved the enhancement of operation for the diesel fuel system by eliminating the unreliable operation of the solenoid valves for the "0" Diesel Generator. These valves have had a history of sticking open, requiring excessive maintenance, and resulting in down-time for the diesel generators. In addition to the valve removal work, antisiphoning holes were drilled into the inlet piping inside the day tanks. The antisiphoning holes replaced the intended function of the valves. These holes break the vacuum created inside the fuel transfer pipe during the fuel transfer operation. This will eliminate the differential pressure across the Day Tanks and the Storage Tanks thereby preventing backflow from the Day Tanks to the Storage Tanks which was the purpose of the solenoid valves. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the FSAR/UFSAR Appendix H.4, "Safe Shutdown Analysis" required update.

M01-1-86-072

This modification involved modifying the High Pressure Core Spray (HPCS) system so that it is aligned to the Suppression Pool (SP), and abandonment of the suction and test return lines to the Condensed Storage Tank (CST) due to failure in the test return line to the CST. The failure of the test return line was attributed to microbiological corrosion, primarily of the weld metal. Major scope included but was not limited to: installing a new blind flange on HPCS test return line to the CST, de-term control cables to nearest junction box for the full flow test return valves, remove control switches, position indicators, indicating lights, computer input from control room panel 1H13-P601, and deletion of digital inputs from plant computer systems. No unreviewed safety questions associated with the modification exists. Changes to the Technical Specification, Amendment #81, have been completed. Changes required to the UFSAR include sections for Chapters 1, 3, 5 thru 9, 12, 13, and 15. Appendix H, J, and L also required revisions.

#### H. Summary of Safety Related Modifications

M01-1-87-098-1, M01-1-87-098-2, M01-1-87-098-3  
M01-1-87-098-4, M01-1-87-098-5, M01-1-87-098-6  
M01-1-87-098-7, M01-1-87-098-8, M01-1-87-098-9

These modifications involved increasing the valve reliability for the ECCS Testable Check Valves. The maintenance work history indicated that the ECCS Testable Check Valves have experienced rotational resistance during low flow conditions. This resistance can prevent the valve from fully closing after low flow testing. To correct these problems the following was completed: 1) Replacement of the valve packing with modified ring packing/carbon spacer arrangement, 2) replacement of the Namco limit switches with microswitches to reduce valve shaft friction. The leakoff line was removed since it is no longer required due to replacement of the valve stem packing. 3) removal of the leakoff solenoid valve, manual valve, thermocouple, flexible hose, sightglass and removal of associated wiring and conduit. This scope of work was completed in nine (9) partial modifications:

Partial 1 modified the HPCS 1E22-F005 ECCS Testable Check Valve.  
Partial 2 modified the LPCS 1E21-F006 ECCS Testable Check Valve.  
Partial 3 modified the RHR 1E12-F041A ECCS Testable Check Valve.  
Partial 4 modified the RHR 1E12-F041B ECCS Testable Check Valve.  
Partial 5 modified the RHR 1E12-F041C ECCS Testable Check Valve.  
Partial 6 modified the RHR 1E12-F050A ECCS Testable Check Valve.  
Partial 7 modified the RHR 1E12-F050B ECCS Testable Check Valve.  
Partial 8 modified the RCIC 1E51-F065 ECCS Testable Check Valve.  
Partial 9 modified the RCIC 1E51-F066 ECCS Testable Check Valve.

The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the LaSalle FSAR section 5.2.5.2 and figure 7.3-7 sheet 2 were required.

M01-1-88-026

This modification involves the installation of two (2) fuses (in series) for the RHR Pressure Switches 1E12-N032A/B and 1E12-N033A/B. During the steam condensing mode of RHR, steam is routed from the reactor pressure vessel to the RHR heat exchanger via the RCIC system. During this mode, RHR pressure switches assist in protecting the RHR heat exchanges from over pressurization by providing a signal to close the bypass valves. If one of the pressure switches were to fail, it would cause an electrical short to ground at one of the non-safety related components being supplied from the same DC bus. This could have disabled the RHR control logic for essential equipment required during and/or after a postulated design event. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.



#### H. Summary of Safety Related Modifications

M01-1-88-052

This modification involved the deletion of line break/flow switches 1E31-N007AB/BB, 1E31-N012AB/BB, and 1E31-N0013AB/BB. These switches are SOR type 103AS-B203 differential pressure (DP) switches which have a high diaphragm failure rate and are subject to additional surveillance requirements due to NRC Commitments. These switches initiate an isolation of the RHR heat exchanger and RCIC steam supply lines, respectively, when their setpoints are exceeded. Eliminating these switches will also improve the availability of these systems by reducing the probability of spurious system trips. The change constituted removal of six (6) DP switches and their respective instrument lines. The instrumentation ports of the manifold valves were plugged and abandoned in place. The removal of the cables between the DP switches and the junction boxes on the instrument racks and the flexible conduit that is attached to these switches has been completed. Cables have also been removed and abandoned in place between the instrument racks and the computer input cabinet. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, upon review of the UFSAR Sections 7.6.2.2.4, 7.6.2.2.5 and Figure 7.3-7 concluded that a revision to clarify the description of the RCIC and RHR leak detection systems was required.

M01-1-89-030

This modification involved a revision to the fuel filter restricted alarm circuit for the "1A" Diesel Generator to meet the "blackboard" concept. The design eliminated spurious activation of this alarm. Fuel filter high differential pressure switch 1PDS-DG051 will be interlocked with 50-second time delay relay K33 which is energized when DG engine speed reaches 150 rpm. This interlock prevents the alarm from annunciating for 50 seconds after a DG start. This alarm will only appear when fuel oil flow through the fuel filter becomes restricted during DG operation. The main function of the alarm remains unchanged. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-1-89-033-5

This modification involved the installation of Emergency Lighting Battery Packs (ELBPs) for the MSIV Rooms. This work included installation of a battery pack with remote ammeter outside the MSIV room and the installation of two (2) remote lamps inside the MSIV Room. This was completed per 10CFR50, Appendix R, Section III.j, adequate illumination to assure operators can bring the plant to a safe shutdown (SSD) in the event of a fire which may disable the normal station lighting system. The Safety evaluation concluded that there were no unreviewed safety questions. There are no Technical Specification changes required. However, this modification did not change any commitments to the FSAR/UFSAR Section 9.5.1 (Fire Protection System) or Appendix H.4 (SSD Analysis). Section 9.5.3 (Lighting Systems) did require a revision to reflect the addition of the ELBP's. In addition, the report entitled "Fire Protection Documentation and Review of the Assessment of 10CFR50, Appendix R, LaSalle County Station" required a revision to reflect the additional emergency lighting.

#### H. Summary of Safety Related Modifications

M01-1-90-001

This modification involved the upgrade of the 1/4 inch instrumentation tubing connected to the "1A" Diesel Generator. This modification was initiated in response to the High Pressure Core Spray (HPCS) Safety System Functional Inspection (SSFI) held in 1989. This modification upgrades any non-stainless steel 1/4 inch tubing and components to stainless steel. In addition the removal and replacement of crankcase pressure tubing to the new pressure gage 1PI-DG122 was performed. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the FSAR/UFSAR section 7.3.6.2 required update to include the crankcase pressure gauge to the list of local instrumentation.

M01-1-90-002

This modification involved the upgrade of the 1/4 inch instrumentation tubing connected to the "1B" Diesel Generator. This modification was initiated in response to the High Pressure Core Spray (HPCS) Safety System Functional Inspection (SSFI) held in 1989. This modification upgrades any non-stainless steel 1/4 inch tubing and component to stainless steel. In addition, crankcase pressure, air box pressure, water jacket pressure and motor driven fuel oil pump filter inlet pressure gauges were installed. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the FSAR/UFSAR section 7.3.6.2 required update to include the addition of the added pressure gauges to the list of local instrumentation.

M01-1-90-005

This modification involved the replacement of the RHR Shutdown Cooling High Flow Isolation Relays with a time delay relay. During RHR shutdown cooling startups, shutdowns, and flowrate adjustments, large differential pressure (dp) spikes are originating from the shutdown cooling (SDC) high flow instruments 1E31-N012AA/BA. The dp spikes are being sensed at the shutdown cooling suction flow elbows. The existing SDC high flow isolation relays 1B21H-K74/77 (Agastate GP) were replaced with a time delay relay (Agastat E7024AB) set for a 1 second time delay. This time delay relay will prevent differential pressure fluctuations seen by isolation switches from tripping the SDC isolation logic. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-1-90-009

This modification involved increasing the nominal clearance between the Control Rod Drive (CRD) housing supports and the lower surface of the CRD flange cap screws from approx. 1 to 1.5 inches. This will facilitate undervessel maintenance during the removal and reinstallation of the CRD's during outage periods. This will also decrease the dose associated with this maintenance activity. The Safety evaluation concluded that there were no unreviewed safety questions. There were changes required to the Technical Specification. Reactivity Control systems, Section 3/4.1.3 Control Rods. Changes to the UFSAR Section 4.6.1.2.3, 4.6.2.3.1.2.1, 4.6.2.3.1.2.4 and 4.6.2.3.3.1 were revised to reflect this modification.

#### H. Summary of Safety Related Modifications

M01-1-90-011

This modification involved the upgrade of the 125 Volt Division III Batteries and rack. The batteries were replaced due to the addition of DC loads since fuel load. The 125V division III system has reached its maximum load for the existing size battery. In addition, these batteries have been replaced because the existing capacity margin to accommodate degraded capacity due to aging and low temperature operation is very small. The battery physical configuration did not change significantly although the new racks are longer and slightly wider. The Safety evaluation concluded that there were no unreviewed safety questions. There were changes to Technical Specification section 3/4.8.2.3.2 which was based on the existing cells' nominal specific gravity of 1.210. The new replacement cells have a nominal specific gravity of 1.215. The changes to the UFSAR Section 8.3 and the Fire Hazard Analysis were also completed.

M01-1-90-012

This modification involved the replacement of the 125 Volt Division III battery charger. This existing charger was replaced because it had become unreliable and spare parts were no longer available. The physical location of the battery charger did not change. This change upsized the DC cable in order to increase the ampacity of the cable. The AC cable was also replaced with a longer cable of the same size. The current and voltage monitoring instrumentation for the battery charger remained the same. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. A revision to the UFSAR Section 8.3 and Appendix H was required.

M01-1-90-014

M01-1-90-015

These modifications involved the enhancement of operation for the diesel fuel system by eliminating the unreliable operation of the solenoid valves for the 1A Diesel Generator. These valves have had a history of sticking open, requiring excessive maintenance, and resulting in down-time for the diesel generators. In addition to the valve removal work, antisiphoning holes were drilled into the inlet piping inside the day tanks. The antisiphoning holes will replace the intended function of the valves. These holes break the vacuum created inside the fuel transfer pipe during the fuel transfer operation. This will eliminate the differential pressure across the Day Tanks and the Storage Tanks thereby preventing backflow from the Day Tanks to the Storage Tanks which was the purpose of the solenoid valves. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the FSAR/UFSAR Appendix H.4, "Safe Shutdown Analysis" required update.

#### H. Summary of Safety Related Modifications

M01-2-84-031

This modification involved modifying the control circuitry to prevent the closure of the 2A Diesel Generator breaker onto a faulted bus. This change will also trip the breaker upon bus fault indication as long as a ECCS signal is not present. This change was based on Station Electrical Engineering Department's recommendation letter which resulted from review of the loss of 4160 volt ESF bus (OPEX No. 83-13). The physical changes resulting from this modification are strictly minor wiring changes inside the 2422 and 2423 breaker control circuitry cabinets. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification revisions required. However, changes to UFSAR were required to section 8.3-10.

M01-2-84-141

This modification involved the removal of the isolation and alarm function of the Riley Modules for the Reactor Water Cleanup Pump Room Temperature Leak Detection (LD) system. This was completed by removing the wires from the output switch contacts of Riley Modules 1/2E31-N600/601A-F at the Main Control Room Panel and rewire of the output switch contacts of Riley Modules 1/2E31-N600/601G-K at the Main Control Room Panels. The alarm and isolation functions of the RWCU Heat Exchange Room Temperature leak detection are still maintained. This has improved the performance of the leak detection monitoring system, since it has eliminated spurious isolation and alarm signals. The Safety evaluation concluded that there were no unreviewed safety questions. Technical Specification revisions to section 3.3.2 to amend the deletion of the RWCU pump trips was required. The UFSAR required revisions to delete leakage detection equipment as a result of placing the RWCU pumps downstream of the heat exchangers.

M01-2-86-017

This modification involves the reslope of the instrument line for the Suppression Pool Level Gauge 2CM01M. The level gauge 2CM01M had a low point in the high leg of its sensing line. The presence of this low point caused incorrect level indication by the level gauge. The instrument line 2CM62AB was reconfigured at two (2) locations to eliminate the low points. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, revisions to the UFSAR Chapter 5, Reactor Coolant System and Connected Systems, and Table 5.2.1, Item #10 were amended to include the CM Instrument line for the suppression pool level gauge.

M01-2-86-032

This modification involved the reconfiguration of portions of the Division I and II Suppression Pool instrument sensing lines. These sensing lines contained low spots and/or incorrect pipe slopes which allowed condensation to trap in them, causing the erroneous readings. The lines were resloped from the PC Vacuum breaker piping back to the condensate pots towards the suppression pool penetration using a minimum slope of one-half inch per foot. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

#### H. Summary of Safety Related Modifications

M01-2-86-049

This modification involved modifying the High Pressure Core Spray (HPCS) system so that it is aligned to the Suppression Pool (SP) and abandonment of the suction and test return lines to the Condensate Storage Tank (CST) due to a failure in the test return line to the CST. The failure of the test return line was attributed to microbiological corrosion, primarily of the weld metal. Major scope included but was not limited to: installing a new blind flange on HPCS test return line to the CST, de-term control cables to nearest junction box for the full flow test return valves, remove control switches, position indicators, indicating lights, computer input from control room panel 1H13-P601, and deletion of digital inputs from plant computer systems. No unreviewed safety questions associated with the modification exists. Changes to the Technical Specification, Amendment #81, have been completed. Changes required to the UFSAR include sections for Chapters 1, 3, 5 thru 9, 12, 13, and 15. Appendix H, J, and L also required revisions.

M01-2-87-082

This modification involved modifying the Reactor Core Isolation Cooling (RCIC) system so that it could be aligned to the Suppression Pool in the event the RCIC suction and return lines to the Condensate Storage Tank fail. This included adding a new water leg pump suction from the suppression pool, adding a full flow test return line to the suppression pool, removing the standpipe from the 2CY01A line of the CY tank which reserves 135,000 gallons of water for RCIC and HPCS use, and adding a keylock switch and an alarm to the control circuit of valve 2E51-F022. The new RCIC full flow test line was tied into the LPCS full flow test return line. The Safety evaluation concluded that there were no unreviewed safety questions. Technical Specification changes for 3/4.3.5, 3/4.7.3, B3/4.7.3 and B3/4.5 associated with the RCIC modification are to add containment isolation provisions for the new full flow test return line to the suppression pool. The UFSAR changes to Chapters 1, 3, 5, 6, 7, 8, 9, 12, 13, and 15, also Appendix H, J, and L consisted of revising descriptions and tables associated with the RCIC system.

M01-2-87-083

This modification involved replacing the Scram Discharge Instrument Volume (SDIV) level transmitter 2C11-N012A,B,C,D. The Differential Pressure Transmitters monitor the water level in the scram discharge volume to assure that sufficient volume is available to accomplish a scram. This is in response to concerns by GE where inadvertent trips and/or incorrect information may be indicated concerning the level in the Scram Discharge Volume. Four (4) Rosemount capillary style model 1153 transmitters were replaced with "hard piped" existing transmitters. This consisted of removing a section of pipe at each SDV and adding a flange for attachment of the respective capillary tube (reference leg), tracing the capillary tubing and mounting the transmitters on the existing stands and re-piping between the transmitters "sensing leg" and original 5 valve manifold. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the UFSAR sections 4.6.1.1 and 7.2.2.4.7 along with Tables 7.2-1 and 7.3-4 were required to provide more detailed information concerning the transmitters.



#### H. Summary of Safety Related Modifications

M01-2-86-087

This modification involved replacing the existing relief valves on the shell side of the Reactor Water Cleanup (RWCU) Regenerative heat exchangers. The hydraulic transient created by valve cycling, coupled with pipe thermal expansion, is believed to be resulting in the repeated cracking of the fillet welds at the connection of the heat exchangers and the inlet of the relief piping. To correct the concerns, the existing Lonergan relief valves 2G33-F340A/B were replaced with a slow-opening Dresser relief valve. This will minimize the hydraulic transients. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-2-87-087-1, M01-2-87-087-2  
M01-2-87-087-5, M01-2-87-087-6,

These modifications involved increasing the valve reliability for the ECCS Testable Check Valves. The maintenance work history indicated that the ECCS Testable Check Valves have experienced rotational resistance during low flow conditions. This resistance can prevent the valve from fully closing after low flow testing. To correct the problems the following was completed: 1) Replacement of the valve packing with modified ring packing/carbon spacer arrangement, 2) replacement of the Namco limit switches with microswitches to reduce valve shaft friction, 3) removal of the leakoff line since it is no longer required due to replacement of the valve stem packing, 4) removal of the leakoff solenoid valve, manual valve, thermocouple, flexible hose, sightglass and removal of associated wiring and conduit. This scope of work was completed in four (4) partial modifications:

Partial 1 modified the HPCS 2E22-F005 ECCS Testable Check Valve.  
Partial 2 modified the RCIC 2E51-F066 ECCS Testable Check Valve.  
Partial 5 modified the RHR 2E12-F041C ECCS Testable Check Valve.  
Partial 6 modified the RHR 2E12-F041B ECCS Testable Check Valve.

The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the LaSalle FSAR section 5.2.5.2 and figure 7.3-7 sheet 2 were required.

M01-2-88-002

This modification involved the replacement of the 125 Volt Division II battery charger. This existing charger was replaced to accommodate the new 125V division II, GNB type NCX-17, batteries. The existing charger has remained as a back up charger and will be used in the event of the primary charger failure. This backup charger will not be used to recharge the batteries after a discharge. The remote instrumentation and alarms of the existing charger were relocated onto the new battery charger. The new battery charger required instrument changes due to the higher charger capacity. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, a revision to the UFSAR Section 8.3 and Appendix H was required.



#### H. Summary of Safety Related Modifications

M01-2-88-003

This modification involved the replacement of the 125 Volt Division II Batteries and rack. These batteries have been replaced because the existing capacity margin to accommodate degraded capacity due to aging and low temperature operation is very small. The battery physical configuration did not change significantly although the new racks are longer and slightly wider. The Safety evaluation concluded that there were no unreviewed safety questions. There were no changes to the Technical Specification. The changes to the UFSAR Section 8.3 and the Fire Hazard Analysis were have been completed.

M01-2-88-029

This modification involved the installation of two (2) fuses (in series) for the RHR Pressure Switches 2E12-N032A/B and 2E12-N033A/B. During the steam condensing mode of RHR, steam is routed from the reactor pressure vessel to the RHR heat exchanger via the RCIC system. During this mode, RHR pressure switches assist in protecting the RHR heat exchanges from over pressurization by providing a signal to close the bypass valves. If one of the pressure switches were to fail, it would cause an electrical short to ground at one of the non-safety related components being supplied from the same DC bus. This could have disabled the RHR control logic for essential equipment required during and/or after a postulated design event. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-2-88-030

This modification involved replacement of the 2B Diesel Generator Fuel Pump Alarm to eliminate nuisance alarms resulting from spurious activation of the 2B DG alarm circuit due to diesel generator electrical noise. Several attempts to suppress the electrical noise have failed to prevent the spurious alarms. This modification removed four (4) SCR diodes, two capacitors and two resistors and installed one HFA relay and two blocking diodes at the diesel generator room panel 2E22-P301B. This will improve the performance of the DG alarm circuits without changing their function or affecting other control circuits. A failure in the alarm circuit will not affect the operation of the diesel generator due to the electromechanical separation provided between the relay coil and the contacts. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-2-89-008

This modification has reduced the possibility of a reactor scram due to inadvertent/spurious RCIC initiations by the addition of a time delay to the turbine trip logic. This time delay provides a four minute span for the operator to determine if the start was spurious and secure RCIC if the system is not needed to maintain vessel inventory. The start of the delay period is signalled by a new control room annunciator which alerts the operator to the RCIC start. This modification was performed as part of the continuing effort to reduce the number of scrams at LaSalle. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

#### H. Summary of Safety Related Modifications

M01-2-89-021

This modification revised the ATWS RPT logic from a one-out-of-two to one-out-of-two taken twice using the Alternate Rod Insertion (ARI) level and pressure instrumentation. The modified circuit also can be tested at full power up to and including the relays that energize the trip coils for the recirculation pump circuit breakers. This change was made to comply with ATWS Rule 10CFR50.62. The Safety evaluation concluded that there were no unreviewed safety questions. This modification revised Technical Specifications 3.3.4.1, 3.3.4.1-1, 4.3.4.1-1, 4.3.4.1-1, and 3.3.4.1-2. UFSAR sections 7.6.4.2.1, 15.8 and Appendix G.3.1.2.2 were revised to show the changes in logic to conform to 10CFR50.62 "Requirements for Reduction of Risk from Anticipated Transients Without Scram (ATWS) Events for Light Water-Cooled Nuclear Power Plants.

M01-2-89-027

This modification involved the revision of the fuel filter restricted alarm circuit for the "2A" Diesel Generator to meet the "blackboard" concept. The design eliminated spurious activation of this alarm. Fuel filter high differential pressure switch 2PDS-DG051 was interlocked with 50-second time delay relay K33 which is energized when DG engine speed reaches 150 rpm. This interlock prevents the alarm from annunciating for 50 seconds after a DG start. This alarm will only appear when fuel oil flow through the fuel filter becomes restricted during DG operation. The main function of the alarm remains unchanged. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

M01-2-90-002

This modification involved the upgrade of the 1/4 inch instrumentation tubing connected to the "2B" Diesel Generator. This modification was initiated in response to the High Pressure Core Spray (HPCS) Safety System Functional Inspection (SSFI) held in 1989. This modification upgrades any non-stainless steel 1/4 inch tubing and components to stainless steel. In addition, crankcase pressure, air box pressure, water jacket pressure and motor driven fuel oil pump filter inlet pressure gauges were installed. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the FSAR/UFSAR section 7.3.6.2 required update to include the addition of the new pressure gauges to the list of local instrumentation.

M01-2-90-005

This modification involved the replacement of the RHR Shutdown Cooling High Flow Isolation Relays with a time delay relay. During RHR shutdown cooling startups, shutdowns, and flowrate adjustments, large differential pressure (dp) spikes are originating from the shutdown cooling (SDC) high flow instruments 2E31-N012AA/BA. The dp spikes are being sensed at the shutdown cooling suction flow elbows. The existing SDC high flow isolation relays 2B21H-K74/77 (Agastate GP) were replaced with a time delay relay (Agastat E7024AB) set for a 1 second time delay. This time delay relay will prevent differential pressure fluctuations seen by isolation switches from tripping the SDC isolation logic. The Safety evaluation concluded that there were no unreviewed safety questions. There were no UFSAR or Technical Specification changes required.

#### H. Summary of Safety Related Modifications

M01-2-90-009

This modification involved the upgrade of the 125 Volt Division III Batteries and rack. The batteries were replaced due to the addition of DC loads since fuel load. The 125V division III system has reached its maximum load for the existing size battery. In addition, these batteries have been replaced because the existing capacity margin to accommodate degraded capacity due to aging and low temperature operation is very small. The battery physical configuration did not change significantly although the new racks are longer and slightly wider. The Safety evaluation concluded that there were no unreviewed safety questions. There were changes to Technical Specification section 3/4.8.2.3.2 which was based on the existing cells' nominal specific gravity of 1.210. The new replacement cells have a nominal specific gravity of 1.215. The changes to the UFSAR Section 8.3 and the Fire Hazard Analysis were also completed.

M01-2-90-010

This modification involved the replacement of the 125 Volt Division III battery charger. This existing charger was replaced because it had become unreliable and spare parts were no longer available. The physical location of the battery charger did not change. This change upsized the DC cable in order to increase the ampacity of the cable. The AC cable was also replaced with a longer cable of the same size. The current and voltage monitoring instrumentation for the battery charger remained the same. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, a revision to the UFSAR Section 8.3 and Appendix H was required.

CR 88-076

This component replacement involved replacing the seat ring, disc and stem of the RHR full flow test valve 2E12-F024B with multi-stage/multi-path, high pressure drop valve trim. The RHR full flow test valve is an 18" 300 lb globe valve. This valve is a Anchor/Darling Valve which has been reported to fail under throttle flow conditions with the valve positioned at 20% open or less. This new multi-stage/multi-path valve trim will have less cavitation problems. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

CR 90-124, CR 90-125  
CR 90-126, CR 90-127

These component replacements involved replacing existing Anderson-Greenwood bellows sealed globe valves on the Main Steam Drain Valves, 2B21-F067A/2B21-F067B/2B21-F067C/2B21-F067D with an Anchor/Darling double disk gate valve. The existing motor operator was not replaced. The purpose of these replacements were to install a valve that is better able to meet through-seat leakage limits while requiring less maintenance than the existing valves. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, UFSAR Table 6.2-21 was revised to indicate the change in valve type (from globe to gate). The table also reflects the Technical Specification stroke time limit of 23 seconds, rather than "standard" stem speed.

#### H. Summary of Safety Related Modifications

ECR 92-922 (L18827)

This exempt change request relocated the digital point ID #1304 from contact 14-14C to contact 5-5C to allow the open torque switch bypass to be set for the Reactor Building Close Cooling Water Supply Valve 1WR179. This change allowed more accurate indication of valve position for the control room from the digital points. It also allowed the open torque switch bypass to be set to the requirements of NOD-MA.1 without sacrificing the accuracy of the digital points. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

ECR 92-922 (18826)

This exempt change request relocated the digital point ID #1312 from contact 14-14C to contact 5-5C to allow open torque switch bypass to be set for the Reactor Building Close Cooling Water Supply Valve 1WR029. This change allowed more accurate indication of valve position for the control room from the digital points. It also allowed the open torque switch bypass to be set to the requirements of NOD-MA.1 without sacrificing the accuracy of the digital points. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-0-90-021

This minor plant change involved modifying the attachment of the 6 GPM AC Lube Oil pump/motor assembly to the "0" Diesel Generator Skid from its present welded attachment to a bolted connection. This will allow the maintenance departments to replace the pump/motor without altering the pump/motor alignment and having to realign the assembly after each replacement. The present welded attachment forces the pump/motor assembly to be removed from its skid so that the welds from the pump/motor skid to Diesel Generator skid can be completed. The necessity to remove the pump/motor from it's as-supplied, as-aligned condition results in the need to perform post installation realignment procedures which are difficult and time consuming. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-90-039

P01-1-90-044

These minor plant changes involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Suppression Pool Inlet Isolation Valves, 1CM027/1CM031. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connections were insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

H. Summary of Safety Related Modifications

P01-1-90-045

P01-1-90-047

These minor plant changes involved installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Return to Suppression Pool Isolation Valves, 1CM025A/1CM026A. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connections were insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-90-049

P01-1-90-052

These minor plant changes involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Hum. Monitor "A" and "B" Inlet Isolation Valves, 1CM017A/1CM018B. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connections were insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-90-053

P01-1-90-055

These minor plant changes involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Hum. Monitor "A" Outlet Isolation Valves, 1CM019A/1CM020A. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connections were insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-90-054

P01-1-90-056

These minor plant changes involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Hum. Monitor "B" Outlet Isolation Valves, 1CM019B/1CM020B. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connections were insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.



H. Summary of Safety Related Modifications

P01-1-90-062

This minor plant change involved the installation of two (2) hydrolazing ports for the "B" RHR LPCI Injection line. The 16-inch diameter RHR injection line, 1RH40CB, which is located outside primary containment contains high radiation levels which are not sufficiently reduced by normal flushing of the line. These hydrolazing ports, which are 1 inch NPS, were welded to the pipes and have removable plugs to provide access into the lines for effective flushing as part of the dose rate reduction program. Two (2) 1 inch diameter globe valves were also installed at the low point of 1RH40CB to allow flushed water and crud from the pipe to drain into a floor drain or collection tank. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-90-069

P01-1-90-070

These minor plant changes involved modifying the attachment of the 6 GPM AC Lube Oil pump/motor assembly to the "1A" and "1B" Diesel Generator Skid from its present welded attachment to a bolted connection. This will allow the maintenance departments to replace the pump/motor without altering the pump/motor alignment and having to realign the assembly after each replacement. The present welded attachment forces the pump/motor assembly to be removed from its skid so that the welds from the pump/motor skid to Diesel Generator skid can be completed. The necessity to remove the pump/motor from its as-supplied, as-aligned condition results in the need to perform post installation realignment procedures which are difficult and time consuming. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-513

This minor plant change rerouted the conduit for the RPS cable 1RP042 which interferes with the opening of the hinged cover of the Main Turbine Control Valve #3's limit switch enclosure. This change also included installation of a new junction box and installation of conduit and cable between the new and existing junction boxes. Changes to existing supports and removal of supports was also required. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-516

This minor plant change replaced the existing flexible wedge gate valve for the Reactor Water Cleanup 1G33-F001 valve with a double disk gate valve. The valve was replaced so that it would be able to meet its through-seat leakage limits while requiring less maintenance than the existing valve. The new valve was furnished with live loaded packing and did not require a leakoff line, therefore, the existing leakoff line was cut, capped and abandoned in place. Also solenoid valve 1E31-F005F1 and temperature element 1E31-F016F1, which provided isolation and leak detection for the leakoff line, were abandoned in place. The control switch for the solenoid valve was removed from the Main Control Room panel. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, Figure 7.3-7 sheet 2 of the UFSAR was revised to indicate that valve 1G33-F001 no longer required a leakoff line.



#### H. Summary of Safety Related Modifications

P01-1-91-517

This minor plant change replaced the existing flexible wedge gate valve for the Reactor Water Cleanup 1G33-F004 valve with a double disk gate valve. The valve was replaced so that it would be able to meet its through-seat leakage limits while requiring less maintenance than the existing valve. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-518

This minor plant change replaced the existing flexible wedge gate valve for the Reactor Core Isolation Cooling System (RCIC) 1E51-F008 valve with a double disk gate valve. A function of this valve is to provide containment isolation in the unlikely event that the RCIC steam supply line should break or rupture. The existing valve exhibits unpredictable behavior when subjected to blowdown conditions of differential pressure and flow. The new Anchor/Darling double-disc parallel slide gate valve was installed because they have been successfully type-tested under simulated blowdown conditions. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-530

P01-1-91-531

These minor plant changes involved repairing the seal between the RHR heat exchangers, 1E12-F001B/1E12-F001A partition plate end tube sheet groove. This involved welding two sill plates, one on each side of the RHR heat exchanger partition plate. FURMANITE FSC-N-3B was injected between the sill plates. The sill plate and the Furmanite configuration will function as a seal to minimize bypass flow between the inlet and outlet plenums of the heat exchanger thus improving heat exchanger performance. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-532

This minor plant change involved removing the existing triangular refueling mast and installing the NF-500 tubular refueling mast. The NF-500 refueling mast is mounted to the fuel grapple and provides a torsionally and externally rigid structure by which the grapple head's motion can be controlled. This cylindrical mast also provides attachment points for the hoisting cables, air lines, and electrical connectors supplying the fuel grapple. The Safety evaluation concluded that there were no unreviewed safety questions. A revision to the Technical Specification Sections 3.9.6 and 4.9.6 due to the increased weight of the mast sections was required. A safety evaluation consisting of a Significant Hazards Analysis (SHA) under the Fuel Handling Accident (FHA) was completed. There were no revisions required to the FSAR/UFSAR.

#### H. Summary of Safety Related Modifications

P01-1-91-539

This minor plant change removed the existing PSA mechanical snubber NB13-1001S and replaced it with a new Lisega hydraulic snubber. Due to the reactor vessel head environment, the NB13-1001S PSA mechanical snubber has experienced a high failure rate. Snubber failures have led to increased maintenance, inspection time, repair/replacement cost along with increased radiation exposure to plant personnel. The Hydraulic snubber is better suited to withstand the reactor vessel head conditions and thus will reduce maintenance, inspections, and exposure time. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-546

This minor plant change replaced the existing 5 ft-lb DC motor on the Reactor Core Isolation Cooling (RCIC) Full Flow Test Downstream Stop valve 1E51-F059 with a 7.5 ft-lb DC motor. The existing thermal overload relay was replaced with a Westinghouse type AN23P overload relay with an FH24 heater. The thermal overload setting was reset to 100% and the MCC circuit breaker magnetic setting was reset. This change increased the thrust that the actuator delivers to the valve stem. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-551

This minor plant change replaced the existing 2 ft-lb motor on the "B" RHR Supply from Fuel Pool emergency Makeup Pump Downstream Stop Valve, 1E12-F093, with a 5 ft-lb motor. This also required the changing of the MCC thermal overload setting. The 1E12-F093 valve indicated that additional actuator thrust was required to ensure the valve's reliability under design basis flow and differential pressure conditions. This change increased the thrust that the actuator delivers to the valve stem. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-552

P01-1-91-053

These minor plant changes replaced the Limitorque gearing overall ratio (OAR) to 82.0 and change the spring pack to model 0301-111 on the "1C" and "1B" RHR Pump Min. Flow Valves 1E12-F064C/1E12-F064B. This change increased the thrust that the actuator delivers to the valve stem by replacing the motor pinion gear and the worm shaft gear to increase the operator's overall gear ratio. This replacement did not alter the actuator weight. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, Table 6.2-21 of the UFSAR was revised to properly show the valves stroke timing.

#### H. Summary of Safety Related Modifications

P01-1-91-556

This minor plant change replaced the existing 2 ft-lb motor on the 1A RHR Blowdown Isolation valve 1E12-F049A with a 5 ft-lb motor. The thermal overload setting was reset. Additional actuator thrust is required to ensure the valves's reliability under design basis flow and differential pressure conditions. This has increased the thrust that the actuator delivers to the valve stem. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-559

This minor plant change involved the addition of a set of piping flanges in the RCIC Head Spray Piping Line (1RI24B) just upstream of the N-7 RCIC head Spray nozzle on the Reactor Pressure Vessel. The installation was intended to ease the process of RPV disassembly and reassembly during refueling by alleviating the need to withdraw the "snout" portion of the existing spray nozzle from the RPV during removal of the Head Spray piping. The existing configuration has resulted in extended reassembly times and unnecessary dose. It has also introduced the possibility of damaging both the vessel nozzle and the snout due to the difficulties involved in making up the vessel to snout flange connection. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-91-561

This minor plant change installed an interposing relay in the Diesel Generator "0" Main Feed Breaker (1413) Closing Circuit, thus providing a greater design margin between the minimum acceptable pickup voltage of the circuit breaker closing coil and the expected voltage across the coil during emergency operation. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-92-511

This minor plant change replaced the undervoltage relays 1427-AP270A/B in the ESF Division I degraded voltage protection circuit. The main function of these undervoltage relays is to monitor the voltage on the Division I 4KV bus and initiate an automatic transfer from off-site power to the associated diesel generator when a degraded voltage condition is detected. This was essentially a "like-for-like" replacement, and the scope of work consisted of only minor electrical changes. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

#### H. Summary of Safety Related Modifications

P01-1-92-512

This minor plant change replaced the undervoltage relays 1427-AF271A/B in the ESF Division II degraded voltage protection circuit. The main function of these undervoltage relays is to monitor the voltage on the Division II 4KV bus and initiate an automatic transfer from off-site power to the associated diesel generator when a degraded voltage condition is detected. This was essentially a "like-for-like" replacement, and the scope of work consisted of only minor electrical changes. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-92-513

This minor plant change replaces the undervoltage relays 1427-AF272A/B in the ESF Division III degraded voltage protection circuit. The main function of these undervoltage relays is to monitor the voltage on the Division III 4KV bus and initiate an automatic transfer from off-site power to the associated diesel generator when a degraded voltage condition is detected. This was essentially a "like-for-like" replacement, and the scope of work consisted of only minor electrical changes. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-92-514

This minor plant change replaced the 120 VAC contactor coils with 480 VAC coils in the open and close motor control circuits of HPCS Injection Valve 1E22-F004. Currently, each open and close motor contactor coil is connected in parallel with an auxiliary relay, and both devices are directly interlocked with the other switch and relay contacts in the control circuit. This change removes the existing 120 VAC contactor coils from the control circuit and connects the new 480 VAC coils to the 480 VAC power supply through an auxiliary relay contact. To accommodate this change, replacement auxiliary relays were also required since the contacts of the existing P&B relays are not rated for 480 VAC. The circuit logic remained unchanged since the contractor coils will be interlocked with the control circuit thorough the auxiliary relays. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-1-92-519

This minor plant change installed an interposing replay to each of the open and close control circuits of the motor operator for the RHR Suction Cooling Inboard Isolation Valve 1E12-F009. Previously, the open and close motor starter (or contactor) coils were directly interlocked with the rest of the switch and relay contacts in the control circuit. This change has each contactor coil indirectly interlocked with the control circuit through an interposing relay. This replaced the contactor coils with relays in the open and close circuits and reconnected the contactor coils to a contact from these new interposing relays. The other side of these relay contacts are wired to the "line" side of the 120 VAC power supply. The logic of the circuit remained unchanged. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

#### H. Summary of Safety Related Modifications

P01-2-90-013

This minor plant change removed the temporary support on Jet Pump Sensing Lines (#5 and #15), added new supports and reinforced the existing lower bracket support and changed the natural frequency of the line by changing the free-span length. The new sensing line clamp and beam are designed to rigidly restrain the jet pump sensing line against the lower support bracket and at a point 7.75 inches lower, reinforcing the original bracket attachment to the sensing line. The clamp assembly consists of a beam which supports the sensing line, a ring which encircles the jet pump diffuser and sensing line, a wedge block which wedges the slide against the jet pump diffuser, and a wedge adjustment screw which drives the wedge block down to provide the necessary clamping force against the beam. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, a change to the UFSAR to clarify the new clamp arrangement was required.

P01-2-90-023

This minor plant change installed a small drain line to the upper and lower bearing oil reservoirs of the LPCS pump motor. This drain line replaced an oil plug, and consists of a 1/2-inch manually operated globe valve and connecting piping. The addition of the drain line will facilitate oil sampling activities associated with the pump motor. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-90-030

This minor plant change installed a vent to the bonnet for the PHR suppression Pool Valves 2E12-F004B. This included installation of two (2) manual gate valves (2E12-F428B and 2E12-F429B) and connecting pipe to the bonnet of valve 2E12-F004B and return to the process header, 2RH01AB. Addition of the vent line has relieved the hydraulic locking problems associated with this valve. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, the UFSAR Table 6.2-21 was revised to add the 2E12-F428B valve as a containment isolation valve.

P01-2-90-035

This minor plant change installed a vent to the bonnet for the RHR suppression Pool Valve 2E12-F004A. This included installation of two (2) manual gate valves (2E12-F428A and 2E12-F429A) and connecting pipe to the bonnet of valve 2E12-F004A and return to the process header, 2RH01AA. Addition of the vent line has relieved the hydraulic locking problems associated with this valve. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, changes to the UFSAR Table 6.2-21 were revised to add the 2E12-F428A valve as a containment isolation valve.



#### H. Summary of Safety Related Modifications

P01-2-90-034

This minor plant change added transient suppressors or varistors across the line and neutral of the 120 VAC feeds to the GE NUMAC power supplies for the main steamline radiation monitors, 2D18-K610A, B, C, and D. The varistors were installed in control room panels 2H13-P635 and 2H13-P636. This change was recommended by GE in SIL No. 499 to protect the power supplies from low energy transients such as voltage spikes. Thus, this change will improve the reliability of these monitors. This change did not alter the function of these monitors which is to initiate a reactor scram on high main steamline radiation. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification and FSAR/UFSAR changes required.

P01-2-90-036

This minor plant change provided a lifting device for the CRD pumps. This change installed a lifting beam with support steel to assist the maintenance departments with performance of maintenance activities. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification and FSAR/UFSAR changes required.

P01-2-90-039

This minor plant change involved installation of two (2) hydrolazing ports for the "B" RHR LPCI Injection line. The 16-inch diameter RHR injection line, 2RH40CB, which is located outside primary containment contains high radiation levels which are not sufficiently reduced by normal flushing of the line. These hydrolazing ports, which are 1 inch NPS, were welded to the pipes and have removable plugs to provide access into the lines for effective flushing as part of dose rate reduction program. Two (2) 1 inch diameter globe valves were also installed at the low point of 2RH40CB to allow flushed water and crud from the pipe to drain into a floor drain or collection tank. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-90-043

This minor plant change installed a small drain line to the upper and lower bearing oil reservoirs of the 2C RHR pump motor. This drain line replaced an oil plug, and consists of a 1/2-inch manually operated globe valve and connecting piping. The addition of the drain line will facilitate oil sampling activities associated with the pump motor. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-90-053

This minor plant change involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Suppression Pool Common Outlet Isolation Valve, 2CM033. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connection was insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.



H. Summary of Safety Related Modifications

P01-2-90-058

This minor plant change involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Suction From Drywell Isolation Valve, 2CM022A. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connection was insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-90-061

This minor plant change involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Suppression Pool Return Isolation Valve, 2CM025A. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connection was insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-90-067

This minor plant change involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Suppression Pool Inlet Isolation Valve, 2CM018B. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connection was insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-90-070

P01-2-90-071

These minor plant changes involved modifying the attachment of the 6 GPM AC Lube Oil pump/motor assembly on the "2A" and "2B" Diesel Generator Skids from their present welded attachment to a bolted connection. This will allow the maintenance departments to replace the pump/motor without altering the pump/motor alignment and having to realign the assembly after each replacement. The present welded attachment forces the pump/motor assembly to be removed from its skid so that the welds from the pump/motor skid to Diesel Generator skid can be completed. The necessity to remove the pump/motor from its as-supplied, as-aligned condition results in the need to perform post installation realignment procedures which are difficult and time consuming. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

#### H. Summary of Safety Related Modifications

P01-2-90-072

This minor plant change involved the installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Suppression Pool Purge Isolation Valve, 2IN031. The damaged field conductors were replaced with #14 AWG Rockbestos Radiation Resistant Firewall SR lead wires. The spliced connection was insulated with Raychem WCSF-N-115 heat shrink tubing. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-91-506

This minor plant change replaced the existing flexible wedge gate valve for the Reactor Water Cleanup 2G33-F001 valve with a double disk gate valve. The valve was replaced so that it would be able to meet its through-seat leakage limits while requiring less maintenance. The new valve was furnished with live loaded packing and did not require a leakoff line, therefore, the existing leakoff line was cut, capped and abandoned in place. Also solenoid valve 2E31-F005F1 and temperature element 2E31-F016F1, which provided isolation and leak detection for the leakoff line, was abandoned in place. The control switch for the solenoid valve was removed from the Main Control Room panel. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, Figure 7.3-7 sheet 2 of the UFSAR was revised to indicate that valve 2G33-F001 no longer required a leakoff line.

P01-2-91-507

This minor plant change replaced the existing flexible wedge gate valve for the Reactor Water Cleanup 2G33-F004 valve with a double disk gate valve. The valve was replaced so that it would be able to meet its through-seat leakage limits while requiring less maintenance. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-91-511

This minor plant change replaced the existing 15 ft-lb motor for the RHR Shutdown Cooling Isolation Valve 2E12-F008, with a 25 ft-lb motor. The thermal overload setting was reset. Additional actuator thrust is required to ensure the valves's reliability under design basis flow and differential pressure conditions. This will increase the thrust that the actuator delivers to the valve stem. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

#### H. Summary of Safety Related Modifications

P01-2-91-512

P01-2-91-513

These minor plant changes replaced the Limitorque gearing overall ratio (OAR) to 82.0 and change the spring pack to model 0301-111 on the 2A RHR Pump Min. Flow Valve 2E12-F064A and the LPCS Pump Full Flow Valve 2E21-F012. This change will increase the thrust that the actuator delivers to the valve stem by replacing the motor pinion gear and the worm shaft gear to increase the operator's overall gear ratio. This replacement did not alter the actuator weight. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification changes required. However, Table 6.2-21 of the UFSAR was revised to properly show the valves stroke timing.

P01-2-91-514, P01-2-91-515

P01-2-91-516, P01-1-91-517

These minor plant changes replaced the existing 2 ft-lb motor for the Reactor Building Closed Cooling Water Isolation Valves 2WR040/2WR179 2WR029/2WR180, with a 5 ft-lb motor. The thermal overload setting was reset. Additional actuator thrust is required to ensure the valves's reliability under design basis flow and differential pressure conditions. This will increase the thrust that the actuator delivers to the valve stem. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-91-524

P01-2-91-525

These minor plant changes involved repairing the seal between the RHR heat exchangers, 2E12-F001B/2E12-F001A partition plate end tube sheet groove. This involved welding two sill plates, one on each side of the RHR heat exchanger partition plate. FURMANITE FSC-N-3B was injected between the sill plates. The sill plate and the Furmanite configuration will function as a seal to minimize bypass flow between the inlet and outlet plenums of the heat exchanger, thus improving heat exchanger performance. The Safety evaluations concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

P01-2-91-555

This minor plant change installed an interposing relay in the Diesel Generator "0" Main Feed Breaker (2413) Closing Circuit, thus providing a greater design margin between the minimum acceptable pickup voltage of the circuit breaker closing coil and the expected voltage across the coil during emergency operation. The Safety evaluation concluded that there were no unreviewed safety questions. There were no Technical Specification or FSAR/UFSAR changes required.

I. Summary of ECCS Outages

This information has been reported monthly in LaSalle's NRC Monthly Reports (Section II.F.2) dated January 1992 through December 1992.

J. Survey of Evaluation Results of Chlorine Shipments by Barge on the Illinois River.

Not required for 1992, the survey was last completed in 1991.

K. Summary of Events Violating Technical Specification 3.4.5 - Primary Coolant Iodine Spiking Exceeding Allowable Limits.

During this reporting period, January 1, 1992 through December 31, 1992, there were no violations of Technical Specification 3.4.5, Primary Coolant Iodine Spikes Exceeding Allowable Limits.

ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT-0 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L00609	VC	ORG047	RECEIVER INLET STOP VALVE LEAKING FREON
L02193	VC	OPDS-VC051	RECALIBRATE SUPPLY FAN FLOW SWITCH
L05347	DG	ODG01S	CLEAN & INSPECT AIR COMPRESSOR SKID
L06050	DG	ODO02T	CLEAN DAY TANK VENT SCREENS
L08772	DG	ODO01P	FUEL PUMP OILER LEAKING OIL
L09622	VC	OFR-VC068	REMount EMERGENCY MAKEUP DIFF PRESS RECORDER
L10433	DG	OJT-DG065	REPLACE WATT TRANSDUCER FOR EDSFI
L10615	NR	OC51-000	ICPS UNSTABLE, WILL NOT STAY WITHIN TOLERANCE
L10672	DG	ODG02JB	DG PANEL REPLACE CAPACITOR
L10744	VC	OPI-VC133	A VC COMPRESSOR LEAKING SUCTION PRESSURE GAUGE
L11805	DG	ODG023B	INSPECT AIR COMPRESSOR CHECK VALVE
L12015	VC	OFZ-VC001F	OVC30YA DAMPER WOULD NOT OPEN
L12454	DC	ODC19E	REPLACE RSH 125V BATTERY CHARGER LUGS
L13115	DG	ODG08DA	INSPECT & VERIFY PROPER OPERATION OF AIR DRYER
L13116	DG	ODG08DB	INSPECT & VERIFY PROPER OPERATION OF AIR DRYER
L13126	DG	ODG08CA	INSPECT AIR COMP SUCTION AND DISCHARGE VALVE
L13127	DG	ODG08CB	INSPECT AIR COMP SUCTION AND DISCHARGE VALVE
L13144	DG	OSI-DG28B	REPLACE DG FREQUENCY METER, READS LOW
L13149	DG	ODG08DA	VERIFY AIR DRYER DRAIN TRAP OPERATION
L13150	DG	ODG08DB	VERIFY AIR DRYER DRAIN TRAP OPERATION
L13178	AP	OAP09E	PERFORM RSH BUS BREAKER CUBICLE INSPECTION
L13403	VC	OTT-VC145	AIR INLET TEMPERATURE STICKING AT 175 DEG
L13650	VC	OXY-VC165A	DETECTOR LOCK INOPERABLE
L13745	VC	OXY-VC125A	DETECTOR CASSETTE CARTRIDGE INOPERABLE
L13754	AP	OAP09E	CLEAN & INSPECT BUS 041 GROUND/TEST DEVICE
L13782	VC	OVC02SB	HUMIDIFIER SCALE BUILD UP IN VESSEL
L13879	VC	OFZ-VC047A	ODOR EATER INLET VALVE FAILED OPEN
L14113	RD	OC11-000	DATA DRIVER CARD BAD
L14121	AP	OAP49E	REPLACE BROKEN HANDLE ON MCC 031
L14332	VC	OTZ-VC043	REPLACE TEMPERATURE CONTROLLER ON ACTUATOR
L14617	DC	OPL96J	REPLACE CABLE ON STANDBY BATTERY PACK
L14721	DG	ODG01K	ADJUST GOVERNOR MOTOR FRICTION CLUTCH
L14981	DG	OTS-DG104	REPLACE TEMPERATURE SWITCH, FAILED CAL
L14982	DG	OTS-DG117	REPLACE SENSOR, FAILED CALIBRATION
L15095	DG	ODC20E	ADJUST TSC DIESEL FLOAT VOLTAGE
L15272	VC	OXY-VC125B	AMMONIA DETECTOR ALARMS AT 15 PPM
L15385	VC	OVC01MA	HUMIDITY VALVE FAILED TO CYCLE
L15479	DG	OPDS-DG036	REPLACE COOLING WATER PUMP STRAINER
L15600	VC	OXY-VC087B	AIR DUCT DETECTOR FAILED TO ALARM
L15732	AP	ODG01P	DG COOLING WATER PUMP INSTALL FEED BREAKER
L15762	VC	OXY-VC125B	REPLACE AMMONIA DETECTOR TAPE DRIVE
L15797	VC	OVC02SB	REPLACE STEAM GENERATOR RELIEF VALVE
L15875	DG	OPDS-DG051	REPLACE FUEL FILTER SWITCH REVERSE TUBING
L15884	DG	ODO004	DISCHARGE VALVE FULL OPEN LIGHT INOPERABLE
L16004	VC	OXY-VC125A	AMMONIA DETECTOR ALARMING AT 12.5 PPM
L16130	DG	ODG000	INSPECT DG HACR-1 TEST SWITCH
L16246	DG	ODG09K	TSC DIESEL WATER JACKET HEATER INOPERABLE

ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT=0 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L16248	DC	0PL96J	DC-DC CONVERTER DRAWING EXCESSIVE CURRENT
L16309	VC	0XY-VC165A	MOISTURE IN AMMONIA DETECTOR FLOW METER
L16401	VC	0VC02CB	VENT RETURN FAN TRIPS ON THERMALS
L16507	DG	0DG044	DRAIN LINE U-BOLT NOT SECURED ON INLET HEADER
L16591	VC	0XY-VC165B	AMMONIA DETECTOR ALARMING
L16721	DC	0DC21E	REPLACE TSC 125 BATTERY CHARGER TIMER HANDLE
L16737	VC	0VC01SA	REPLACE TERMINAL BOX COVER
L16885	DG	0PS-DG042A	AIR SKID SWITCH DRIFTING, ALARM RECIEVED
L16920	DG	0DG01K	INSTALL 20 TEMP CYLINDER TEST VALVES
L16926	DG	0LI-DO002B	REPLACE DG LEVEL GAUGES
L16964	VC	0XY-VC165B	AMMONIA DETECTOR TAPE NOT ADVANCING
L17047	VC	0VC01FB	INSPECT SUPPLY AIR FILTER UNIT DAMPER SUPPORT
L17189	DC	0DC20E	CORROSION ON TSC BATTERY CELL TERMINALS
L17552	AP	0AP49E	REPLACE BROKEN HANDLE, MCC031 CUBICLE C-4
L17912	VC	0XY-VC087A	0XY-VC087B FAILED CALIBRATION
L17971	DG	0DG09K	TSC DIESEL GEN VENTILATION DAMPERS INOPERABLE
L18111	DC	0DC18E	RSH 125 VDC BATTERIES CELLS 55 & 58 LOW
L18146	NR	0NR000	VOLTAGE PREREGULATOR NEGATIVE OUTPUT
L19057	DG	0DG08CB	AIR COMPRESSOR AFTERCOOLER AIR LEAK
L19197	VC	0FSY-VC004X	REPLACE DEFECTIVE RELAY



ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT=1 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L04672	AP	1E32-F008	REPLACE 136X-2 CUBICLE F5
L06049	DG	1DO000	CLEAN DG DAY TANK VENT SCREENS
L06051	DG	1DO000	CLEAN DG DAY TANK VENT SCREENS
L08377	RH	PDI-1E12-N029B	RHR INJECTION LINE SWITCH DRIFTS
L09362	DC	1ER-DC015	DIV I GRND DETECTOR +15V GROUND ON RECORDER
L09594	RD	LT-1C11-N012A	INSPECT CRD SCRAM DISCH LEVEL TRANSMITTER
L09700	RH	ZI-1E12-R608A	CONTROL RM INDICATOR DOES NOT RESPOND
L09705	NB	RE-1B13-D193FB	LPRM 32-25D HIGH SPIKES
L09806	NR	1NR000	1D APRM HIGH NEUTRON TRIP RECEIVED
L09863	RD	TR-1C11-R018A	CRD 30-11 TEMPERATURE PEGS UPSCALE
L09953	RI	1E51-C003	TAKE RCIC WATER LEG PUMP CURRENT READINGS
L10012	HP	1E22-C001	PERFORM HPCS MOTOR MEGGER
L10013	VG	1VG02C	MONITOR SBT FAN LINE CURRENT ON MOTOR
L10108	AP	1AP76E-F5	REPLACE MCC 135Y-2 CONTROL TRANSFORMER
L10435	DG	1E22-S001	CALIBRATE 1B DG METERS FOR EDSFI
L10662	DG	1LS-DO004	SECURE DAY TK LEVEL SWITCH
L10752	DG	1DG01K	SECURE CONDUIT ON DIESEL SKID
L10841	RD	1C11-000	RMCS ACTIVITY CONTROLS INACCURATE INDICATION
L10967	DG	1PS-DG047	REPLACE CRANKCASE PRESSURE SWITCH
L11141	AP	1AP58E	MCC 132X-1/D2 REMOVE OVERLOAD RELAY
L11834	RD	1C11-D001-100	HCU 30-55 ACCUMULATOR LEAKING
L12319	RD	1C11-D001-004	REPLACE LIGHT ASSEMBLY FOR CRD 26-55
L12438	DG	1DO024	FUEL OIL SUCTION VALVE FAILED TO OPEN
L12451	DG	1TI-DG004	REPLACE DG COOLING WATER DISCH INDICATOR
L12470	RI	1E51-C003	RCIC WATER LEG PUMP LOSING OIL
L12632	DC	1ER-DC009	GROUND DETECTOR RECORDER NO INDICATION
L12673	NB	1H13-P629	REPLACE LPCS/RHR RELAY FUSE
L12674	NB	1H13-P629	REPLACE LPCS/RHR RELAY FUSE
L12708	RD	UR-1C11-R611	INSPECT SCRAM TIME RECORDER
L12795	RI	1E51-F045	RCIC TURBINE SUCTION VALVE PACKING LEAK
L12914	RI	FCK-1E51-R600	REPLACE RCIC FLOW CONTROLLER THUMBWHEEL
L12940	RH	1E12-F073A	RHR VENT INDICATOR DOES NOT RESPOND
L13019	DG	1DG08CA	REPLACE STARTING AIR COMPRESSOR BELTS
L13045	RH	PS-1E12-N018	INSTRUMENT STOP VALVE LEAKS
L13111	DG	1DG09DA	INSPECT FOR PROPER OPERATION OF AIR DRYER
L13112	DG	1DG09DB	INSPECT FOR PROPER OPERATION OF AIR DRYER
L13114	DG	1DG08DB	INSPECT FOR PROPER OPERATION OF AIR DRYER
L13137	DC	1ER-DC009	NO CHART INDICATION
L13151	DG	1DG08DA	INSPECT OPERATION OF AIR DRYER DRAIN TRAP
L13152	DG	1DG08DB	INSPECT OPERATION OF AIR DRYER DRAIN TRAP
L13153	DG	1DG09DA	INSPECT OPERATION OF AIR DRYER DRAIN TRAP
L13154	DG	1DG09DB	INSPECT OPERATION OF AIR DRYER DRAIN TRAP
L13620	DG	1E22-S001	DG FUEL PUMP FAILURE ALARMS
L13621	DC	1EI-DC056	CALIBRATE THE 250VDC CHARGER VOLTMETER
L13687	AP	1AP38E	REPLACE BREAKER C5 HANDLE
L13786	NR	1C51-000	REPLACE APRM'S K18 RELAYS

ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT=1 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L13792	DG	1DG08CA	INSPECT AIR COMP SUCTION & DISCHARGE VALVE
L13793	DG	1DG08CB	INSPECT AIR COMP SUCTION & DISCHARGE VALVE
L13837	DG	PI-1E22-R514	REPLACE FUEL FILTER GAUGE
L13938	RD	1C11-D001-010	REPLACE HCU 14-51 DIRECTIONAL CONTROL VALVE
L14256	MS	LIS-1B21-N702B	LOW WATER LEVEL INDICATOR STICKING
L14370	DG	1DG09DA	AIR DRYER TEMPERATURE CONTROLLER INOPERABLE
L14371	"	1DG09DB	AIR DRYER TEMPERATURE CONTROLLER INOPERABLE
L14514	NB	HK-1B21-R613	JET PUMP TOTAL FLOW INDICATES LOW
L14553	DG	1DG01K	LOW LUBE OIL PRESSURE ALARM FAILED TO CLEAR
L14722	DG	1PS-DG042A	AIR BANK DIGITAL ALARM UP IN CONTROL ROOM
L14725	DC	1DC36E	CHARGER TRIPS AC CIRCUIT BREAKER
L14938	RI	1E51-C002	RCIC TURBINE TRIPPED ON OVERSPEED
L14983	RI	1E51-C002	RCIC TURBINE TRIPPED ON OVERSPEED
L15064	HP	1E22-F015	RESET SUCTION VALVE LIMIT SWITCH ROTOR
L15065	HP	1E22-F012	RESET MIN FLOW LIMIT SWITCH ROTOR
L15073	RI	1E51-F045	RCIC INLET VALVE PACKING LEAK
L15077	NR	1NR000	LPRM 32-17B DOWNSCALE LAMP FAILED TO LIGHT
L15106	VY	1TI-VY016	RHR ROOM TEMP READS LOW
L15221	RI	1E51-C003	REPLACE RCIC WATER LEG PUMP MOTOR BEARINGS
L15269	HG	1PA12J	HYDROGEN RECOMB LIGHT FAILED
L15310	VG	1VG01C	REPLACE SBGT SUPPLY BROKEN TERMINAL BLOCK
L15612	DG	1E22-C302A	AIR COMPRESSOR, REMOVE DUCT TAPE & WIRES
L15731	AP	0DG01P	REPLACE COOLING WATER PUMP FEED BREAKER
L15743	RD	1C11-D001-011	INSTRUMENT BLOCK CAP LEAKING NITROGEN
L15785	DG	1AP80E	REPLACE DG OIL CIRC PUMP OVERLOAD RELAY
L15787	RH	PI-1E12-R002C	RHR PUMP GAUGE STICKING
L15807	RD	1C11-D001-038	HCU 06-35 NITROGEN LEAKING
L15819	RH	1E12-C002B	RHR PUMP SEAL COOLER, REPLACE BLOWN GASKET
L15820	RH	1E12-C002C	RHR PUMP SEAL COOLER, REPLACE BLOWN GASKET
L15883	AP	1AP04E	D/G BREAKER NOT CLOSING
L15898	NR	RY-1C51-K605GM	"A" APRM ALARMING ABNORMALLY
L15938	RD	1C11-D001-000	REPLACE SCRAM PILOT VALVES AT HCU 06-27
L16034	NR	RR-1C51-R603D	RECORDER DIGITAL DISPLAY INOPERABLE
L16044	NR	RR-1C51-R603A	SECURE GREEN PEN CARRIAGE
L16132	DG	1E22-S001	DG HACR-1 RELAY INSPECTION
L16202	DG	1DG01K	REPLACE SPACE HTR OVERLOAD RELAY
L16210	DG	1DG01K	DG SOAKBACK OIL PUMP FAILS TO RUN
L16243	DG	1PS-DG042A	1A DG AIR COMP, LOW AIR PRESS ALARM UP
L16403	RD	1C11-D001-012	HCU 14-55 NITROGEN LEAK
L16543	RD	1C11-D183-126	HCU 42-07 VALVE LEAKAGE
L16638	RH	TE-1E12-C002BB	RHR PUMP ERRATIC TEMPERATURE INDICATION
L16723	RD	1C11-F022A	REPLACE CRD FILTER VENT HANDWHEEL
L16788	RH	1E12-F409A	RHR STRAINER CLOGGED NEEDLE VALVE
L16918	DG	1DG01K	INSTALL 20 TEMPORARY CYLINDER TEST VALVES
L16919	DG	1E22-S001	INSTALL 20 TEMPORARY CYLINDER TEST VALVES
L16923	DG	1LI-DO009B	REPLACE LEVEL GAUGES
L16927	DG	1LI-DO002B	REPLACE LEVEL GAUGES

ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT=1 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L17068	NR	RE-1B13-D193BG	FULL CORE DISPLAY LPRM 24-25B D/S IS LIT
L17115	AP	1AP57E	REPLACE 131Y-1 C4 BREAKER POSITION IND SLEEVE
L17565	DC	ER-1E22-R542	DIV 3 BATT GROUND RECORDER PEN NOT WORKING
L17696	DG	1DG08CA	AIR COMP CIRCUIT BREAKER TRIPPED MAGNETICS
L17796	DC	1DC09E	CALIBRATE DIV II CHARGER AMMETER
L18103	NR	1C51-000	APRM D 5 VOLT POWER SUPPLY PS-25 HAS 175 MV P-P
L18125	NR	JI-1C51-R901B	B APRM SPIKED UPSCALE
L18278	AP	1APG4E	REPLACE CONTROL POWER TRANSFORMER SCREW
L18298	AP	1AP41E	REPLACE MCC 131B-4 COMPT B4 BREAKER HANDLE
L18795	DG	1DG049A	DG AIR COMP CHECK VALVE STUCK OPEN
L18836	DG	1DG000	AIR START MOTOR REGULATOR SET TO LOW
L18892	AP	1AP60E	REPLACE MCC 132Y-2 A-2 BREAKER HANDLE
L18897	DG	1E22-S001	SECURE K1 LOCKOUT RELAY
L19171	VG	1VG02C	SBGT COOLING FAN STARTED ON RPS BUS TRANSFER
L19318	RD	1C11-D001-076	REPLACE CRD 10-15
L19717	DG	1DG08CB	REPLACE 'B' AIR COMPRESSOR BELTS
L19721	DG	1DG03J	REPLACE 1A DG K3 RELAY
L19781	DC	1DC38E	24/48 SYS B BATTERY CHARGER INOPERABLE

ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT=2 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L05235	RD	2C11-D001-139	REPLACE HCU 58-31 STOP VALVE HANDWHEEL
L06052	DG	2D002M	CLEAN DAY TANK VENT SCREENS
L06053	DG	2D0000	CLEAN DAY TANK VENT SCREENS
L06603	DG	2E22-S001	VERIFY DG WIRING
L07005	RH	2RH000	REPLACE RHR WATERTIGHT DOOR LATCHING MECH
L08632	DC	2DC000	PERFORM 24/48V BATTERY ICV'S
L09172	DC	2DC06E	REPLACE 221Y CROSSTIE BREAKER AUX SWITCH
L09954	HG	2HG01A	MONITOR HYD RECOMB MOTOR LINECURRENT
L10014	HP	2E22-C003	TAKE HPCS WATER LEG PUMP CURRENT READINGS
L10015	RI	2E51-C003	TAKE RCIC WATER LEG PUMP CURRENT READINGS
L10016	VG	2VG02C	MONITOR SBTG COOLING FAN LINE CURRENT
L10017	RH	2VY01C	MONITOR RHR SUPPLY LINE CURRENT
L10018	HP	2VY02C	MONITOR HPCS SUPPLY LINE CURRENT
L10020	LP	2VY04C	MONITOR LPCS SUPPLY LINE CURRENT
L10434	DG	2E22-S001	CALIBRATE DG METERS FOR EDSFI
L10514	VY	2VY04A	REMOVE INSULATION FOR CHEMICAL CLEANING
L10538	AP	2APA8E	MCC 231B-7 BREAKERS TRIPPED
L10644	DG	2E22-D300	DG COOLING WATER DISCHARGE INSUL DAMAGED
L10651	DG	2DG08DA	REPLACE DG AIR DRYER INDICATING LIGHT
L10714	DG	2DG08CA	REPLACE DG AIR COMP SHEET METAL SCREWS
L10836	DG	2VG02JB	INSTALL COVER FOR COMPONENT 86
L10840	DG	2DG02JA	TIGHTEN LOOSE TERMINALS ON COMPONENT 59N
L10852	RD	TE-2C11-C001AA	REPLACE PUMP MOTOR BEARING THERMOCOUPLE
L11153	DG	2DG09DA	AIR DRYER FAILED TO OPERATE
L11539	NR	2C51-000	REPLACE LPRM POWER SUPPLY/CIRCUIT CARDS
L11849	NR	RY-2C51-K605GS	2E APRM RECIEVED HIGH HIGH NEUTRON TRIP
L12032	NR	2C51-000	FABRICATE DETECTOR PIGTAILS
L12089	DG	2JT-DG024	CHECK VAR TRANSDUCER & METER MEASUREMENT
L12090	DG	2D020M	REMOVE RECIRCULATION ORIFICE
L12259	NR	RE-2C51-N003D	TIP D READ LOW DURING TRANSVERSE TRACE
L12431	RD	TI-2C11-R902A	REPLACE TEMPERATURE INDICATOR
L12448	DC	2DC09E	DIV I CHARGER OSCILLATING APPROX 2 AMPS
L12462	DG	2DG08CA	INSPECT AIR COMP SUCTION DISCHARGE VALVES
L12463	DG	2DG08CB	INSPECT AIR COMP SUCTION DISCHARGE VALVES
L12472	RH	2E12-F411B	RHR CONTROL SWITCH, INCORRECT INDICATION
L12493	AP	2AP85E	NO LIGHT INDICATIONWHEN BUS ENERGIZED
L12679	AP	2AP64E	REPLACE MCC 234X-1 RESET BUTTONS
L12797	RD	UR-2C11-R611	INSPECT SCRAM TIME RECORDER
L12857	RH	2TS-VY001	REPLACE CUBICLE COOLER FAN TEMP SWITCHES
L12863	DG	2AP07E	REPLACE BREAKER PLUNGER INTERLOCK CLIP
L13098	NR	2NR000	LPRM 16-17 BINDING
L13117	DG	2DG09DA	INSPECT AIR DRYER OPERATION
L13118	DC	2DG09DB	INSPECT AIR DRYER OPERATION
L13120	DC	2DG08DB	INSPECT AIR DRYER OPERATION
L13125	DG	2DG08CA	INSPECT AIR COMP SUCTION AND DISCHARGE VALVE

ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT=2 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L13145	DG	2DG08DA	INSPECT AIR DRYER DRAIN TRAP OPERATION
L13165	DC	2DC000	REPLACE CONDUIT SUPPORT BOLT
L13171	DG	2DG01K	REPLACE BROKEN HEAT SHRINK
L13179	DG	PS-2E22-N508	CORRECT FUEL PUMP PRESS SWITCH WIRING
L13334	HP	2E22-P301B	REPAIR CUT CABLE
L13335	HG	2PA12J	REPLACE HYD RECOMBINER PANEL LIGHT
L13372	DG	2E22-F362A	AIR DRYER CHECK VALVE FAILED
L13507	DG	2PDS-DG051	2A DG FUEL FILTER RESTRICTION ALARM UP
L13720	DC	2IP03E	TSC UPS FAILED TO RETURN TO NORMAL
L13787	NR	2NR000	REPLACE APRM'S K18 RELAYS
L14298	AP	2SA01C	REPLACE SWGR 241X TERMINAL BLOCK
L14324	RD	2C11-D001-094	REPLACE CRD 38-59 VALVE HANDWHEEL
L14437	DG	TS-2E22-N901B	CALIBRATE REFRIG AIR DRYER TEMP SWITCH
L14518	DG	2DG08CB	INSPECT AIR COMP SUCTION & DISCHARGE VALVE
L14547	AP	2AP79E	REPLACE 243-1 COMPT 2C LUG
L14598	DG	2DG01F	COOLING WATER STRAINER INOPERABLE
L14610	VY	2TZ-VY023A	DAMPER ACTUATOR INOPERABLE
L14611	VY	2TZ-VY023B	DAMPER ACTUATOR INOPERABLE
L14615	NR	RY-2C51-K605BX	LPRM 16-17C READ BETWEEN 50%
L14622	AP	2AP56E	REPAIR CUT CABLES
L14881	NR	2NR000	D APRM SPIKED UP TO 11% & SLOWLY DRIFTED
L15007	RI	2E51-C005	VACUUM PUMP WATER SPRAYED ON MOTOR
L15008	RI	2E51-C005	VACUUM PUMP SEAL LEAKAGE
L15059	AP	2AP20E	PERFORM SWGR 235Y HFA RELAY CALIBRATION
L15084	RI	2DC066	LOSS OF POWER TO 2E15-F019
L15097	RI	2E51-C002	RCIC TURBINE OVERSPEED ASSEMBLY INOPERABLE
L15100	RI	2E51-F045	RCIC ISOLATION VALVE PACKING LEAK
L15162	RD	2C11-000	SCRAM VALVE DELAY ACTUATING
L15265	RD	2C11-D003-A	CRD FILTER, STRIPPED DRAIN LINE UNION
L15299	AP	2AP03E	237X/Y FEED BREAKER, NO CLOSED INDICATION
L15301	PC	2FS-CM902	NO LOW FLOW SWITCH ALARM INITIATED
L15318	NB	RY-2C51-K605FF	LPRM 48-25D DOWNSCALE @ 50% POWER
L15423	NR	RY-2C51-K605GS	2E' APRM CANNOT CALIBRATE
L15447	DG	2DG08CA	AIR COMPRESSOR MOUNTING BOLT SHEARED OFF
L15544	DG	2E22-F369B	HPCS D/G RECEIVER LEAKS
L15603	DC	2ER-DC020	125 VDC BUS PEN IS NOT WORKING
L15746	DG	2DG049B	INSPECT AIR COMPRESSOR CHECK VALVE
L15853	RI	2E51-F331	STEAM LINE TRAP, LEAK AT FLANGE
L15872	LC	FT-2E32-N053A	REPLACE FLOW TRANSMITTER TERMINAL STRIP
L15914	VG	2VG003	INSPECT SBTG SUCTION DAMPER
L15915	VG	2VG01C	MONITOR LINE CURRENT ON SBTG FAN MOTOR
L15997	MS	TR-2B21-R816	TEMP RECORDER, CHART PAPER FAILED TO ADVANCE
L16023	RD	TE-2C11-N730	HCU 14-47 THERMOCOUPLE READS UPSCALE
L16051	HP	PSH-2E22-N014	REPLACE SUCTION PRESS INSTRUMENT STOP VALVE
L16053	NR	RY-2C51-K605GS	SUPURIOUS ALARMS RECEIVED

ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT=2 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L16116	NR	RY-2C51-J600	D TIP DRAWER BOTTOM READING
L16134	DG	2DG000	INSPECT DG HACR-1 TEST SWITCH
L16198	RD	XY-2C11-K919F	CRD 10-19 TRIPPED RMCS
L16200	DC	2PM01J	250V BATTERY DISCHARGE HIGH
L16201	RI	2E51-F086	236Y-2 BREAKER TRIPPED ON THERMALS
L16206	RI	2E51-F086	LUBRICATE ISOLATION VALVE STEM
L16209	AP	2AP000	SWGR 231B AUTO TRIPPED ON NEUTRAL OVERCURRENT
L16341	RH	PIS-2E12-N022C	DISCHARGE HEADER INDICATOR, BENT NEEDLE
L16396	AP	2AP000	SECURE PRESSURE REGULATOR IN PANEL
L16438	DG	2DG08CA	INSPECT AIR COMP SUCTION & DISCHARGE VALVE
L16439	DG	2DG08CB	INSPECT AIR COMP SUCTION & DISCHARGE VALVE
L16449	DG	2DG08CA	AIR COMP SHOWS 18# OF OIL PRESSURE
L16500	RD	2C11-C001B	CLEAN CRD PUMP SCREENS
L16577	RD	2C11-C001A	REPLACE CRD PUMP MOTOR VENT SCREEN
L16639	RH	2E12-F024A	FULL FLOW TEST VALVE TRIPPED ON MAGNETICS
L16650	RD	2C11-D001-052	ACCUM 10-27 NITROGEN LEAKAGE
L16677	RI	2E51-F086	RCIC VACUUM BREAKER VALVE PACKING LEAKAGE
L16678	RH	2E12-F024A	REPLACE ANTI ROTATION LOCKING DEVICE
L16766	RI	2E51-C002	TRIP & THROTTLE FAILED TO RESET
L16876	NR	RE-2C51-N003A	TIP A DAMAGED DURING TIP SET
L16924	DG	2D0009B	REPLACE LEVEL GAUGES
L16925	DG	2LI-D0002B	REPLACE LEVEL GAUGES
L16946	RI	2E51-F086	LUBRICATE VALVE YOKE
L17093	RI	2E51-F008	BREAKER TRIPPED ON MAGNETICS
L17262	RI	2E51-F059	FULL FLOW TEST STROKE TIMES
L17271	RD	2C11-C001B	HIGH CRD PUMP VIBRATION IN GEAR BOX
L17291	RD	ZS-2C11-F004A	FLOW CONTROL VALVE DOES NOT SHOW FULL OPEN
L17334	NB	RE-2B13-D193BV	LPRM 16-17A SPIKING AT 100%
L17335	NR	RY-2C51-K601H	UNABLE TO ADJUST
L17340	NR	RY-2C51-K605GM	RECONNECT RECORDER TO APRM OUTPUTS
L17360	RH	PIS-2E12-N022B	REPLACE RHR PUMP PRESSURE COVER PLATE
L17387	DG	2DG08CB	INSPECT AIR COMPRESSOR
L17471	MS	MS01-2877S	REPLACE MECH SNUBBER PIPE CLAMP BOLT
L17632	RI	2E51-C005	REPLACE BAROMETRIC CONDENSER PIGTAIL
L17668	NR	RY-2C51-K601E	IRM E DID NOT RESPOND WHEN PULLING RODS
L17717	NB	LT-2B21-N403D	CALIBRATE REACTOR VESSEL LEVEL TRANSMITTER
L17901	RP	2C71-S003E	REPLACE RPS LOGIC CARD
L18123	DG	2DG08CB	STARTING AIR COMPRESSOR REMAINS RUNNING
L18188	RD	2RM000	RMCS TRIPPED AND WILL NOT RESET
L18238	RH	TRS-2E12-R601	SPURIOUS RHR TEMPERATURE RECORDER ALARM
L18253	RD	XY-2C11-K921	RMCS TRIPS ON ROW 30-11
L18379	LP	FS-2E21-N004	SWITCH FOUND OUTSIDE OF REJECT LIMIT
L18697	DC	2DC000	DIV II GROUND DETECTOR HAS +60 VDC GROUND
L18731	NB	LR-2B21-R884A	RX LEVEL/PRESS RECORDER TAKE UP SPOOL
L18864	RD	2C11-000	RMCS TRIPPED ON ROD 30-11
L18907	NB	PS-2B21-N413B	RPV LO PRESS & INJ LINE B/C LPCI



ATTACHMENT A  
SAFETY-RELATED MAINTENANCE COMPLETED  
(NON-OUTAGE RELATED)

----- UNIT=2 -----

WRNUM	SYSTEM	EPN	DESCRIPTION
L18982	DG	2DG01K	SPACE HEATER NOT OPERATING
L19140	RD	2C11-C001B	CRD PUMP OIL COOLER LEAKAGE
L19157	DG	2DG000	REPLACE DG SMALL BORE TUBING
L19178	RH	2E12-F024A	FULL FLOW TEST VALVE MOTOR TRIPPED
L19246	RD	2C11-D001-066	HCU 18-19 CHARGING NIPPLE LEAKS
L95782	PC	2PL75J	REPLACE CAM PART ASSEMBLY T-HANDLE
L98683	AP	2AP07E	REPLACE BUS 243 CUB 5 SBM SWITCH
L98833	RH	2E12-F362C	REPLACE RHR PUMP DISCH VENT HANDWHEEL

ATTACHMENT B  
II.B UNIT SHUTDOWNS  
(UNIT 1)

-----  
DATE: 920301 GENERATOR OFF-LINE: 94.25 OUTAGE TYPE: Forced (L1F15)  
(YYMMDD) (Hours)

REASON: Automatic reactor scram due to loss of main condenser vacuum.  
Condenser vacuum was lost when the steam seal evaporator failed  
resulting in a loss of steam to the main turbine seals.

CRITICAL ACTIVITY PATH:

Troubleshoot, repair and test the steam seal evaporator.  
Correct limit switch problems on the main turbine valves.  
Repair leaks and correct valve indication problems on the heater  
drain system.  
Replace four fire seals in steam sensitive areas.  
Repair radiation monitors on the 'B' control room HVAC system.

CORRECTIVE ACTIONS (DVR/LER# if applicable):  
DVR# 1-1-92-0014 LER# 92-003-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None.

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

WR NUM	SYS	EPN	DESCRIPTION
L08982	RP	1C71-N006F	Replace the #3 Turbine Stop Valve Limit switch
L12797	MS	1B21-CV4	Control problem at EHC panel
L13591	RD	1C11-K946BK	Control Rod 30-11 full out indication
L13646	VC	OREY-VC081XB	Radiation Monitor relay failed to energize
L13872	RD	JY-1C22-K601A	Division 1 Alternate Rod Insertion trouble alarm

-----  
DATE: 921003 GENERATOR OFF-LINE: 2160.5 OUTAGE TYPE: Scheduled (L1R05)  
(YYMMDD) (Hours)

REASON: Refueling Outage.

CRITICAL ACTIVITY PATH: See Appendix A.

CORRECTIVE ACTIONS (DVR/LER# if applicable): None.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None.

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: See Appendix B.

APPENDIX A  
CRITICAL PATH ACTIVITY  
REFUEL OUTAGE (L1R05)

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DESCRIPTION

MAIN TURBINE OFF LINE  
INSPECT 1B21-RSDV2 VALVE  
INSPECT 1PS-FW088 FOR OIL LEAK  
REMOVE 1PCM111 PERSONNEL ACCESS HATCH STRONGBACKS  
INSTALL 1PCM111 PERSONNEL ACCESS HATCH STRONGBACKS  
COOL REACTOR TO COLD SHUTDOWN  
BEGIN UNIT AUXILIARY TRANSFORMER MAINTENANCE  
COMPLETE REACTOR VESSEL DISASSEMBLY  
BEGIN CIRCULATING WATER WINDOW MAINTENANCE  
BEGIN TURBINE GENERATOR WINDOW MAINTENANCE  
BEGIN DIESEL GENERATOR B WINDOW MAINTENANCE  
MRI BELLOWS INSULATION MODIFICATION WALKDOWN-(P01-1-91-528)  
MRI BELLOWS INSULATION INSTALLATION-(P01-1-91-528)  
BEGIN DC BATTERIES (DIV III) MAINTENANCE  
BEGIN HIGH PRESSURE CORE SPRAY MAINTENANCE  
UNLOAD REACTOR CORE  
BEGIN SAFETY/RELIEF VALVES (SRV/ADS) MAINTENANCE  
BEGIN RESIDUAL HEAT REMOVAL B MAINTENANCE  
BEGIN RX CORE ISOLATION COOLING MAINTENANCE  
INSPECT 1HD059A HEATER DRAIN VALVE  
INSPECT 1HD056A HEATER DRAIN VALVE  
BEGIN CONTROL ROD DRIVE MAINTENANCE  
BEGIN REACTOR WATER CLEAN-UP MAINTENANCE  
BEGIN DIESEL GENERATOR A MAINTENANCE  
SIGNATURE TRACE, SET LIMIT SWITCHES ON VALVE 1WR180  
BEGIN DIESEL GENERATOR O MAINTENANCE  
BEGIN LOW PRESSURE CORE SPRAY MAINTENANCE  
REPAIR 1B21-1BSFV1 MSR STEAM FEED VALVE INDICATION  
REPLACE 1CD01PB CD/CB PUMP COUPLING  
COMPLETE CORE RELOAD  
INSPECT AND TEST INTEGRATED LEAK RATE TEST INSTRUMENT CABLES  
INSPECT 1VP01CB VP CHILLER  
HYDROTEST 1HD059A HEATER DRAIN VALVE  
PERFORM SIGNATURE TRACE, SET LIMIT SWITCHES ON 1VP053B VALVE  
PERFORM VOTES TEST ON 1VP053B VALVE  
REASSEMBLE 1HD059A HEATER DRAIN VALVE  
COMPLETE CONTROL ROD DRIVE TIMING & FRICTION TESTS  
COMPLETE REACTOR REASSEMBLY  
MODIFICATION TEST, CLEAN CONDENSATE CHECK VALVES-(P01-1-90-026)  
REINSTALL 1HD056A HEATER DRAIN VALVE INSULATION  
REINSTALL 1HD059A HEATER DRAIN VALVE INSULATION

APPENDIX B  
REFUELING OUTAGE (L1R05)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L19453	HP	1E22-F012	INCREASE HPCS PUMP FLOW BYP VALVE THRUST
L19461	RD	1C11-D001-002	REPAIR CRD 22-59 FULL IN/OUT LIGHT SOCKET
L19481	RH	1E12-F024A	FULL FLOW TEST STOP VALVE FAILED TO CLOSE
L19509	RI	1E51-F063	REPLACE SEAL ON LIMITORQUE OPERATOR
L04716	RH	1E12-F098C	RHR MANUAL DISCHARGE VALVE LEAKING
L06124	LC	1E32-F001E	REBALANCE ISOLATION VALVE TORQUE SWITCH
L06940	DC	1DC02E	250V DC BUS UNABLE TO CLOSE BREAKER WITH DOOR
L07158	NR	RY-1C51-K601D	1D SRM SHORT PERIOD ALARM SPORADIC
L07282	DC	1DC01E	250 VDC CELL #61 ICV BELOW LIMIT
L08824	NR	RY-1C51-K601D	IRM (D) READING HIGH
L09602	RP	1RP000	1C71-K7A MSL HI RAD SCRAM & ISOL RELAY NOISY
L09846	MS	1B21-F502B	SJAE PCV UPSTREAM STOP VALVE MECH POS IND
L10656	DG	1DG01K	REPLACE ENGINE TERMINAL BOX CABLE LUG
L10658	DG	1DG01K	1DG02JB PANEL, LUGS BENT IN EXCESS OF 45 DEG
L10659	DG	1DG01K	1DG05J PANEL, LUGS BENT IN EXCESS OF 45 DEG
L10660	DG	1DG01K	1DG03J PANEL, LUGS BENT IN EXCESS OF 45 DEG
L10661	DG	1DG01K	1DG02JA PANEL, LUGS BENT IN EXCESS OF 45 DEG
L10666	DG	1DG01K	1DG03J PANEL, LOCKE TERMINAL BOARD SECTION
L10700	DG	1DG01K	OIL LEAK AROUND AIR BOX DRAIN LINE FITTING
L10759	DG	1E22-P301B	PANEL RELUG WIRE AT TERMINAL 106 OF TB11
L10824	DG	1DG04T	DG DAYTANK MANWAY FLANGE
L10825	DG	1E22-S001	FUEL OIL FLANGE LEAK
L11177	RD	1C11-F109A	CRD PUMP VENT LEAKING
L11800	RD	XY-1C11-K946BH	CR 46-19 NO POSITION INDICATED WHEN AT 48
L11896	DG	0DG000	INSPECT AIR COMP SUCTION AND DISCHARGE VALVES
L11897	DG	0DG000	INSPECT AIR COMP SUCTION AND DISCHARGE VALVES
L11908	NR	RY-1C51-K605EZ	REPAIR LPRM DETECTOR 32-25B
L13046	MS	PS-1B21-N015B	MSL LOW PRESSURE STOP VALVE LEAKS BY
L13740	NR	RY-1C51-K605CK	LPRM 24-09C CAUSE UPSCALE ALARMS
L13959	RD	XY-1C11-K939AX	HCU 26-39 DOES NOT HAVE FULL OUT INDICATION
L14571	RH	1E12-F094	VALVE LEAKS BY SEAT
L15187	RD	1RD000	REPLACE SCRAM BOXES COVER CLIPS
L15254	RH	1E12-F068A	RHR HX OUTLET VALVE PACKING LEAK
L15348	RH	1AP82E	REPAIR 1VY06C VENT FAN CONDUCTOR JACKETS
L15387	LP	1E21-F012	FULL FLOW TEST BYPASS VALVE PACKING LEAK
L15767	RH	1E12-F068B	RHR HX OUTLET VALVE PACKING LEAK
L15826	RH	1E12-F333C	RHR PUMP VALVE LEAKING
L15827	RH	1E12-F334C	RHR PUMP VALVE LEAKING
L15961	LC	PT-1E32-N061A	MSL PRESS INSTRUMENT STOP VALVE LEAKS
L15962	LC	PT-1E32-N060	REPLACE RX PRESSURE TRANSMITTER TUBE FITTING
L15963	LC	PT-1E32-N050	REPLACE RX PRESSURE PIPE THREAD
L16199	RD	PDI-1C11-N015	CRD SUCTION FILTER DP INDICATOR READS LOW
L16320	RD	1C11-D001-078	HCU 30-11 INSTRUMENT AIR FITTING LEAK
L16345	DG	0DG01P	REPAIR 0DG01P COOLING WATER PUMP CABLE
L17019	DG	PDI-1E22-N502	1B DG COOLING WATER PUMP DP GAUGE PEGGED LOW
L17328	RD	1C11-D001-002	ACCUM 22-59 VALVE PACKING LEAK
L17870	RP	1C71-S003E	RECALIBRATE
L17877	RD	PDI-1C11-N002	CRD DRIVE FILTER DP ALARM UP
L17924	RD	1C11-F002B	CRD FLOW CONTROL VALVE PACKING LEAK

APPENDIX B  
REFUELING OUTAGE (L1R05)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L17998	RD	1C11-F385	CRD DISCHARGE STOP VALVE PACKING LEAK
L18037	RH	1E12-AK070A	REPLACE LOOSE BANANA JACK PLUG
L18121	NR	RY-1C51-K600BA	SRM B SETPOINTS ERRATIC
L18148	NR	RY-1C51-K601A	IRM FAILED DOWNSCALE
L18181	MS	1B21-2BSVV-2	BLANKET STEAM VENT VALVE LEAK
L18193	RH	1E12-F040B	RHR HX BLOWDOWN VALVE, NO CLOSED INDICATION
L18196	RH	ZS-1E12-F041B	NO VALVE POSITION INDICATION IN CONTROL ROOM
L18198	RH	1E12-F412B	RHR SAMPLE VALVE FAILED TO CYCLE
L18206	RH	ZS-1E12-F050A	RHR RETURN CHECK VALVE, INDICAATION INOPERABLE
L18219	NR	RY-1C51-K601C	C IRM SPIKES
L18222	NR	RY-1C51-K601H	H IRM SPIKES
L18241	MS	1B21-F029B	AIR ACCUM CHECK VALVE LEAK
L18285	NB	TE-1B21-N050A1	DRYWELLHEAD TEST PENETRATION LEAK
L18288	MS	1B21-F022B	MSIV B AIR LEAKING OUT OF EXHAUST PORT
L18309	RD	1C11-000	CRD 10-23 SCRAM LITE INOPERABLE
L18329	MS	1B21-F024D	MSIV ACCUMULATOR CHECK VALVE OUT OF TOLERANCE
L18335	RH	TRS-1E12-R601	RHR HX DISCHARGE COOLING WATER TEMP HIGH
L18375	RH	1E12-F090B	RHR MANUAL RETURN VALVE, DUAL IND WHEN CLOSED
L18434	RI	1E51-F086	1AP83E-E3 MCC 1364-2 RESET BUTTON INOP
L18521	RH	1E12-F359A	RHR SDC EXCESS FLOW CHECK VALVE FAILED
L18522	RH	1E12-F360B	RHR SDC EXCESS FLOW CHECK VALVE FAILED
L18523	RH	1E12-F359B	RHR SDC EXCESS FLOW CHECK VALVE FAILED
L18526	RH	1E12-F360A	RHR SDC EXCESS FLOW CHECK VALVE FAILED
L18552	DG	ODO01P	OILER LEAKS SLIGHTLY
L18553	RD	1C11-000	REPLACE HCU 46-43 HOSE FITTING @ 107 VALVE
L18559	RH	LT-1B21-N403A	INSPECT RX VESSEL LOW WATER LEVEL 3 LOGIC
L18575	AP	1AP07E	SWGR 143 CUB 6 A PHASE ARC CHUTE PROT COATING
L18576	AP	1AP07E	REPAIR SWGR 143 CUB 3 SPACE HEATER BOLT
L18635	RD	HS-1C11-BS003A	REPLACE A CRD PUMP CONTROL SWITCH
L18645	RH	RH23-1001V	REALIGN VARIABLE SUPPORT FOR 1E12-F055B
L18667	LC	FE-1E32-N006A	BLEED OFF FLOW TRANSMITTER LOOP FAILED
L18676	NB	1B13-D003	INSPECT SHROUD ACCESS HOLE COVER
L18704	AP	1AP80E	13-X-Z BUS BAR 1AP80E LOCK WASHER BROKE
L18706	MS	PDS-1E31-N008A	MSL HIGH FLOW SWITCH EXCESS ELECTRICAL NOISE
L18707	RD	PS-1C11-N001B	CRD PUMP SUCTION PRESS SWITCH RESET ABOVE NORM
L18710	RD	PI-1C11-R008	CRD PUMP DISCHARGE PRESSURE GAUGE STICKS
L18711	RD	TI-1C11-R902A	CRD PUMP LUBE OIL TEMP INDICATOR UNABLE TO CAL
L18736	RD	1C11-D046-112	SDV INLET ISOL VALVE HCU 02-31 LEAKS
L18743	HG	1HG002A	RECORDER SUCTION VALVE MOTOR CURRENTS HIGH
L18801	DG	1E22-S001	1B DG RESISTOR R1 IS CRACKED
L18839	NR	RY-1C51-K600C	UNABLE TO CALIBRATE 1C SRM DRAWER
L18841	HP	1NB25A	CORRECT REFERENCE LEG PIPING SLOPE
L18842	HP	1B21-D004C	REATTACH CONDENSING POT HANGER ASSEMBLY
L18849	NR	RY-1C51-K605ET	LPRM 56-33 MACHINE DOWN FOR INSTALLATION
L18850	NR	RY-1C51-K605T	LPRM 48-49 MACHINE DOWN FOR INSTALLATION
L18853	AP	1AP03E	ACB 1411 UNABLE TO CLOSE FROM CONTROL ROOM
L18948	DG	ODG09MB	AIR COMPRESSOR FLEXIBLE OUTLET PIPING LEAK
L19019	DG	ODG01K	DAMAGED LOWER MAIN BEARINGS #2 AND #10
L18869	DG	1PI-DG086	AIR PRESS INDICATION SENSING LINE BROKEN



APPENDIX B  
REFUELING OUTAGE (L1R05)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L18876	NR	RY-1C51-K605GR	COMP PT B680 FOUND OUT OF TOLERANCE
L18896	NR	RY-1C51-K605ET	MACHINE DOWN LPRM FOR INSTALLATION
L18905	HP	1E22-C001	BREAKER PIN BENT, JAMS UP ON GUIDE ARM
L18909	DG	PI-1E22-R546	REPLACE 1B DG CRANKCASE PRESS GAUGE SNUBBER
L18910	RD	1C11-F002B	CRD FLOW CONTROL VALVE DUAL INDICATION
L18915	HP	1E22-F038	HPCS MANUAL INJECTION VALVE INDICATION BAD
L18928	DC	1TCU-VD013	REPAIR DIV III SWGR ROOM TEMP CONTROLLER
L18942	DG	1E22-F301B	DG PANEL LOCAL ALARM HORN FAILED
L18959	RH	1E12-F050B	REPAIR TESTABLE CHECK VALVE CONDUIT
L18983	DG	1E22-S001	INSPECT DG SPACE HEATER
L18991	LP	1E21-F331	SUCTION DRAIN VALVE UNABLE TO CLOSE
L18995	RD	PS-1C11-N077	REPAIR CRD HCU 02-23 ELECTRICAL CABLE
L19003	RH	1E12-D300A	RHR STRAINER REPAIR LEAK
L19015	LP	1TI-DG032	REPLACE PUMP TEMPERATURE INDICATOR GLASS
L19033	DG	1E22-S001	DG OVERSPEED TRIP RELAY FAILED
L19037	RD	1C11-D001-019	HCU 26-43 AIR SUPPLY LINE LEAK
L19039	RD	1C11-D001-144	HCU 38-31 ACCUMULATOR FITTING LEAK
L19043	RD	1C11-D001-177	HCU 42-11 NITROGEN LEAKS
L19056	RP	1RF000	1A RPS MG SET IND & RELAYS VOLTAGE CYCLING
L19071	RD	1C11-D001-009	HCU 18-51 ACCUMULATOR CARTRIDGE VALVE LEAKS
L19076	DC	1DC07E	DIV 1 125V BATTERY CORROSION ON CELLS 50 & 51
L19077	RI	1H13-P601	REPAIR TERMINAL BLOCK DIVIDER
L19097	RD	1C11-D001-111	HCU VALVE LEAKS
L19098	RD	1C11-D001-111	HCU 26-07 VALVE FAILED TO CLOSE
L19102	RD	KY-1C71-AK016C	SCRAM RESET INTERLOCK RELAY BUZZING
L19106	RD	1C11-D001-072	HCU ACCUM 26-15 VALVE STEM BROKEN
L19107	RD	1C11-D001-015	HCU 18-47 VALVE LEAKS
L19116	DC	1DC11ECB17	DIV I 125VDC +75V GROUND ON CIRCUIT BOARD
L19133	RH	1TI-VY019	RECALIBRATE RHR DUCT TEMPERATURE INDICATOR
L19145	AP	1AP04E	INSPECT SWGR 141Y CUB 1 MAIN FEED BREAKER
L19146	RH	1E12-F073B	REPAIR RHR HX VENT VALVE CONTROL ROOM IND
L19148	MS	1B21-F022A	INBOARD MSIV WOULD NOT SLOW CLOSE
L19149	MS	1B21-F022B	INBOARD MSIV WOULD NOT SLOW CLOSE
L19170	MS	1TG01TB	LEVEL TRANSMITTER DRAIN PIPE PLUG STUCK
L19174	LP	1DG036	REMOVE MOTOR COOLER DISCH CHECK VALVE SPRING
L19212	RD	1C11-000	HCU 34-19 REPLACE FULL-IN/-OUT LIGHT SOCKET
L19220	AP	1AP03E	ACB 1412 SAT FEED TO 141Y FAILED TO OPEN
L19245	NR	RY-1C51-K601D	REPLACE D IRM POWER SUPPLY
L19255	RH	1VY01C	A RHR ROOM COOLER BREAKER FOUND TRIPPED
L19256	RH	1H13-P629	INSPECT PANEL EXTERNAL WIRING
L19266	RD	JY-1C22-K601A	POWER SUPPLY FAILED
L19267	MS	1MS04BL	INSPECT SRV DOWNCOMER SUPPORT MS04-1027C
L19271	RH	1E12-D300A	DIV 1 RHR STAINER LEAK ON FLANGE
L19279	RD	LS-1C11-N372	HCU 38-15 ACCUM LEVEL SWITCH CONTACTS INOPERABLE
L19282	RD	1C11-D001-140	REPLACE HCU 54-31 FLEXIBLE CONDUIT
L19283	RD	1C11-D001-160	REPLACE HCU 34-23 FLEXIBLE CONDUIT
L19287	RD	1H13-P603	REPLACE RMCS WITHDRAW BUTTON
L19383	NR	1NR000	TIP TUBING A8 UNABLE TO VERIFY LOCATION
L19413	RH	ZS-1E12-F090B-C	REPLACE LIGHT INDICATION CONDUIT

ATTACHMENT B  
II.B UNIT SHUTDOWNS  
(UNIT 2)

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DATE: 920104 GENERATOR OFF-LINE: 2392.2 OUTAGE TYPE: Scheduled (L2R04)  
(YYMMDD) (Hours)

REASON: Refueling Outage.

CRITICAL ACTIVITY PATH: See Appendix C.

CORRECTIVE ACTIONS (DVR/LER# if applicable): None.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None.

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: See Appendix D.

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DATE: 920412 GENERATOR OFF-LINE: 7.67 OUTAGE TYPE: Forced (L2F15)  
(YYMMDD) (Hours)

REASON: Manual Turbine trip due to Main Turbine bearing high vibrations.  
The vibrations were due to 'rubs' on the newly installed low  
pressure turbine rotors. The reactor remained critical during the  
outage.

CRITICAL ACTIVITY PATH: None.

CORRECTIVE ACTIONS (DVR/LER# if applicable): None.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None.

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None.

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DATE: 920413 GENERATOR OFF-LINE: 6.92 OUTAGE TYPE: Forced (L2F16)  
(YYMMDD) (Hours)

REASON: Manual Turbine trip due to Main Turbine bearing high vibrations.  
The vibrations were due to 'rubs' on the newly installed low  
pressure turbine rotors. The reactor remained critical during the  
outage.

CRITICAL ACTIVITY PATH: None.

CORRECTIVE ACTIONS (DVR/LER# if applicable): None.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None.

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None.

APPENDIX C  
CRITICAL PATH ACTIVITY  
REFUEL OUTAGE (L2R04)

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DESCRIPTION

MAIN TURBINE GENERATOR OFF LINE  
COMPLETE REACTOR DISASSEMBLY  
REPLACE MAIN TURBINE ROTORS-(CR 90-157)  
MAIN STEAM SNUBBER REDUCTION MODIFICATION-(M01-2-90-008)  
BEGIN CIRCULATING WATER MAINTENANCE ACTIVITIES  
BEGIN DIESEL GENERATOR B MAINTENANCE ACTIVITIES  
BEGIN HIGH PRESSURE CORE SPRAY MAINTENANCE AND TESTING  
BEGIN DC BATTERIES (DIV III) MAINTENANCE ACTIVITIES  
2FW01KA TDRFP UN/RECOUPLE TURBINE FOR OVERSPEED TEST  
O/G RECOMB TEMPERTURE RECORDER-(M01-2-87-023)  
COMPLETE REACTOR CORE UNLOAD  
BEGIN LOW PRESSURE CORE SPRAY MAINTENANCE AND TESTING  
PLACE SYSTEM AUXILIARY TRANSFORMER OUT OF SERVICE  
PERFORM CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT MAINTENANCE  
BEGIN RESIDUAL HEAT REMOVAL A MAINTENANCE  
BEGIN 24/48 BATTERY MAINTENANCE ACTIVITIES  
REPLACE LOW POWER RANGE MONITORS  
BEGIN REACTOR CORE ISOLATION COOLING MAINTENANCE  
REMOVE JET PP #15 TEMP CLAMP-(P01-2-90-013)  
BEGIN REACTOR WATER CLEAN UP VALVEMAINTENANCE  
BEGIN DC BATTERIES (DIV II) MAINTENANCE ACTIVITIES  
INSPECT 2FW01KB TDRFP LP BEARING  
RCIC TURBINE TIME DELAY TRIP BYPASS-(M01-2-89-008)  
BEGIN RESIDUAL HEAT REMOVAL B MAINTENANCE  
PERFORM 2A DIESEL GENERATOR/DIV II TESTING  
REPLACE 26B HP HEATER FIRE SEAL  
REPAIR 2HD171A HD REJECT TO 2A COND ACTUATOR  
COMPLETE CORE RELOAD  
REPLACE 2CB01PA PUMP COUPLING  
REPAIR H2 COOLING SUPPORT WS14-2036R  
REPAIR H2 CCOLING SUPPORT WS13-2019R  
REPAIR 2HD026D NORM DRN TO 25A ACTUATOR  
REPLACE FIRE RATED PENETRATION SEAL MK-2TB-138  
2B21-F514B DETERM AND RETERM FOR MMD  
COMPLETE REACTOR REASSEMBLY  
REPLACE VP SYSTEM DUCTWORK  
REINSULATE SRVS  
RESET 2FW003 ISOLATION VALVE LIMIT SWITCH  
REPAIR 2B33-F023A PUMP SUCTION VALVE INDICATION  
INSPECT 2FW01KA THRUST BRG  
PERFORM SIGANTURE TRACE ON VALVE 2CD035F  
REPLACE FIRE RATED PENETRATION SEAL MK-2TB-087  
GROUT TURBINE PENETRATION INTO LOW PRESS HEATER BAY  
REPAIR VALVE 2B21-F069 LEAKAGE  
UNPIN CD SYSTEM PIPING  
INSPECT VALVE 2FW003

APPENDIX C  
CRITICAL PATH ACTIVITY  
REFUEL OUTAGE (L2R04)

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DESCRIPTION

REBUILD VALVE 2B21-F065A  
REPAIR 2E12-F059B DISCHARGE STOP VALVE  
FEEDWATER PUMP PRESSURE SWITCH TESTING-(M01-2-89-009)  
INSPECT 2LS-RF003 D/W FLOOR DRAIN PUMP LEVEL SWITCH  
INSPECT 2RE002 DRYWELL EQUIPMENT DRAIN PUMP  
INSPECT 2FP012 AUTO DELUGE VALVE  
INSPECT MAIN POWER TRANSFORMER DELUGE  
PERFORM VESSEL HYDRO  
REPAIR 2B21-F013N N SRV LEAKAGE  
REMOVE SCAFFOLDING FOR VALVE 2E32-F008  
REPAIR 2B33-F338A INBOARD STOP VALVE INDICATION  
REPAIR 2HD-1SRDCHA NORM DRAIN VALVE  
REPLACE 2DG03J 2A FUEL FILTER  
TIGHTEN 2VP111B VALVE CAP  
TIGHTEN 2VP102B VALVE CAP  
PERFORM INTEGRATED LEAK RATE TEST  
REMOVE HYDROGEN COOLER INSULATION  
REPAIR FIRE BARRIER SEAL  
REPAIR 2FW01KA FEED PUMP TURB OIL LEAK  
REMOVE 59A/59B VALVE INSULATION  
INSPECT GENERATOR BEARING PUMP #10  
PERFORM SIGNATURE TRACE ON VALVE 2B21-F514B  
INSPECT AND TEST 2PL18J VOLT SWITCH  
INSTALL AND REMOVE SA SPOOL PIECE AFTER INTEGRATED LEAK RATE TEST  
REPAIR HEATER BAY AIR LEAKS  
RETERM 2B21F514B AFTER MAINTENANCE COMPLETE  
COMPLETE FINAL REVIEW FOR VALVE 2B21-F514B  
REPAIR 2B33-F079A LEAKOFF CONTROL VALVE  
RCIC WATER LEG PUMP MOD TEST-(M01-2-87-082)  
FW MINIMUM FLOW VALVE MOD TESTING-(M01-2-88-033)  
TROUBLESHOOT AND REPAIR TIPS  
T.S.I. CABLE UPGRADE-(M01-2-89-002)  
INSTALL 2HD-01PD PUMP MOTOR  
REPAIR RY-2C51-K605CB LPRM LOCAL DOWNSCALE LIGHT  
REPAIR 2E12-F041C TESTABLE CHECK VALVE INDICATION  
AMP CHECK VALVE 2B21-F422A  
CLEAR OUT OF SERVICE FOR 2C51-J011 CONNECTION  
PERFORM ROTATION CHECK ON 2B HD PUMP  
INSPECT/TEST 2GS-SSAFV VALVE  
SEND SRV 2B21-F013R TO WYLE LABS, TEST AND REFURBISH  
INSPECT 2CB018B CB MINIMUM FLOW VALVE  
INSPECT 2B21-F073 VALVE THERMAL OVERLOAD  
RCIC TURBINE TIME DELAY TRIP BYPASS TEST(M01-2-89-008)  
TURBINE LUBE OIL CONTROL VALVE TEST-(CR 90-017)  
REPAIR 2B21-F001 REACTOR HEAD VENT VALVE  
REPLACE 2G33-F001 VALVE MOTOR  
2G33-F001 VALVE, SET LIMITS & SIGNATURE TRACE

APPENDIX C  
CRITICAL PATH ACTIVITY  
REFUEL OUTAGE (L2R04)

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DESCRIPTION

PERFORM VOTES TESTING ON THE 2G33-F001 VALVE  
RESET LIMITS AND SIGNATURE TRACE 2G33-F001  
REBUILD 2G33-F001 VALVE ACTUATOR  
FINAL IN SERVICE TESTING REVIEW, 2G33-F001  
2G33-F004 SET LIMITS & SIGNATURE TRACE  
PERFORM 2G33-F004 VOTES TEST  
REBUILD 2G33-F004 VALVE ACTUATOR  
FINAL REVIEW OF 2G33-F004  
INSPECT 2CY03P CY JOCKEY PUMP FOR VIBRATION  
REPLACE 2PA16J STARTREC PANEL VALIDYNE CARD  
REPAIR H2/CO2 SELECTOR VALVE  
2TG02KB LPB TURBINE NEW MONOBLOCK ROTOR  
2TG02KC LPC TURBINE NEW MONOBLOCK ROTOR  
2TG02KA LPA TURBINE NEW MONOBLOCK ROTOR  
REPAIR VALVE 2B33-F013B  
2FW01KA REMOVE/REINSTALL INSTRUMENTATION FOR PUMP REBUILD  
2FW01KB REMOVE/REINSTALL INSTRUMENTATION FOR PUMP REBUILD  
INSPECT 2A MSR 1ST STAGE DRAIN VALVE TO DRAIN TANK  
REPAIR 2HD-MSDCV-HB  
REPAIR 2B21-MOVSV-5 DRAIN VALVE  
RECALIBRATE 2PSL-GS031 STEAM PACKING EXHAUST SWITCH  
INSTALL 2PS-TO031 TURBINE LUBE OIL MANOMETER  
REPLACE HD10-2406X RIGID STRUT END PADDLES  
TORQUE 2A TDRFP BOLTS  
REPLACE 2G33-F001 VALVE THERMAL OVERLOAD  
REPLACE 2G33-F004 VALVE MOTOR  
2G33-F004 REPLACE THERMAL OVERLOAD  
ADJUST 2B21-F067D MSL DRAIN VALVE CLOSE LIMIT SWITCHES  
ADJUST 2B21-F067A MSL DRAIN VALVE CLOSE LIMIT SWITCHES  
ADJUST 2B21-F067B MSL DRAIN VALVE CLOSE LIMIT SWITCHES  
ADJUST 2B21-F067C MSL DRAIN VALVE CLOSE LIMIT SWITCHES  
INSTALL MAIN TURBINE BEARING VIBRATION DETECTOR-(M01-2-89-002)  
REPLACE 2B EXTRACTION STEAM SUPPLY LINE DRAIN VALVE-(CR 90-093)  
REPLACE 2B TDRFP LOW PRESS LINE DRAIN VALVE-(CR 90-086)  
REPLACE 2G33-F001 RWCU SUCT LINE ISOL VALVE-(CR 90-057)  
CLEAR OOS FOR 2G33-F001 VALVE  
PERFORM PLANT HEATUP  
RECOUPLE RCIC TURBINE TO PUMP AFTER OVERSPEED TEST  
TAKE 2E51-C002 OUT OF SERVICE  
LST 92-073 RI FULL FLOW TO S/P @ 150# MOD TEST-(M01-2-87-082)  
RCIC & LPCS SIMULTANEOUS RUN @ 150# - MOD TEST-(M01-2-87-082)  
RCIC FULL FLOW TO SUP POOL @ 1000# MOD TEST-(M01-2-87-082)



APPENDIX C  
CRITICAL PATH ACTIVITY  
REFUEL OUTAGE (L2R04)

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DESCRIPTION

SYNCHRONIZE GENERATOR TO GRID  
B TDRFP AND C MDRFP MIN FLOW MOD TEST-(M01-2-88-033)  
A TDRFP MINIMUM FLOW VALVE MOD TEST-(M01-2-88-033)  
RECOUPLE A TURBINE DRIVEN REACTOR FEED PUMP  
2FW01KB TDRFP UN/RECOUPLE TURBINE FOR OVERSPEED TEST  
UNCOUPLE 'B' TURBINE DRIVEN REACTOR FEED PUMP  
COUPLE 'B' TURBINE DRIVEN REACTOR FEED PUMP

APPENDIX D  
REFUELING OUTAGE (L2R04)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L00514	DG	2TE-DG07710	DG CYLINDER HEAD TEMPERATURE INDICATION LOW
L01096	AP	2E22-S001	DG OUTPUT BREAKER FUSE HOLDER INTERFERENCE
L01147	AP	2AP000	6.9 KV BUS DUCT WTR DRIPPING FROM SEAM ON BUS
L02158	DG	2DO04T	HPCS DG FUEL OIL DAY TANK LEAKING
L02259	LF	2E21-F012	LPCS PUMP FULL FLOW BYPASS VALVE PACKING LEAK
L02527	MS	2B21-F020	EQUALIZATION LINE STOP VALVE PACKING LEAK
L02539	RD	2C11-D001-	SCRAM VALVE AIR SUPPLY FOR 50-35 LEAK
L02764	RD	2C11-D001-054	CONTROL ROD 02-27 FULL IN LIGHT INDICATION
L03048	NR	RY-2C51-K601E	IRM 2E INDICATES HIGH
L03077	RD	2C11-000	HCU'S RECEIVED DATA FAULTS
L03905	MS	2TT041BA	PACKING LEAK
L03906	MS	2TG03TB	INSPECT MSR DRAIN TANK FOR FLANGE LEAKS
L04347	MS	2B21-F021	MSL DRAIN VALVE WON'T FULL CLOSE
L04360	DG	2DG009	2VY03A COOLER ISOLATION VALVE LEAKS
L04361	DG	2DG008	2VY03A COOLER ISOLATION VALVE LEAKS
L04383	NR	RE-2B13-D193DR	LPRM 56-25A READING DOWNSCALE
L04937	DG	2DO064B	DIESEL FUEL OIL VALVE LEAKS
L05384	RI	2E51-F008	RCIC STEAM SUPPLY VALVE LEAK
L05671	MS	2TT002AB	STOP VALVE PACKING LEAK
L05673	MS	2B21-MSBPV1	TURBINE BYPASS SEAL LEAKOFF LEAKING
L06194	MS	2B21-RSSV2	DUAL INDICATION WHEN CLOSED
L06416	RH	2E12-C300A	RHR PUMP OIL LEAK
L06879	RH	2E12-F053A	REBUILD RHR INJECTION VALVE & VOTES TEST
L08061	RH	2E12-F053B	ADJUST RHR RETURN VALVE LIMIT SWITCHES
L08812	DC	2DC01E	250V BATTERY REPLACE CELL #114
L09371	NR	RE-2B13-D193DX	REPLACE LPRM STRING 48-41
L09372	NR	RE-2B13-D193N	REPLACE LPRM STRING 32-49
L09373	NR	RE-2B13-D193GD	REPLACE LPRM STRING 32-09
L09375	NR	RE-2B13-D193CH	REPLACE LPRM STRING 24-09
L09377	NR	RE-2B13-D193DN	REPLACE LPRM STRING 16-41
L09378	NR	RE-2B13-D193EU	REPLACE LPRM STRING 16-25
L09379	NR	RE-2B13-D193BY	REPLACE LPRM STRING 16-17
L09380	NR	RE-2B13-D193X	REPLACE LPRM STRING 08-41
L09383	NR	RE-2B13-D193CW	REPLACE LPRM STRING 32-57
L09385	NR	RE-2B13-D193EY	REPLACE LPRM STRING 32-25
L09387	NR	RE-2B13-D193AP	REPLACE LPRM STRING 16-33
L09391	NR	RE-2B13-D193CM	REPLACE LPRM STRING 40-09
L09392	NR	RE-2B13-D193EK	REPLACE LPRM STRING 40-33
L09895	RI	2E51-F025	STEAM SUPPLY OUTLET VALVE PACKING LEAK
L09969	MS	2MS14A	STEAM LEAK ON FLANGE
L10025	RD	2C11-D001-111	CRD 42-47 DOUBLE NOTCHED
L10123	AP	2AP27E	SWGR 231A CUBICLE 101B DAMAGED
L10352	RH	2E12-F325A	RHR STOP VALVE LEAKS
L10460	PC	2PC001A	INSPECT VACUUM BREAKER LIMIT SWITCH
L10478	NR	RY-2C51-K601D	D IRM ERRATIC DURING STARTUP
L10526	MS	2AP39E	REPAIR HIGH LOAD VALVE MOTOR LEADS
L10619	MS	2B21-F409A	MSR VALVE LEAKAGE
L10675	DG	0DG03J	PANEL LUGS BENT IN EXCESS OF 45 DEG
L10676	DG	0DG02JA	PANEL LUGS BENT IN EXCESS OF 45 DEG

APPENDIX D  
REFUELING OUTAGE (L2R04)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L10677	DG	0DG02JB	PANEL LUGS BENT IN EXCESS OF 45 DEG
L10689	DG	2DG035	SAMPLE STOP VALVE LEAKING BY SEAT
L10709	DG	2DG005	DG COOLER INLET ISOLATION VALVE CORRODED
L10763	DG	2E22-P301A	NO INSULATION ON LUGS AT TERMINALS 31 + 32
L10770	DG	2E22-P301A	PANEL LUGS BENT IN EXCESS OF 45 DEG
L10831	DG	2DG02JA	REPLACE BENT LUGS
L10833	DG	2DG05J	REPLACE CORRODED TERMINAL SCREWS
L11086	RD	2C11-D001-113	HCU 50-31 ACCUM CHARGING WATER VALVE LEAKS
L11147	MS	2B21-F418A	AUX SUPPLY STEAM STOP VALVE PACKING LEAK
L11148	MS	2B21-MOVSV-7	SEAT DRAIN VALVE PACKING LK
L11231	RD	2C11-000	HCU 18-03 BAD INDICATION AT POSITION 04
L11386	RD	2C11-D001-075	SPURIOUS ACCUM 14-15 WATER LEVEL ALARMS
L11520	MS	2B21-F481B	ROOT VALVE PACKING LEAKS
L11657	RD	2C11-D177-113	CRD 42-11 DISC SEPARATED FROM STEM
L11706	RH	2E12-F021	FULL FLOW TEST VALVE LEAKING OIL
L11867	NR	RE-2B13-D193EB	REPLACE LPRM S 'ING 08-33
L11883	MS	PS-2B21-N015B	LOW PRESS INSTUMENT VENT VALVE LEAKS
L12030	RI	2E51-F031B	PERFORM PUMP ACTION STOP VALVE VOTES TEST
L12067	LP	2E21-F009	LPCS CHECK VALVE INCORRECTLY ORIENTED
L12099	RD	2C11-D001-179	REPLACE HCU 34-11 ACCUMULATOR
L12148	RD	2C11-D001-065	REPLACE HCU 22-19 ACCUMULATOR
L12149	RD	2C11-D001-052	REPLACE CONTROL ROD DRIVE 10-27
L12150	RD	2C11-D001-006	REPLACE CONTROL ROD DRIVE 06-31
L12151	RD	2C11-D001-030	REPLACE CONTROL ROD DRIVE 10-39
L12152	RD	2C11-D001-143	REPLACE CONTROL ROD DRIVE 42-31
L12153	RD	2C11-D001-120	REPLACE CONTROL ROD DRIVE 38-43
L12154	RD	2C11-D001-095	REPLACE CONTROL ROD DRIVE 34-59
L12155	RD	2C11-D001-065	REPLACE CONTROL ROD DRIVE 22-19
L12156	RD	2C11-D001-051	REPLACE CONTROL ROD DRIVE 14-27
L12428	RD	2AP04E	CRD PUMP BREAKER ARCING CONTACT CRACKED
L12481	PC	2PC000	ELECTR PENE 26 FAILED TO PRESSURIZE
L12483	NR	RY-2C51-K605GR	2D APRM UPSCALE NEUTRON TRIP LIGHT ENERGIZED
L12498	RH	2E12-F048A	TEST RHR BYPASS VALVE SPRING PACK
L12508	RH	2E12-F090B	LEAK-OFF PLUG LEAKING
L12511	LC	2E32-F302E	VALVE PACKING LEAK
L12514	DC	2DC000	DIV I GRD DETECTOR ALARMING IN CONTROL ROOM
L12517	NB	LPR-2B21-R884B	DIV II CHART DRIVE NOT WORKING
L12521	MS	2TT060AA	24A SAMPLE LINE VALVE LEAKING
L12524	MS	2HD049A	23A NORMAL DRAIN VALVE PACKING LEAK
L12525	MS	2HD010F	MSR DRAIN CHECK VALVE PACKING LEAK
L12526	MS	2OG37EA	REPLACE PREHEATER DRAIN TRAP BYPASS LINE ELBOW
L12528	MS	2HD059A	REPAIR 26A HEATER NORMAL DRAIN CHECK VALVE
L12529	MS	2B21-F396B	STEAM SUPPLY FLOW VALVE PACKING LEAK
L12530	MS	2N62-F313B	PREHTR STEAM SUPPLY VALVE PACKING LEAK
L12531	MS	2N62-F314A	PREHTR STEAM SUPPLY VALVE LEAKING
L12532	MS	2N62-F315B	PREHTR STEAM SUPPLY STOP VALVE LEAKING
L12534	LC	2E32-F009	DEPRESSIZING VALVE LEAKS
L12539	MS	2LT-HD021	ROOT STOP VALVE PACKING LEAK
L12540	MS	2AS057	AUX SAMPLE BOILER PACKING LEAK

APPENDIX D  
REFUELING OUTAGE (L2R04)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L12541	MS	2HD149B	26B HEATER DRAIN LINE PACKING LEAK
L12543	RH	2E12-F042A	REPLACE VALVE MOTOR
L12548	RD	2C11-F402A	SDV VENT VALVE NO CLOSED INDICATION
L12549	MS	2B21-F019	MSIV DRAIN ISOLATION VALVE PACKING LEAK
L12667	VG	2PDI-VG021	MOIST SEPERATOR INDICATOR FAILED CALIBRATION
L12684	DC	2E1-DC057	BATTERY VOLTMETER FOUND DEFECTIVE
L12688	RI	2E51-F028	VAC PUMP DISCH ISOL EXCEEDED ADMIN LIMIT
L12700	MS	TR-2B21-R816	REPAIR RECORDER
L12741	NB	NB13-2807S	REMOVE PSA-1/4 SIZE SNUBBER
L12742	MS	2MS000	REMOVE HEATER BAY SNUBBERS
L12762	MS	MS01-2877S	BOTTOM LOAD STUD NOT IN PLACE
L12766	RI	2E51-F072	RCIC TEST TAP PIPE THREADS DAMAGED
L12774	MS	2B21-F398B	REINSULATE ROOT STOP VALVE
L12779	RI	2E51-F004	UPSTREAM STOP VALVE MOVED FROM OPEN-CLSD
L12819	DG	2DG027	MOTOR COOLER INLET VALVE LEAKS
L12839	DG	2E22-S001	CLEAN EXPANSION TANK SIGHTGLASS
L12844	HP	2VD06C	INSPECT HPCS SWGR BATTERY ROOM FAN WIRES
L12851	DG	2AP07E	REPAIR AUX 243-1 CUBICLE 2B SLICE IN WIRE
L12852	DG	2AP07E	INSPECT 243-1 CUB 5F HPCS FUEL TANK FAN WIRES
L12859	DG	2AP07E	INSPECT 243 CUBICLE 5 BREAKER
L12860	DG	2AP07E	INSPECT 243 CUBICLE 1 BREAKER
L12861	DG	2AP79E	REPAIR 243-1 CUB 2D WIRE INSULATION
L12915	RI	FCK-2E51-R600	REPLACE RCIC FLOW CONTROLLER THUMBWHEEL
L12928	NR	RE-2C51-N001C	SRM 2C INCORRECT INDICATION
L12941	HP	2AP79E	REPLACE MCC 243-1 BROKEN LUG
L12949	NB	2B21-N402C	MSIV INSTRUMENT STOP VALVE LEAKS
L12950	NB	2B21-N400C	ARI INSTRUMENT STOP VALVE LEAKS
L12961	MS	2B21-MOVSV1	SEAT DRAIN VALVE BREAKER TRIPPING
L12974	RD	2C11-D001-112	HCU 06-27 SCRAM VALVE RESTRICTED STEM TRAVEL
L12989	LC	2E32-F007	OUTBOARD BLEED VALVE PACKING LEAK
L13023	RI	2E51-F065	REPLACE TEST CHECK VALVE CONDUIT
L13056	DC	2DC07E	DIV 1 CELL #26 LOW SPECIFIC GRAVITY
L13122	RH	2E12-F068A	RHR OUTLET VALVE DIFFICULT TO OPERATE
L13123	RD	2C11-D001-106	HCU 34-51 COIL INADVERTANTLY ENERGIZED
L13134	RH	2E12-F334A	SEAL COOLER OUTLET VALVE LEAKS
L13136	MS	2B21-RSLLV2	STEAM TO MSR 2B BLOWN DIAPHRAM
L13168	RP	2C71-S001A	RPS M/G ATTEMPTED TO START WHEN BREAKER CLOSED
L13172	DG	2VD06C	BATTERY ROOM FAN FAILED TO TRIP BREAKER
L13174	DG	PS-2E22-N513	REPLACE DG LUBE OIL PRESSURE SWITCH
L13264	DG	2DG048B	COMPRESSOR DISCHARGE RELIEF VALVE LIFTS
L13269	DG	2PI-DG098A	CALIBRATE AIR SUPPLY PRESSURE INDICATOR
L13292	DG	PI-2E22-R512	DG LUBE OIL, UNABLE TO CALIBRATE GAUGE
L13293	DG	TS-2E22-N516	REPLACE TEMPERATURE SWITCH
L13310	RD	2C11-D001-075	REPAIR RMCS SOLENOIDS LUG BROKEN
L13332	RH	2E12-D300B	DEBRIS FROM STRAINER IN WATERBOX
L13393	PC	2LV96E	ELECTRICAL PENETRATION LEAKAGE
L13396	DG	2E22-P301B	HPCS D/G PANEL INTERMITTENT GROUNDS
L13446	RD	PS-2C11-N138	ACCUM 58-39 PRESS SW FAILED
L13453	HP	2E22-F015	REPLACE HPCS SUCTION VALVE ELECT TERMINATION

APPENDIX D  
REFUELING OUTAGE (L2R04)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L13456	LP	FS-2E21-N004	LPCS MIN FLOW SWITCH OUT OF TOLERANCE
L13471	MS	MS38-2811S	SNUBBER LOCKED RIGID
L13472	RH	2E12-D300A	DETERMINE RHR WS STRAINER GEAR MOTOR
L13479	AP	2AP06E	REPLACE OUTPUT BREAKER TSC
L13486	PC	2H13-P611	TIGHTEN RX VESSEL ISOLATION RELAY SCREW
L13487	PC	2H13-P609	TIGHTEN LOGIC ALARM RELAY
L13488	PC	2H13-P609	TIGHTEN LOW COND VACUUM RELAY
L13491	DG	2DG08CB	AIR COMP MOTOR BREAKER TRIPS ON THERMALS
L13511	RD	2C11-D001-070	REPLACE HCU 02-19 FITTING
L13512	RD	2C11-D001-073	REPLACE HCU 22-15 FITTING
L13513	RD	2C11-D001-147	REPLACE HCU 58-27 FITTING
L13525	NR	RY-2C51-K605V	LPRM 48-49B UPSCALE ALARM WILL NOT RESET
L13535	RD	2C11-000	HCU 54-27 DRAIN LINE OBSTRUCTIONS
L13536	RD	2C11-000	REPLACE HCU 42-19 DRAIN VALVE CONNECTOR
L13594	DG	2AP07E	REPLACE SWGR 243 CUBICLE 3 PLUNGER CLIP
L13597	RH	PS-2B21-N413A	RX INJECTION LINE INST STOP VALVE LEAK
L13626	DG	2AP07E	ADJUST DG OUTPUT BREAKER PLUNGER WASHERS
L13653	RD	2C11-D001-112	HCU 38-47 NITROGEN BLOCK VALVE STEM LEAK
L13669	RH	2E12-F011A	VALVE PACKING LEAK
L13670	RH	2E12-F027A	STOP VALVE LEAK
L13676	RH	2E12-F042B	DETERMINE RHR ISOLATION VALVE ACTUATOR
L13688	RH	11-2E12-C002C	RHR PUMP AMMETER FAILED CALIBRATION
L13694	RD	2C11-D001-007	HCU 26-51 UNION LEAKING AIR
L13695	MS	2B21-F068	VALVE LEAK
L13696	MS	2B21-F069	VALVE LEAK
L13697	MS	2B21-F069	VALVE WILL NOT TORQUE WHEN FULL CLOSED
L13700	RD	PS-2C11-N067	ACCUMULATOR PRESS SWITCH FAILED TO OPEN
L13704	MS	2B21-F068	DETERM/RETERM LIMITORQUE FOR VALVE REPAIRS
L13724	RH	2E12-F041B	REPAIR TESTABLE CHECK VALVE CONDUIT
L13725	RH	2E12-F092B	REPAIR LPCI VALVE CONDUIT
L13743	AP	2AP37E	MCC 231A-3 CUBICLE TRIPS
L13759	RH	2TS-VY004	INSPECT LPCS/RCIC PUMP COOLER FAN INTERLOCK
L13767	RD	2C11-D001-052	HCU 10-27 CRD VENT DRAIN VALVE LEAKING
L13768	RD	2C11-D001-051	HCU 14-27 CRD VENT DRAIN VALVE LEAKING
L13783	MS	2B21-F513B	MSR STEAM STOP VALVE WIRE HEAT DAMAGED
L13802	NB	2H13-P644	REPLACE CRACKED COVER ON AGASTAT RELAYS
L13810	MS	2B21-F067C	REPLACE MSL DRAIN VALVE CONDUIT
L13813	RH	2E12-F004A	RHR PUMP SUCTION BREAKER TRIPPED
L13815	RD	PS-2C11-N116	HCU 46-55 NITROGEN LEAKS
L13820	RD	2C11-D001-052	REPLACE HCU 10-27 SCRAM VALVE DIAPHRAGM
L13824	RD	2C11-D001-146	HCU ALARM UP WITH 1000# PRESSURE
L13825	AP	2AP000	REALIGN SAT FEED CONTACT
L13833	NB	TC-2B21-N030J2	THERMOCOUPLE READS OPEN
L13838	AP	2AP000	REPAIR 241X-Y CONTROL SLIDE
L13839	AP	2AP20E	MCC 235Y-3 FAILED TO AUTO TRIP
L13854	RD	2C11-D167-11F	REPLACE HCU 34-19 VALVE O-RING
L13857	RD	2C11-D001-066	HCU 18-19 ACCUMULATOR LEAKS
L13906	AP	2AP20E	FEED BREAKER WOULD NOT CYCLE
L13911	RD	2C11-D001-113	HCU 10-27 CHARGING WATER VALVE LEAKS

APPENDIX D  
REFUELING OUTAGE (L2R04)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L13926	RD	2C11-D001-177	HCU 42-11 WATER IN INSTRUMENT BLOCK
L13927	RI	2E51-F019	SEAL-IN CONTACT WORKS INTERMITTANTLY
L13958	RH	2E12-C300B	REPAIR 235Y COMPT 203C BREAKER CABLES
L13964	RH	2E12-F009X-R	REPLACE EMERGENCY FEED CONTACTOR
L13965	RH	2E12-F009 -F	REPLACE NORMAL FEED CONTACTOR
L13969	RD	21A186	REPAIR HEADER PRESSURE REGULATOR
L14042	MS	2B21-F514B	DETERM AND RETERM LIMITORQUE
L14111	RI	2E51-F360	TRIP/THROTTLE VALVE NO INDICATION
L14253	RI	2E51-F063	RCIC ISOLATION VALVE FAILED LLRT
L14254	RI	2E51-F063	REPLACE VALVE
L14260	AP	2AP90E	INSPECT AUX TRANSFORMER
L14303	RI	2E51-F065	INJECTION CHECK VALVE FAILED LLRT
L14314	RD	2C11-000	HCU 50-43 NO POSITION INDICATION
L14333	MS	2B21-MOVCA4	VALVE TO TORQUE OUT WHEN 1/2 CLOSED
L14375	NB	2H13-P601	NO ALARM WHEN SRV WAS OPENED
L14403	MS	2B21-F013N	LEAK IN SOLENOID
L14420	HP	2E22-F007	REPAIR CHECK VALVE BONNET LEAK
L14431	RH	2E12-F050B	ADJUST RHR VALVE PACKING
L14444	RD	XY-2C11-K908	REPAIR CRD PRESS CONTROLLER STABILIZING VALVE
L14445	RD	2C11-0001-117	SCRAM SOLENOID PILOT VALVE LEAKING
L14461	NB	LT-2B21-N406B	INVESTIGATE VALVE LEAKAGE
L14467	RD	2C11-D097-127	HCU 42-55 OUTLET SCRAM VALVE PACKING LEAK
L14468	RD	2C11-D049-127	HCU 22-27 OUTLET SCRAM VALVE PACKING LEAK
L14469	RD	2C11-D088-127	HCU 18-07 OUTLET SCRAM VALVE PACKING LEAK
L14470	RD	2C11-D084-127	HCU 14-07 OUTLET SCRAM VALVE PACKING LEAK
L14471	RD	2C11-D021-127	HCU 18-43 OUTLET SCRAM VALVE PACKING LEAK
L14487	RH	2VY07C	RHR WS PUMP FAN TRIPPING ON OVERLOAD
L14507	HP	2E22-C003	REPLACE MCC 243-1 CUBICLE 2C HANDLE
L14538	RD	2C11-000	REPLACE SCRAM SOL ELECTRICAL BOX COVERS
L14555	MS	MS33-2801	REPLACE PIPE CLAMP SPACER & SPACER BOLT
L14558	MS	MS04-2655C	UNPIN CONSTANT PIPE SUPPORT
L14575	NR	RY-2C51-K605CB	LPRM LOCAL DOWNSCALE LIGHT
L14589	MS	2B21-MOVCA5	MSR CROSS AROUND MOTOR LOOSE
L14624	RH	2E12-F041C	LPCI TESTABLE CHECK VALVE NO INDICATION
L14634	RD	2C11-000	HCU 30-35 NITROGEN LEAKS
L14727	RI	SE-2E51-N908	RCIC GOVENOR SPEED PICKUP SEPARATED
L14838	DC	2DC16E	BATTERY CHARGER PUTTING OUT LOW VOLTAGE
L14858	MS	2B21-F001	RX HEAD VENT WILL NOT CLOSE FULLY
L14864	MS	2B21-F067D	ADJUST DRAIN VALVE ADJUST CLOSE LIMIT SWITCHES
L14865	MS	2B21-F067A	ADJUST DRAIN VALVE ADJUST CLOSE LIMIT SWITCHES
L14866	MS	2B21-F067B	ADJUST DRAIN VALVE ADJUST CLOSE LIMIT SWITCHES
L14867	MS	2B21-F067C	ADJUST DRAIN VALVE ADJUST CLOSE LIMIT SWITCHES
L14971	RI	2E51-F068	RESET CLOSE TORQUE SWITCH BYPASS
L73660	RI	2E51-F360	RCIC TURB TRIP & THROTTLE VALVE STEM LEAK
L87333	MS	2B21-F514B	SCAV STEAM STOP VLV YOKE SEPARATING
L87699	MS	2B21-RSHLV-2	MSR 2B SSR STM HI LOAD BROKEN ROD
L89193	LC	PDT-2E32-N054	MSIV LEAKAGE CNTL IB DP XMTR LEAKS
L94613	RH	2E12-F072B	RHR PMP DISCH DRAIN STOP VLV LEAKS
L97545	RD	2C11-D001-062	REPLACE HCU 02-23 ACCUMULATOR



APPENDIX D  
REFUELING OUTAGE (L2R04)  
SAFETY RELATED CORRECTIVE MAINTENANCE

WRNUM	SYSTEM	EPN	DESCRIPTION
L97549	RD	2C11-D001-039	REPLACE HCU 02-35 ACCUMULATOR
L97553	RD	2C11-D001-047	REPLACE HCU 30-27 ACCUMULATOR
L97554	RD	2C11-D001-185	REPLACE HCU 34-07 ACCUMULATOR
L97572	ED	2C11-D001-033	HCU 26-35, MULTIPLE WATER ALARMS
L97719	AP	2AP07E	BUS 243 CUB 3 CRACKED TRIP & CONTROL FUSE
L98067	RH	2DC13E	DIST PNL 212Y CB2 UNACCEPTABLE BOLT CONNS
L98319	RH	2E12-F024B	RHR FULL FLOW TEST WILL NOT STAY IN HANDWHEEL
L98421	RH	2E12-F027B	RHR CONT SPRAY VLV RPLC MISSING PLATE
L98667	AP	2AP07E	BUS 243 CUB 1 SAT BKR INSTALL/RMV SHIMS TO ALIGN
L98668	AP	2AP07E	BUS 243 CUB 5, FUSE HOLDER UC FD 243-1 RPLC STAT
L98669	AP	2AP07E	BUS 243, CUBES 1,3,4,5 FUSEHOLDERS RPLC PULLOUT
L98687	AP	2AP07E	BUS 243 CUB 1 SBM SW SAT BKR RPLC SBM SW
L98688	AP	2AP07E	BUS 243 ENCLOSURE BOT CNTR BOLT HOLE IS STRIPPED
L98689	AP	2AP07E	BUS 243 CUB 1 DOOR SAT BKR MAKE ADJUSTMENT
L98690	AP	2AP07E	BUS 243 CUB 1 SAT BKR RPLC/RPR/ADJ POSITIVE MECH
L98692	AP	2AP07E	BUS 243 BUS SUPPORT RPLC DAMAGED FIBERGLASS
L98709	HG	2HG002A	INLET O/B VLV RPLC TORQUE SW LIM PLATE
L98827	RI	2E51-F031	RCIC PF S.P. SUCT VLV LIMITER PLATE
L99035	RD	2C11-D001-120	CRD HCU 34-43 DIR CNTRL VLV REPL
L99068	DC	2DC11E	125 VDC DISTRIBUTION 211Y CIRCUIT BREAKER 21
L99095	RD	2F23--E006	RE CONDUIT DAMAGED JUST UNDER CAROUSEL
L99171	MS	2B21-RSSV2	MSR 2B SSR STM SOURCE VLV TORQUE SW
L99176	NB	NB13-2807S	PIPE CLAMP FOR SUPPORT NB13-2807S GOUGED
L99232	RD	2IA39A	SCRAM AIR HDR PIPING ELBOW IN 2IA39A HAS SM DENT
L99478	MS	2IA050A	2B21-F028B O/B MSIV AIR ISOL GLOBE VALVE
L99481	MS	2IA000	PILOT AIR ISOL VLV TO D MSIV O/B LEAKS
L99500	RD	2C11-D001-115	HCU 22-43 BALL CK VLV LEAKS BY
L99501	RD	2C11-D001-126	HCU 54-31 SEAT LEAKS BY
L99502	RD	2C11-D001-126	HCU 38-51 SCRAM VALVE SEAT LEAKAGE
L99521	RD	2C11-D001-113	HCU 38-07 WATER STOP VLV INOP
L99534	DC	2DC01E	250V BATT CELL #101 RMV'D, REPLACE
L99553	RD	2C11-D001-048	CRD MECHANISM LOCATION 26-27 HAS BAD SEALS
L99554	RD	2C11-D001-134	CRD MECHANISM LOCATION 46-35 HAS BAD SEALS
L99622	RI	2E51-F063	SEAL LEAK OFF REACHED ALARM PT
L99655	LC	2E32-F001E	B LINE I/B MSIV-LCS UPSTRM BLEED VALVE
L99700	RD	2C11-D001-113	CRD HCU CHARGING WTR VLV EXTREMELY

ATTACHMENT B  
II.B UNIT SHUTDOWNS  
(UNIT 2)

-----  
DATE: 920415 GENERATOR OFF-LINE: 103.4 OUTAGE TYPE: Forced (L2F17)  
(YYMMDD) (Hours)

REASON: Manual reactor scram due to pressure oscillations induced by  
spurious opening and closing of the turbine bypass valves.

CRITICAL ACTIVITY PATH:

Performance of a Main Condenser tube leak test.  
Return of the Condensate and Circulating Water systems to  
operation.  
Investigation of the Electro Hydraulic Control system pressure  
oscillations.

CORRECTIVE ACTIONS (DVR/LER# if applicable):

DVR# 1-2-92-048 LER# 92-004-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None.

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

WRNUM	SYS	EPN	DESCRIPTION
L15032	DC	2DC17E	Division II Charger amps/voltage oscillating
L15162	RD	2C11-0000	Scram valve delay indication
L15184	RD	2C11-117	Rebuild scram solenoid for rod 38-11
L15301	PC	2FS-CM902	Flow switch failed to alarm

-----  
DATE: 920420 GENERATOR OFF-LINE: 1.6 OUTAGE TYPE: Scheduled (L2M06)  
(YYMMDD) (Hours)

REASON: Main Turbine overspeed trip test.

CRITICAL ACTIVITY PATH:

Completion of the overspeed trip test.

CORRECTIVE ACTIONS (DVR/LER# if applicable): None.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None.

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None.

ATTACHMENT B  
11.B UNIT SHUTDOWNS  
(UNIT 2)

-----  
DATE: 920827 GENERATOR OFF-LINE: 116.8 OUTAGE TYPE: Forced (L2F18)  
(YYMMDD) (Hours)

REASON: Automatic reactor scram due to a main turbine trip. The turbine trip was caused by a spurious signal from the main turbine thrust bearing wear detector.

CRITICAL ACTIVITY PATH:

Investigation and correction of the Turbine Driven Reactor Feed Pumps.

Testing of the Reactor Core Isolation Cooling system piping.

Testing of all eighteen Safety Relief Valves.

CORRECTIVE ACTIONS (DVR/LER# if applicable):

DVR# 1-2-92-067 LER# 92-012-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

WRNUM	SYS	EPN	DESCRIPTION
L17110	DC	2PA08J	25 VDC ground on the Division I detector
L17389	NR	2C51-K601E	Erratic indication
L17395	NB	2H13-P601	SRV full open alarm not functioning
L17396	NB	2B21-N575B	SRV false position indication
L17397	NB	2B21-N575A	SRV false position indication
L17451	RI	2E51-F066	Repair indication hinge pin
L17460	RI	2E51-F065	Adjust position indication cams
L17516	NB	2B21-N575N	Inspect position indication transmitter
L17517	NB	2B21-N575M	Inspect position indication transmitter
L17519	NB	2B21-N575K	Inspect position indication transmitter
L17557	NB	2B21-D004A	Repair damaged insulation on condensing pot
L17558	NB	2B21-D004B	Repair damaged insulation on condensing pot
L17559	NB	2B21-D004C	Repair damaged insulation on condensing pot
L17560	NB	2B21-D004D	Repair damaged insulation on condensing pot

ATTACHMENT B  
II.B UNIT SHUTDOWNS  
(UNIT 2)

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DATE: 921116 GENERATOR OFF-LINE: 67.0 OUTAGE TYPE: Forced (L2F19)  
(YYMMDD) (Hours)

REASON: Automatic reactor scram due to a loss of the station  
service/instrument air system.

CRITICAL ACTIVITY PATH: Repair a flange leak on the 'B' moisture  
separator reheater.

CORRECTIVE ACTIONS (DVR/LER# if applicable):  
DVR# 1-2-92-082 LER# 92-016-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

<u>WRNUM</u>	<u>SYS</u>	<u>EPN</u>	<u>DESCRIPTION</u>
L14658	NR	2C51-K600CA	Erratic indication
L17682	RD	2C11-D001-022	Replace the withdrawal supply valve

ATTACHMENT C  
II.B FORCED REDUCTIONS IN POWER  
GREATER THAN 20% IN DESIGN POWER LEVEL  
(UNIT 2)

DATE: 920515  
(YYMMDD)

OPERATION AT REDUCED POWER: 24.0  
(Hours)

REASON: Reduced power level due to high levels in the 21 and 22 Feedwater heaters when the Motor Driven Reactor Feedpump was placed in service.

CRITICAL ACTIVITY PATH: None

CORRECTIVE ACTIONS (DVR/LER# if applicable): None

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None