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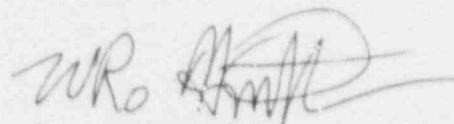
February 24, 1992

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

Gentlemen:

Enclosed for your information is the annual report covering LaSalle County Nuclear Power Station for the period covering January, 1991 through December, 1991.

Very truly yours,


G. J. Diederich
Station Manager
LaSalle County Station

GJD/MJC/djf

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. Units 1 and 2 are boiling water reactors 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 primary construction contractor was Commonwealth Edison Company.

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

Unit 2 was issued operating license number NPF-18 on December 16, 1983. Initial criticality was achieved on March 10, 1984 and commercial operation was commenced on June 19, 1984.

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

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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 1991 through December 1991. For safety related maintenance (non-outage related) performed during the period of January 1991 thru December 1991, see Attachment A.

B. Unit Outage or Power Reductions

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

C. Radiation Exposure

This information is reported annually for 1991 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 1991 through December 1991.

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

LaSalle Special Procedure 91-001

LaSalle Special Procedure LLP 91-001, "Condenser Tube Leak with Sulfur Hexafluoride", was performed to determine which side of the condenser contained tube leakage. This procedure consisted of temporary installation of the Science Applications International Corporation Sulfur Hexafluoride injection and detection equipment to the Amertap and Off Gas pretreatment Process Radiation Monitor system. The margin of safety was not reduced since both the Circulating Water and Process Radiation Monitoring systems are equipped with isolation boundaries to prohibit injection into the Circulating Water system or process air through the vendors detection equipment. The Sulfur Hexafluoride did not impact reactor chemistry or degrade any reactor components. This process is a standard industry practice.

LaSalle Special Test 91-003

LaSalle Special Test LST 91-003, "Unit 1 Feedwater Check Valve 1B21-F032A Troubleshooting Procedure" provided a method for determining the failure mode of the 1B21-F032A opening circuit logic. The special test also attempted to fully open the valve per circuit alterations. The purpose of the change was to eliminate an undesired feedwater A/B branch flow mismatch of about 10% at full power when the valve is 15% closed. The valve opening circuitry was modified to energize the open solenoids in the reverse direction. Since these are AC solenoids this did not affect their overall function. Because one of the two close solenoids remained connected throughout the test, the mechanical ability of the check valve to isolate was not affected and Technical Specifications were maintained.

E. Tests and Experiments not covered in the Safety Analysis Report
(continued)

LaSalle Special Test 91-054

LaSalle Special Test LST 91-054 "Special Measures for Secondary Containment Leak Rate Test (SCLRT) On-Line" outlined methods/controls to bypass Main Steam Line Tunnel (MST) High Ambient Temperature and High Ventilation System Differential Temperature trips while the Reactor Building Ventilation HVAC System (VR) was shutdown. The purpose of this change was to ensure compliance with Technical Specification 3.3.2.2. The bypass actions change the isolation of Group I from automatic to manual action (for small leaks only). The major effects of this were analyzed and reviewed in the justification for amendment 62 to Unit 2 Technical Specification (LOSR 90-40, 90-41, License submittal for amendment 77 to Unit 1 license and amendment 62 to Unit 2 license). The special test bypasses the automatic trips only and does not affect temperature indicators for the MST. Should unexpectedly high temperatures occur in the MST which could be indicative of a steam leak a manual isolation could be performed. However, a manual isolation does not bypass the valve motor thermal overload protective devices of the Main Steam Line (MSL) drain valves. Therefore in the event that a manual isolation is required the thermal overload protective devices on the MSL drain valves would not be bypassed. This was not specifically addressed in the License amendment submittal and is therefore the subject of this safety evaluation. The UFSAR will be updated to reflect this test mode. Since this procedure collected response indications, this will be evaluated and the evaluation results were sent to engineering to verify compliance with the pretest Environmental Qualification calculations for components in the MST.

The jumpers installed by this procedure did not change the facility as described in the UFSAR because the isolation bypassed is reviewed and approved. The Division I jumpers at P632 also bypass the loss of power interlock to K3A and C. This interlock causes a trip but is not contained in the Technical Specifications or the UFSAR.

LaSalle Special Test 91-069

LaSalle Special Test LST 91-069 "Unit 1 250V Battery "BITE" Test" approved the measurement of individual cell impedance by passing a 1 amp 25 Hz AC signal through the battery. This change allowed battery capacity to be quantitatively evaluated based on cell impedance. This procedure attached an AC signal source to a safety related battery. This is not addressed in the UFSAR. Unit 1 was shut down during this test. The 250V battery is not required to mitigate the consequences of any accident in the shutdown mode. The failure analysis of this battery bounds this test. The 250V DC system is not required to be operable by Technical Specifications with the Unit in shutdown, therefore this change did not reduce the safety margin.

LaSalle Special Test 91-089

LaSalle Test Procedure, LST-91-089, Unit-1 High Pressure Core Spray Water Leg Pump Performance Test, allowed 1E22-F033, the Water Leg Pump Recirc Stop Valve to be throttled from a closed position to a partially open position to increase pressure and thereby prevent water hammer to the system during the performance of this test. Based on a safety evaluation, that was performed as required by 10CFR50.59, it was concluded that this Test Procedure had an insignificant affect on the plant.

E. Tests and Experiments not covered in the Safety Analysis Report
(continued)

LaSalle Special Test 91-121

LaSalle Procedure LST 91-121 "Startup, Testing, and Shutdown of Unit 1 Turbine Building Ventilation System (VT) Evaporative Cooler Bank A" provided guidelines for the startup, testing and shutdown of the Unit 1 Turbine Building Evaporative Cooler (1VT03AA) to evaluate the feasibility of operating this system during warm weather. The UFSAR Section 9.4.4.2 indicates that the evaporative coolers are supplied with domestic water, since Clean Condensate System (MC) will be used, the UFSAR is affected. This is not a technical specification change. The evaporative coolers have no impact on plant safety. The use of MC in place of domestic water for operating the evaporative coolers does not affect the safety of the plant. The likelihood for an accident affecting plant safety was not increased.

LaSalle Special Test 91-123 and
Temporary System Change 1-1286-91

LaSalle Special Test LST 91-123 "Chemical Cleaning of 1VY03A Southeast Area Cooler" isolated 1VY03A from Core Standby Cooling System (CSCS) for chemical cleaning. The purpose of this change was to achieve a higher flow rate through the cooler, which will restore the heat exchanger to the normal level of efficiency. This caused the 'B' and 'C' Residual Heat Removal (RHR) area cooler to be inoperable as described in the UFSAR for plant operation. There was no change to the Technical Specifications (TS). Worst case is total loss of Division 2 Emergency Core Cooling System (ECCS) function, which is already bounded by the UFSAR by single failure criterion. TS allow ECCS to be inoperable for 72 hours, thus the margin of safety was within TS limiting condition for operation. During the chemical cleaning process Divisions 1 and 3 were operable and available to mitigate the consequences of all UFSAR evaluated accidents. In conjunction with this special test, Temporary System Change 1-1286-91 installed a blank flange in Service Water Supply Line 1DC "A-4" downstream of 1DG008 and upstream of 1DG007 so that 1A Diesel Generator (DG) Cooling Water Pump could be returned to service while the cooler was inoperable due to cleaning.

LaSalle Special Test 91-141

LaSalle Special Test LST 91-141 "Chemical Cleaning of Core Standby Cooling System (VY) Northeast (NE) and Northwest (NW) Area Coolers" approved taking the Engineered Safety Feature (ESF) Division 1 '0' Diesel Generator (DG) Cooling Water Pumps Out Of Service (OOS) to isolate Unit 1/2 VY NE and NW coolers for chemical cleaning. This was accomplished by cleaning each unit separately within a 72 hour timeclock and returning '0' DG Cooling Water Pump to service with adjusted flow to '0' DG cooler of 1,000 GPM plus or minus 25. The purpose of this change was to achieve higher flow rates through the coolers. ESF Division 1 was inoperable during the cleaning process on the unit being cleaned, Divisions 2 and 3 were operable during the process and mitigate all UFSAR evaluated accidents. The worst case condition is a total loss of ESF Division 1 Emergency Core Cooling System (ECCS) functions. This case is bounded in the UFSAR analysis by single failure criterion. Technical Specifications allows ECCS Division 1 to be inoperable for 72 hours, thus the margin of safety is within technical specification limiting condition for operation.

F. Changes to Procedures Covered in the Safety Analysis Report

On-Site Review 91-014

LaSalle On-Site Review OSR 91-014 "Relocation of the Radioactive Effluent Technical Specifications (TS) to the Off-Site Dose Calculation Manual (ODCM)" approved the relocation of the Radioactive Effluent TS to the ODCM. This amendment involves changes to the TS controls for licensee initiated revisions to the ODCM. The UFSAR in Appendix I indicates that the programmatic controls and requirements for control of radioactive effluents are included in the TS's. This amendment along with the change submitted in On-Site Review 89-038 will relocate the procedural details of the Radioactive Effluent Technical Specifications (RETS) to the ODCM and Process Control Program (PCP). These changes will not affect the initial assumptions for, or increase the probability of the occurrence of the initiators for, any previously analyzed events. Nor does this change affect the radiation dose previously calculated for any event either on site or off site at the site boundaries. These amendments are administrative in nature and do not alter the level of control for plant radiological effluents. The necessary controls, for radiological effluents, will be provided in the ODCM and PCP.

Emergency Operating Procedure Format Guidelines

To make procedures easier to manage, the format used to write Abnormal Operating Procedures has been revised. This resulted in changes to the UFSAR. Changes to the UFSAR included deleting a description of the procedure format and a list of typical Abnormal Operating Procedures. Reference to the BWR Owners Group guidelines and writers flowchart guideline was added to provide direction to individuals writing an Abnormal Operating Procedure. By changing the guidelines for the preparation of Abnormal Operating Procedures, these procedures will be easier to manage.

Procedure LFS-100-1

LaSalle Fuelhandlers Surveillance LFS-100-1 "Refuel Platform Main Hoist Interlock Check for Core Alterations" Revision 5 corrects typographical errors, revises a note, adds a note on performing surveillances with the Reactor Mode Switch in SHUTDOWN and adds a reference. UFSAR Section 7.7.13.2.2 requires interlocks only with Mode Switch in REFUEL position. However, 7.7.13.2.4 states that (loaded) bridge travel over the core is stopped any time rods are withdrawn, disabling the Core Limit Switches defeats this. This condition was evaluated (LOSR 87-26). Inadvertant criticality is avoided by constant rod block in shutdown and administrative controls. Technical Specifications contain provisions for core alterations with the Mode Switch in SHUTDOWN. The limit switches defeated to do this are required only with the Mode switch in REFUEL.

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

Procedure LOA-1(2)H13-P603 A403

Procedure LaSalle Abnormal Procedure LOA-1(2) H13-P603 A403 has been revised and LaSalle Special procedure LLP-91-058 was written. In the LOA procedure, operator actions have been added to direct that once all possible corrective actions have been identified and initiated, the individual alarms may be patched-out. For Unit 1 this will be done by having the Instrument Maintenance Department reprogram the individual Control Rod Drive (CRD) channel on the new 1C11-R018 recorder so that the alarm output relay is deactivated. This will deactivate the alarm for this CRD but will allow trending to continue. For these Unit 2 CRDs, this will be done under LLP-91-058, "Bypassing CRD Thermocouples at 2C11-R018 Recorder". The procedure directs the Instrument Maintenance Department to lift the leads from the CRD thermocouple at the recorder, and to install a jumper across the recorder terminals so that this CRD point will actually be reading room temperature. All bypass CRD temperature points will be monitored weekly by the Technical Staff Engineer and any CRDs that are no longer "hot" will be reactivated. When the new recorder is installed on Unit 2, the LLP will be closed.

Procedure LOA 1(2)PM10J A103

LaSalle Abnormal Operations Procedure LOA 1(2)PM10J A103 "Reactor Building Closed Cooling Water (RBCCW) Expansion Tank Level High-Low" provides for action when the automatic level control valve fails to operate normally. The purpose of this procedure change is to provide for proper tracking of the condition and provide proper control of off-normal valve positions. Section 9.2.3.5 of the UFSAR states the RBCCW Expansion Tank level is controlled automatically, manual operation is not discussed. The RBCCW System does not have a safety design basis, and proper level control will be monitored via the Control Room Annunciators. The RBCCW System is not addressed in the Technical Specifications.

Procedures LOA-RH-06, LOA-RI-04, LOA-RI-05
LOA-VP-02, LOP-CM-02 and LOP-RT-14

LaSalle General Abnormal Operating (LGA) support procedures which were developed as revision 0's were initiated to provide instructions for lining up miscellaneous plant systems to facilitate actions necessary to support operation under the scope of Emergency Operating Procedures. Revisions to existing support procedures were made to resolve various procedural deficiencies identified during procedure walkdowns.

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

Procedure LOA-VX-01

Throughout the year, it is not unusual for the outside air damper actuators to fail on the switchgear heat removal system. When an outside air damper actuator fails, the damper is moved to its fail-safe position of fully opened. If a failure occurs during periods of cold weather, large amounts of cold air will enter the room. As a result, and if counter measures are not taken, the temperature of the switchgear room and the battery cell electrolyte would fall below the allowable Technical Specification limits for operation. Technical Specification 3.7.7 states that the switchgear room temperature will be maintained between 50 and 104 degrees Fahrenheit and Technical Specification 4.8.2.3.2 states that battery electrolyte temperature be maintained above 60 degrees Fahrenheit.

The newly developed LaSalle Operational Abnormal procedure LOA-VX-01, "Switchgear Heat Removal Damper Failure", allows the use of a permanent procedure to replace the need to create a temporary procedure each time the threat of cold outside temperatures appears. This procedure outlines steps to manually operate the dampers, and if necessary, temporarily wire closed the outside air dampers until outside air is needed or repairs to the actuator can be completed. In the cases where the damper is temporarily wired closed, the intent of the UFSAR, to be able to automatically adjust the dampers, is no longer possible. The UFSAR states, "Each heat removal system is designed to admit 100% outside air, but outside air dampers and return air dampers are modulated to maintain temperatures within limits," section 9.4.5.2.2.d. With the dampers temporarily wired closed, outside air would not be able to enter the rooms and the damper would not be able to modulate automatically to control temperature.

The purpose of LOA-VX-01, "Switchgear Heat Removal Damper Failure" is to provide guidance to prevent the switchgear room temperature from decreasing below Technical Specification limits when the switchgear heat removal dampers fail. In the event of switchgear room temperature decreasing below 65 degrees Fahrenheit, the procedure directs the Operating Department to monitor room temperature.

The possibility of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Safety Analysis Report is not increased. The switchgear and battery room temperatures are monitored and if they begin to approach Technical Specification Limits, the dampers will be adjusted manually to compensate. Also, the battery room is vented to the much larger volume of the switchgear room to prevent the build-up of hydrogen in the battery room. A small amount of air flows out of the switchgear room and into the turbine building also preventing any build up of hydrogen in the switchgear room.

The possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report is not created. The monitoring and adjustment to the switchgear room temperature will be done manually and the dilution of hydrogen in the switchgear room creates no new unanalyzed situations.

The margin of safety, as defined in the basis for any Technical Specification, is not reduced. The room temperature will be monitored during each shift to verify that the room is within Technical Specification limits for temperature and will be adjusted accordingly if necessary. The large switchgear room air volume and the venting of air out of the battery room will prevent the buildup of hydrogen in those rooms.

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

Procedure LOP-HP-01, LOP-HP-02, LOP-HP-03,
LOP-HP-04 and LOA 1(2)H13-P601 A205

LaSalle High Pressure Core Spray (HPCS) Operating Procedures were revised to reflect actual plant conditions: LOP-HP-01 "Filling and Venting The High Pressure Core Spray System"; LOP-HP-02 "Draining the High Pressure Core Spray System"; LOP-HP-03 "Preparation for Standby Operation of High Pressure Core Spray System"; LOP-HP-04 "Shutdown for High Pressure Core Spray System After An Automatic Initiation"; and LOA 1(2)H13-P601 A205 "High Pressure Core Spray System Actuation". These procedures have been revised to reflect the permanent alignment of the HPCS System to the Suppression Pool (SP), and to reflect the permanent isolation of connections between the HPCS System and the Cycled Condensate (CY) System. The Cycled Condensate System has no safety design basis and eliminating the capability for the HPCS System to access the water volume in the Cycled Condensate Storage Tank (CST) has no impact on the plant accident analysis. Isolation of the CST as a water source for the HPCS System will not significantly reduce the calculated margins of safety since the CST is not considered in the safety analysis for the design basis accident or transient.

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

LaSalle Special Procedure 91-061

LaSalle Special Procedure LLP 91-061 "Depressurizing Across Unit 1 Instrument Nitrogen (IN) 100# Supply Header" provided direction for isolation of IN to Main Steam Isolation Valves (MSIV). The purpose was to provide guidance for performing MSIV maintenance during Hot Shutdown. The probability of the occurrence of an accident was not affected. This procedure did not perform any action that could cause a loss of the pressure boundary. Consequences of an accident are bounded by accidents from power operation. The procedure did not affect any equipment operating modes. Unit was in shutdown, therefore, margin to protective functions were conservative. System availability was maintained within Technical Specification requirements.

LaSalle On Site Review 90-011

LaSalle Onsite Review LOSR 90-011, Unit 1, Division 2, 125V Battery Replacement, was performed to provide support for a temporary battery supply arrangement that was required to replace the Unit 1 Division 2, 125V DC batteries. Based on a safety evaluation, that was performed as required by 10CFR50.59, the NRC concluded that even though the duration of this temporary arrangement exceeded Limiting Conditions for Operation, that an adequate basis for this duration was provided and that the proposed temporary battery supply arrangement for division 2 was acceptable.

LaSalle On Site Review 91-006

LaSalle Onsite Review LOSR 91-006 "Unit 1 Cycle 5 Reload and Core Operating Limits Report" was approved to ensure Unit 1 operates within the design basis by complying with the results of the reload licensing submittal and other analyses performed by GE which will affect future unit operations. The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the UFSAR is not increased nor is the probability for an accident or malfunction of a different type than any evaluated previously in the UFSAR created and the margin of safety is not reduced as demonstrated in analyses using NRC approved methods. The NRC has previously approved GE9B fuel for use as a reload fuel type. Limiting postulated occurrences have been analyzed for L1C5 to ensure that safety limits are bounded and that acceptable fuel performance is maintained. The reload fuel in no way affects the performance of any safety related equipment. Analysis also demonstrated that fuel design and licensing criteria will be met during normal and abnormal operating conditions. Since operation during L1C5 is bounded by the limits established in the reload analyses and associated generic analyses performed by GE and specified in the L1C5 COLR.

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

(continued)

Work Request L04753

LaSalle Work Request L04753 to repair Control Room Door 609 included the temporary removal of the door. This door is an element of the Control Room envelope as defined in the UFSAR 6.4.2.4. The "B" VC Emergency Make-Up Filter Train remained operable during the removal of door 609 by closing doors 296 and 298 as demonstrated by testing. Continuous monitoring of doors 296 and 298 during the repair ensured the probability of failure of the "B" VC Emergency Make-Up Filter Train to meet the Control Room pressurization requirement did not increase. Therefore, the consequences of a design basis accident was mitigated by the operation of the "B" VC Emergency Make-Up Trains. The only parameter important to reactor safety that was affected by the temporary removal of door 609 was control room pressure. This has already been evaluated in the UFSAR. The basis for the applicable Technical Specification 3.7.2 is to limit radiation exposure to Control Room personnel during a design basis accident. This margin of safety was ensured by the operation of the "B" VC Filter Train.

Out Of Service 1-0701-90

LaSalle Out Of Service OOS "Valve 1E51-F064 Out Of Service Closed During Operational Conditions 1, 2 and 3", approves 1E51-F064 being left OOS Closed during conditions 1,2 and 3 following LaSalle Unit 1 Fourth Refuel (L1R04). The valve motor is undersized and therefore the valve cannot meet design basis opening/closing requirements. The valve will be closed to meet isolation condition requirements of the Technical Specifications. This is a change to the UFSAR as the valve is normally in service during conditions 1,2 and 3 but closed. The valve is used (cycled open) to initiate the steam condensing mode of operation which is not required by the Emergency Operating Procedures. The valve is normally closed during plant operation and would only be used (cycled open) after a shutdown if the steam condensing mode were to be used.

Out Of Service 0-244-91
and Out Of Service 0-246-91

LaSalle Out Of Service's OOS 0-244-91 "0 Diesel Generator Air Compressor ODG08CA" and OOS 0-246-91 "0 Diesel Generator Air Compressor ODG08CB" approved opening the air crosstie between subsystems, (ODG032). This eliminated the two separate subsystems as described in Section 9.5.6.1 of the Safety Evaluation Report (SER). This change also deviated from the definition of 2 subsystems as described in the USAR Section 9.5.6.1. The purpose of this change was to take the 0 DG 'A' air compressor (ODG08CA) and 'B' Air Compressor (ODG08CB), respectively, OOS for planned maintenance. The air pressure remained above 200 psig per Technical Specification (TS) 4.8.1.1.2.a.7. This allowed the DG to be considered operable. The probability that an accident would occur was not affected as UFSAR section 9.5.6.3 assumes the failure of the Diesel Generator when both subsystems fail. Consistent with the basis of TS 3/4.8.1 and 3/4.8.2, in that, no degradation to the receiver supply for the DG was made, the margin of safety was not reduced.

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

(continued)

Out Of Service 0-2020-91

LaSalle Out Of Service (OOS) "A and B Auxiliary Electric Equipment Room Ventilation (VE) Cooler Condenser Fan" approved removing the A and B VE Cooler Condenser Fans from service to perform breaker inspections. The purpose of this OOS was to perform breaker inspections for the Electrical Distribution System Functional Inspection (EDSFI). Section 9.4 of the UFSAR states that the Control Room HVAC System (VC) Emergency Make-Up (EMU) train must monitor the habitability of the Control Room and Auxiliary Electric Equipment Room (AEER); ie. a positive pressure and low dose. Removing the VE Cooler Condenser Fan from service would not affect either of these parameters, and it would not affect the operation of VE EMU train. Section 7.3.4.2.a and 9.4.1.2 state that the AEER refrigeration unit is required to maintain AEER temperatures less than 80 degrees F. Even with these fans OOS low temperature outside air (less than 30 degrees F) was available to maintain AEER temperatures less than 80 degrees F. VC EMU train operation as required by Technical Specifications Section 3.7.2 was not affected and AEER temperatures as required by section 3.7.7 were maintained between 50 and 104 degrees F during the OOS so that the margin of safety was not reduced.

Out Of Service 0-2055-91

LaSalle Out Of Service OOS 0-2055-91 "0 Diesel Generator (DG) Air Compressor ODG08CB" approved opening the air cross tie between subsystems, (ODG032). This did not provide the 2 separate subsystems as described in the Safety Evaluation Report (SER) in section 9.5.6. This change also deviated from the definition of 2 subsystems as described in the UFSAR section 9.5.6.1. The purpose of this change was to take the 0 DG 'A' air compressor (ODG08CA) OOS for maintenance on the discharge check valve. The air pressure remained above 200 psig per Technical Specification 4.8.1.1.2.a.7 for the DG to be considered operable. The UFSAR section 9.5.6.3 assumes the failure of the DG when both subsystems fail, therefore the probability that an accident will occur was not affected. Consistent with the basis of Technical Specification 3/4.8.1 and 3/4.8.2, in that, no degradation to the receiver supply for the DG was made, the margin of safety was not reduced.

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

(continued)

Out Of Service 1-28-91

LaSalle Out Of Service (OOS) "Opening of the 1E32-F008 Valve in Operational Condition 1 (Run) and Leaving The Valve Out Of Service Open" approved opening the Main Steam Isolation Valves Leakage Control System (MSIV-LCV) valve (1E32-F008) and placing the valve OOS while the unit was in the run mode. The purpose of this change was to allow backseating of the valve to prevent steam leakage from the packing. The purpose of this valve is to blowdown steam to lower Main Steam Line pressure during outboard MSIV-LCV operation. This valve is in series with another valve with the same function (1E32-F009) which will remain operable to perform the design function. In the event that the second valve (1E32-F009) were to fail, the steam would blowdown into the steam tunnel. The steam tunnel is controlled access only, which provides for personnel safety. The Leak Detection System is designed to detect significant leaks in the steam tunnel providing automatic mitigation by isolating the MSIV's. There is no impact on the Technical Specifications as the system will be able to function as designed. This change will not affect any accident analysis of the UFSAR.

Out Of Service 1-135-91

LaSalle out of service OOS 1-135-91 "Unit 1 Division I 125V Battery Room Exhaust Fan OOS" approved the Division I 125 V battery room exhaust fan (1VX02C) being shut down and taken out of service to allow the 1VX02C fan breaker to be inspected. Battery room ventilation is specified in Section 8.3.2.1 of the UFSAR as being required to purge the battery room of hydrogen liberated from the batteries to prevent an explosive mixture, limit room temperature to 65-104 F, and maintain battery room at normal plant pressure. Battery ventilation is also indirectly Technical Specification related through battery electrolyte temperature requirements. With the fan shut down these are affected. The battery room door remained open during the period the fan was OOS. This allowed the pressures in the Division I Switchgear and 125 VDC Battery Room to equalize and allowed the switchgear ventilation system to maintain proper battery room temperature. A special log was initiated to monitor battery room hydrogen concentration to ensure an explosive mixture was prevented from occurring. The battery was not equalized charged during the time when the fan was OOS so hydrogen production was minimized. In addition, a portable fan was situated in front of the open battery room door to exhaust air from the battery room to the Division I Switchgear Room. The battery was considered fully operable during this change. Also an hourly fire watch was in effect while the battery room fire door was propped open.

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

(continued)

Out Of Service 1-463-91

LaSalle Out Of Service OOS 1-463-91 "Isolate The Unit 1 VY System While Unit 2 Room Coolers And The Unit 2 Low Pressure Core Spray (LPCS) Motor Cooler Remains Operable" approved as the title describes the isolation of the Unit 1 VY System to perform Maintenance. The safety evaluation states that adequate pump flow would exist through Unit 2 LPCS room cooler, Unit 2 RHR A room cooler, and 0 Diesel Generator (D/G) cooling water pump. This ensured that the 0 D/G cooling water pump would be able to perform it's intended function during an accident and therefore does not change existing accident analyses. All actions were controlled by the Technical Specifications and therefore all Technical Specification margins of safety remain unchanged.

Out Of Service 1-1070-91

LaSalle Out Of Service OOS 1-1070-91 "Unit 1 'B' Diesel Generator (DG) Air Compressor 1E22-C302B" approved the opening of the air cross tie between subsystems (1E22-F368). This did not provide the two separate subsystems described in section 9.5.6 of the Safety Evaluation Report (SER). This change also deviated from the definition of 2 subsystems as described in the UFSAR 9.5.6.1. The purpose of this change was to take the Unit 1 B Diesel Generator Air Compressor B (1E22-C302B) OOS for preventative maintenance. The air compressor remained above 200 psig as required per Technical Specifications (TS) 4.8.1.1.2.a.7 for the DG to be considered operable. The probability that an accident would occur was not affected as UFSAR Section 9.5.6.3 assumes the failure of the DG when both subsystems fail. Consistent with the basis of TS 3/4.8.1 and 3/4.6.2, in that, no degradation to the receiver supply for the DG was made the margin of safety was not reduced.

Out Of Service 1-1297-91

LaSalle Out Of Service OOS 1-1297-91 "Unit 1 'A' Diesel Generator (DG) Air Compressor 1DG08CA" approved the opening of the air cross tie between subsystems, (1DG058). This did not provide the 2 separate subsystems as described in the Safety Evaluation Report (SER) Section 9.5.6. This change also deviated from the definition of 2 subsystems as described in the UFSAR Section 9.5.6.1. The purpose of this change was to take the Unit 1 'A' DG Air Compressor A (1DG08CA) OOS for planned maintenance. The air pressure remained above 200 psig per Technical Specification (TS) 4.8.1.1.2.a.7 for the diesel to be considered operable. The UFSAR section 9.5.6.3 assumes the failure of the DG when both subsystems fail, therefore the probability that an accident would occur was not affected. Consistent with the basis of TS 3/4.8.1 and 3/4.8.2, in that, no degradation to the receiver supply for the DG was made, the margin of safety was not reduced.

G. Summary of Changes to the Facility Which are Described in the
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(continued)

Out Of Service 1-1339-91

LaSalle Out Of Service OOS 1-1339-91 "Unit 1 'B' Diesel Generator (DG) Air Compressor 1E22-C302A" approved the opening of the air crosstie between subsystems, (1E22-F368). This eliminated two separate subsystems as described in section 9.5.6 of the Safety Evaluation Report (SER). This change also deviated from the definition of 2 subsystems as described in the UFSAR Section 9.5.6.1. The purpose of this change was to take the Unit 1 'B' Diesel Generator Air Compressor A (1E22-C302A) OOS for required maintenance. The air compressor remained above 200 psig as required per Technical Specification (TS) 4.8.1.1.2.a.7 for the DG to be considered operable. The probability that an accident would occur was not affected as UFSAR section 9.5.6.3 assumes the failure of the DG when both subsystems fail. Consistent with the basis of TS 3/4.8.1 and 3/4.8.2, in that, no degradation to the receiver supply for the DG was made the margin of safety was not reduced.

Out Of Service 1-1379-91

LaSalle Out Of Service OOS 1-1379-91 "Unit 1 Division 2 125V Battery Exhaust Fan" approved the shutdown and OOS of the Unit 1 Division 2 125V Battery Exhaust Fan (1VX05C). The purpose of this change was to allow the 1VX05C fan fire damper to be inspected. Battery room ventilation is specified in UFSAR section 8.3.2.1 as being required to purge the Battery Room of hydrogen liberated from the batteries to prevent an explosive mixture, limit room temperature to 65-104 degrees F, and maintain the Battery Room at normal plant pressure. With the fan shutdown and OOS, the previous UFSAR section is affected. Battery Room ventilation itself is not Technical Specification (TS) related, however, it is tied to the TS indirectly through battery electrolyte temperature requirements. The Battery Room Door remained opened during the period the fan was OOS. This allowed the pressures in the Division 2 Switchgear and 125VDC Battery Room to equalize and allowed the Switchgear Ventilation System to maintain proper Battery Room temperatures. Hydrogen concentration was not a concern unless the fan was shutdown longer than 2 shifts.

The battery was not equalized charged during this time when the fan was OOS so hydrogen production was minimized. In addition, a portable fan was situated in front of the open Battery room Door to exhaust air to the Division 1 Switchgear Room. The battery was considered fully operable during this change. If the fan was to be shutdown longer than the expected 2 eight-hour shifts hydrogen concentration in the Battery Room would have been monitored shiftly to ensure an explosive hydrogen mixture was prevented from accumulating. An hourly fire watch was in effect while the Battery Room Fire Door was propped open, as required by the TS. Therefore, the margin of safety was not reduced.

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

(continued)

Out Of Service 1-1390-91

LaSalle Out Of Service OOS 1-1390-91 "Unit 1 'B' Diesel Generator (DG) Air Compressor 1E22-C302A" approved the opening of the air crosstie between subsystems, (1E22-F368). This eliminated two separate subsystems as described in section 9.5.6.1 of the Safety Evaluation Report (SER). This change also deviated from the definition of 2 subsystems as described in the UFSAR Section 9.5.6.1. The purpose of this change was to take the Unit 1 'B' Diesel Generator Air Compressor A (1E22-C302A) OOS for required maintenance. The air compressor remained above 200 psig as required per Technical Specification (TS) 4.8.1.1.2.a.7 for the DG to be considered operable. The probability that an accident would occur was not affected as UFSAR section 9.5.6.3 assumes the failure of the Diesel Generator when both subsystems fail. Consistent with the basis of TS 3/4.8.1 and 3/4.8.2, in that, no degradation to the receiver supply for the DG was made the margin of safety was not reduced.

Out Of Service 1-1604-91

LaSalle Out Of Service OOS 1-1604-91 "Unit 1 'B' Diesel Generator (DG) Air Compressor 1E22-C302A" approved opening the air cross tie between subsystems, (1E22-F368). This did not provide the 2 separate subsystems as described in the Safety Evaluation Report (SER) in section 9.5.6. This change also deviated from the definition of 2 subsystems as described in the UFSAR Section 9.5.6.1. The purpose of this change was to take the Unit 1 B DG 'A' air compressor (1E22-C302A) OOS to repair/replace the discharge relief valve. The air pressure remained above 200 psig per Technical Specification (TS) 4.8.1.1.2.a.7 so that the DG was considered operable. The probability that an accident would occur was not affected as UFSAR section 9.5.6.3 assumes the failure of the DG when both subsystems fail. Consistent with the basis of TS 3/4.8.1 and 3/4.8.2, in that, no degradation to the receiver supply for the DG was made, the margin of safety was not reduced.

Out Of Service 2-174-90

LaSalle Out Of Service OOS 2-174-90 "Isolation of the 2C Residual Heat Removal (RHR) Pump Seal Cooler" approves the isolation of the cooling water supply to the Unit 2 RHR Pump Seal Cooler. The purpose of this change is to isolate the Pump Seal Cooler since the Cooler has a cracked baseplate. This change requires clarification to the UFSAR 9.2.1.1.1. The C RHR pumps do not require seal cooling because the process fluid which it pumps is not expected to exceed 176 degrees F during a LOCA requiring LPCI actuation, thus this change does not affect the operation of the system.

G. Summary of Changes to the Facility Which are Described in the
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(continued)

Out Of Service 2-186-91

LaSalle Out Of Service OOS 2-186-91 "Unit 2 'A' Diesel Generator (DG) Air Compressor 2DG08CB" approved the opening of the air cross tie between subsystems (1DG058). This eliminated the two separate subsystems as described in section 9.5.6 of the Safety Evaluation Report (SER). This also deviated from the definition of 2 subsystems as described in the UFSAR Section 9.5.6.1. The purpose of this change was to take the Unit 2 A DG Air Compressor B (2DG08CB) OOS for planned maintenance. The air pressure remained above 200 psig per Technical Specification (TS) 4.8.1.1.2.a.7 so that the DG was considered operable. Section 9.5.6.3 of the UFSAR assumes the failure of the DG when both subsystems fail. The probability that an accident would occur was not affected. Consistent with the basis of TS 3/4.8.1 and 3/4.8.2 in that no degradation to the receiver supply for the DG was made, therefore, the margin of safety was not reduced.

Temporary System Change 1-43-91

LaSalle Temporary System Change TSC 1-43-91 "Defeating Radioactive Waste (RW) Control Room Alarms" approves the defeating of alarms resulting from various RW tank level instruments to remove nuisance alarms. The level indication for these tanks is unreliable, resulting in sporadic alarms. The indicators and recorders will remain operable. Radwaste level instruments are not important to safety as defined in the UFSAR, except to the extent that off-site releases are kept to within 10 CFR limits. This change will not affect off-site releases. Tank overflows are discussed in the UFSAR, and there are hard piping overflows to contain them. Radioactive level alarms are not the basis of any margins of safety from the Technical Specifications.

Temporary System Change 1-211-91

LaSalle Temporary System Change TSC 1-211-91 "Remove Off Gas (OG) Filter Building Dam" was approved to eliminate the personnel safety concern of a potential tripping hazard during LaSalle Unit 1 fourth refuel outage (L1R04) activities. Pump requirements from UFSAR 2.4.2.3/Questions 371.14-16 requires existing temporary curb/dam due to Facility Improvement Program (FIP). The only potential consequences from this change is flooding. Flooding will not initiate an accident. Flood damage, as calculated by Engineering, would not occur for 48 hours. Monitoring and administrative controls would have re-installed the dam if flooding became possible. The margin of safety was not reduced.

G. Summary of Changes to the Facility Which are Described in the
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(continued)

Temporary System Change 1-469-91 and
Temporary System Change 1-476-91

LaSalle Temporary System Changes TSC 1-469-91 and 1-476-91 "Unit 1 Fuel Pool Cooling System (FC) and Reactor Building Ventilation HVAC System (VR) Process Radiation Monitors (PRM)" approved jumpering around the VR and FC ventilation PRM's". The purpose of this change was to bypass isolation trip signals during calibration and testing of the VR and FC Ventilation PRM's. Per the UFSAR section 7.6.1.2 and 3, the PRM's provide protection against the consequences of Rod Drop and Fuel Handling accidents. Per Technical Specification 3.3.2, no core alterations, operations with a potential to drain the reactor, or movement of irradiated fuel was allowed while this TSC was in effect. Unit 2 monitors remained operable and capable of initiating Stand By Gas Treatment (SBGT) and Group IV isolations. The action statement of Technical Specification 3.3.2 was adhered to, and the jumpers were removed prior to fuel load so the safety margin was not reduced.

Temporary System Change 1-480-91

LaSalle Temporary System Change TSC 1-480-91 "Repair of the Unit 1 'A' Residual Heat Removal (RHR) Heat Exchanger Baffle Plate" approves two pieces of bar stock being welded to the top of the heat exchanger baffle plate, and Furmanite being injected between these pieces. This repair is being made to improve the heat exchanger performance by elimination of baffle bypass flow. The steam condensing mode of RHR is affected by this change, and will not be used with this TSC in place. It does not affect the seismic qualification of the RHR Heat Exchanger discussed in UFSAR 3.9.2.2.2.11, and is being added to restore adequate operation of the heat exchanger. The added material is compatible with the heat exchanger internals. This repair does not change any of the safety design bases of the RHR system as specified in UFSAR 5.4.7.1. Failure of a single RHR Heat Exchanger is bounded by the Loss of Shutdown Cooling accident analysis of UFSAR 15.2.9. The Operational characteristics of the RHR system are not changing from the system design parameters, thus no Technical Specifications are affected by this repair.

Temporary System Change 1-535-91

LaSalle Temporary System Change TSC 1-535-91 "To Defeat 'A' Residual Heat Removal (RHR) Pump Trip From Suction Valve Closed Signal" approved the lifting of lead AA-64 in panel 1H13-P629 to defeat the "suction valves closed" trip "A" RHR pump (1E12-F004A closed and any of 1E12-F006A, 8 or 9 closed). The purpose of this change was to allow running the "A" RHR pump for surveillances with a malfunction associated with the 1E12-F004A valve that causes the RHR pump to trip even though the valve is open. This interlock is not Technical Specification related. However, the pump trip interlock associated with the "A" RHR pump suction valves is discussed in the UFSAR Section 7.4.3.2.3 and defeating this trip is a change to the facility as described in the UFSAR.

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

(continued)

Temporary System Change 1-535-91

(continued)

The "A" RHR subsystem is not required with the Reactor defueled and this TSC was cleared prior to Core reload. Defeating the trip interlock for no suction path to pump will not make the RHR System inoperable because the interlock is not required by the Technical Specifications and a normal lineup is verified by the Technical Specifications. The "A" RHR subsystem is not required for backup fuel pool cooling. With the reactor defueled, there is no possibility for an accident or malfunction important to safety. Therefore the margin of safety was not reduced.

Temporary System Change 1-705-91

LaSalle Temporary System Change TSC 1-705-91 "Primary Containment (PC) Group 6 and 7 Level 3 Jumper Installation" approved the jumpering out of the Primary Containment Isolation System (PCIS) Group 6 and 7 Level 3 isolation inputs. The purpose of this change was to allow lowering of reactor pressure vessel level for testing of new wide range level transmitters without isolating shut-down cooling, which is used as a means to lower level. This change was performed while the Unit was defueled with fuel pool gates installed. The isolation signals are only required for conditions 1,2 and 3. The UFSAR addresses a loss of fuel pool level and therefore no unanalyzed conditions existed. Since the Unit was defueled and manual isolation capability existed there was no decrease in the margin of safety.

Temporary System Change 1-1338-91

To improve on the margin of safety, the diesel generator (DG) carbon dioxide (CO2) control panels have been replaced with panels that can provide supervised detection. The cables have been wrapped in conduit and an enclosure with a one hour fire rating covers the DG CO2 cabinet.

While this modification was being performed, the following items were inoperable during certain parts of the installation:

- A. the emergency manual push-button in the "0" and "1A" DG room
- B. the local bell alarms, annunciator alarms, and trouble lights at the 1FP04JA and 1FP04JB panels for the sprinkler system associated with valve's 1FP030 and 1FP031
- C. the bell alarms for the "1B" diesel oil day tank room, "0" diesel fuel storage tank room, "1A" diesel fuel storage tank room, "1B" diesel fuel storage tank room, and the Unit 1 reactor building

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

(continued)

Temporary System Change J 1338-91

(continued)

The suppression system was not affected by the inoperability of any of the items stated above. Automatic detection and actuation was still available within the room with an emergency manual and manual push-button actuation available in the DG corridor. Additionally, the diesel day tank rooms are separated from the DG rooms and the rest of the plant by a 3-hour rated barrier. An hourly fire watch was provided for the day tank rooms. If the sprinkler system within the day tank room had actuated, the intermediate jockey pump and if necessary one or both diesel fire pumps would start thereby providing indication and annunciation in the control room. At this point, an operator would have been sent to investigate the diesel oil day tank rooms.

Temporary System Change 1-1405-91

LaSalle Temporary System Change, 1-1405-91, was used to plug and seal floor drains, clean outs, and the Tendon Tunnel access plug at various elevations in the reactor building to reduce the chance of getting an incompatible cleaning solution into the radwaste system. Based on a safety evaluation, that was performed as required by 10CFR50.59, it was concluded that this Temporary System Change had an insignificant affect on the plant. The relatively small amounts of cleaning fluid used (500 gallons) did not pose a flooding hazard and the drains could have easily been unplugged in the event of another source of flooding in the area.

Temporary System Change 1-1414-91

LaSalle Temporary System Change, 1-1414-91, was used to isolate the Unit 1 NE/NW Core Standby Cooling System Coolers for chemical cleaning. This Temporary System Change installed blind flanges on the down stream side of 1DG019, 1DG023 and on the upstream side of 1DG032 to isolate the 1VY01A and 1VY04A coolers. Based on a safety evaluation, that was performed as required by 10CFR50.59, it was concluded that this Temporary System Change had an insignificant affect on the plant. The "O" Diesel Generator Cooling Water Pump was operable during the time this Temporary System Change was installed. In addition, the Low Pressure Core Spray, Reactor Core Isolation Cooling, and "A" Residual Heat Removal pump room temperatures were continuously monitored in the event Residual Heat Removal would have been required during this time.

G. Summary of Changes to the Facility Which are Described in the
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(continued)

Temporary System Change 2-077-91

LaSalle Temporary System Change TSC 2-077-91 "Manual Control of 2RE02PA" which approves bypass of the DWEDS Sump Temperature and Level Interlock to allow continued operation of the sump pump. This would be accomplished by the installation of a switch jumper across contacts 2-21 in the control logic of 2RE02PA. The purpose of this change is to facilitate better system control with increased sump temperatures and inputs. Section 9.3.3 of the UFSAR states that the sump pump autostart on high sump level. This will not be true when the switch jumper is installed and closed. However, with the switch in that configuration the pump will run continuously anyway. Therefore the probability of an accident is not increased since the leakage monitoring function of this system is not impaired. These pumps are not addressed in the Technical Specifications, therefore this change will not reduce the margin of safety.

Temporary System Change 2-164-91

LaSalle Temporary System Change TSC 2-164-91, "Cross Connection Of Domestic Water With Service Water At The Inlet To The Unit 2 Alterex Cooler" approves the injection of domestic water into the service water inlet to the alterex cooler through the alterex water inlet test tap. During normal plant operation using service water as a cooling media in the alterex cooler, the heat exchanger surfaces tend to become fouled. During the summer months when the lake is at elevated temperatures heat transfer in the alterex cooler can be severely restricted. This change will provide a source of cool clean water for the alterex cooler in order to obtain a better heat transfer rate. This will lower machine air temperatures. The connection of domestic water and service water is a facility change. The UFSAR section 9.2.5 restricts the connection of potable water to a radioactive system. Service water is monitored for radiation and the TSC isolates domestic water from service water backflow through a double check valve. The Generator Alternator-Exciter is not required for safe shutdown of the reactor. The domestic water and service water systems are not required by any safety system for operation. If the generator field excitation is lost, the corresponding turbine trip has already been analyzed. This TSC does not affect any Technical Specification items and the safety margin is not reduced.

Temporary System Change 2-332-91

LaSalle Temporary System Change TSC 2-332-91 "Defeat Annunciator For Unit 2 'C' Residual Heat Removal (RHR) Pump Discharge Pressure High Alarm" approved lifting R-Point 1352 in order to clear a Division 2 ground. Due to steam cleaning in the RHR Room various equipment became wet. Pressure Switch 2E12-N022C became wet and started to give a 110V ground on Division 2. The annunciator had to be defeated in order to clear this ground. UFSAR Section 7.6.2.2.5 states that high discharge pressure is a monitored parameter and shall provide annunciators for indication of a RHR leak. The high discharge pressure interface function was maintained by way of local pressure indication once a shift while this TSC was in effect. Technical Specification 3.4.3.7 actions were complied with by way of a 30 day timeclock and a special log to monitor pressure locally, therefore the margin of safety was not reduced.

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

(continued)

Temporary System Change 2-360-91

LaSalle Temporary System Change TSC 2-360-91 "Defeating Control Rod Drive (CRD) Hydraulic Temperature High Annunciator - 2H13-P603-A403" was written to defeat the Unit 2 CRD Hydraulic Temperature High Annunciator (A403) at control room panel 2H13-P603. The purpose of this change is to eliminate false/nuisance alarms. The CRD temperature recorder which supplies the alarm signal to this alarm is broken and causes false alarms on all CRDs. The recorder cannot be replaced until LaSalle Unit 2 Fourth Refuel (L2R04) at which time the recorder will be replaced with a new more reliable model. (Component Replacement 89-079, work request L88983) The CRD temperature recording, trending and annunciator alarm function are mentioned several times in the UFSAR Sections 7.7.2.2.3, 4.6.1.1.2.4.2.4, 4.6.2.3.1.2.2.1, 2, 3 and 4.6.2.3.1.2.6. The primary purpose, as described in the UFSAR, of this instrument and alarm function is to help the reactor operator identify accidents or equipment malfunctions which have occurred. The probability of any related accidents or equipment malfunctions occurring is in no way increased by loss of CRD temperature alarms. The consequences of all these accidents are bounded usually causing a choked-flow small line break vessel leakage rate, limited rod withdraw (one notch) and or rod drift-in or scram. As CRD high temperature alarm is only one of several indications which will be received (and CRD temperature indication is not defeated), the event will not go on undetected. Shiftly monitoring per existing operating department surveillances, will allow the loss of cooling water flow to the CRDs to be detected by downscale flow indication and indication at the temperature recorders. Technical Staff will continue weekly monitoring of all hot CRDs. The CRD temperature recorders and alarm are not used as a basis for any Technical Specifications and therefore can have no affect on any margin of safety.

Temporary System Change 2-374-91

LaSalle Temporary System Change TSC 2-374-91 "Temporary Defeating of Unit 2 Main Turbine Bearing #6 High Vibration Trip" approves lifting the vibration probe amplifier output from bearing #6 from the Turbine Supervisory Instrumentation (TSI) high vibration trip module. The purpose of this change is to prevent a turbine trip caused by a spurious trip signal from the #6 Turbine bearing amplifier card while testing is being performed following installation. The bearing #6 high vibration trip will be bypassed. The UFSAR section 10.2.2 states that the turbine trips on high vibration. This will remain valid for all bearings except #6. Administrative controls will be implemented to monitor vibration readings and alarms to trip the turbine should a high vibration condition occur on #6 bearing. The vibration trip is not for reactor safety purposes, it is for equipment preservation. The Main Turbine overspeed trip remains operable. A turbine trip on high vibration is not included in the Technical Specification accident analysis, therefore, the safety margin is not reduced.

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

(continued)

Temporary System Change 2-397-91

LaSalle Temporary System Change, 2-397-91, was used to isolate the Unit 2 NE/NW Core Standby Cooling System Coolers for chemical cleaning. This Temporary System Change installed blind flanges on the down stream side of 2DG019, 2DG023 and on the upstream side of 2DG032 to isolate the 2VY01A and 2VY04A coolers. Based on a safety evaluation, that was performed as required by 10CFR50.59, it was concluded that this Temporary System Change had an insignificant affect on the plant. The "O" Diesel Generator Cooling Water Pump was operable during the time this Temporary System Change was installed. In addition, the Low Pressure Core Spray, Reactor Core Isolation Cooling, and "A" Residual Heat Removal pump room temperatures were continuously monitored in the event Residual Heat Removal would have been required during this time.

Technical Specification 3/4.8.2

Technical specification amendments to the engineered safety feature Division 3 125 Volt DC battery specific gravity requirements. This change will update the technical specifications to reflect the manufacturer's recommendations for nominal specific gravity values for the replacement batteries to be installed under Modifications M1-1-90-011 and M1-2-90-009.

These amendments are required as a result of the upcoming replacement of the Units 1 and 2 engineered safety feature (ESF) Division 3 125 Volt DC batteries. The DC distribution system and the batteries are designed to provide control power for both normal and emergency operation of plant equipment and to provide power for automatic operation of the engineered safety feature protection systems during abnormal and accident conditions (UFSAR Section 8.3.2.1). The technical specification limits for battery specific gravity are based on the manufacturer's nominal full charge specific gravity rating for a particular battery type. The replacement batteries are of a different type and are rated with a higher nominal full charge specific gravity value than are the currently installed batteries. Raising the technical specification specific gravity limits for the Division 3 batteries will help to ensure that they are maintained in an operable condition capable of meeting their design function. This amendment does not affect the initial assumptions for any accident evaluated in the UFSAR.

The proposed amendment reflects the change in nominal full charge specific gravity rating between the currently installed battery and the replacement batteries. The proposed amendment does not bring about any changes to the facility or to the operation of the facility as described in the UFSAR.

The bases for Technical Specification 3/4.8.2 provides the criteria for establishing the battery specific gravity limits based on the manufacturer's ratings. The limits currently provided in the technical specifications for the Division 3 batteries if left unchanged would be non-conservative for the replacement batteries. Therefore, the technical specification specific gravity limits for the Division 3 batteries must be raised accordingly in order to maintain the current margin of safety.

G. Summary of Charges to the Facility Which are Described in the
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(continued)

UFSAR Chapter 8 - Electric Power

The UFSAR will be revised to reflect the setpoint changes of relays 1427-AP270A/B, 1427-AP271A/B, 2427-AP270A/B, and 2427-AP271A/B. The relays' trip setpoints will be changed from 3814 volts to 3885 volts, plus or minus 4 volts. Analysis of degraded voltage relay setpoints shows that the current relay settings are too low for all possible conditions at minimum switchyard voltages. A higher setpoint will cause the under voltage relays to trip at a higher, more conservative voltage but will not affect the way in which the undervoltage relay operates. The relay and its designed function will not be changed.

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

Section 8.3.2 of the UFSAR will be revised to reflect the replacement of the Unit 2 non-1E 24/48V batteries. The old batteries are obsolete and have reached the end of their life cycle. Replacement cells for the old batteries are not available. The new batteries have a larger capacity and their installation has required modifications to the racking system. The new batteries and modified rack meets all requirements specified by the UFSAR.

UFSAR Chapter 9 - Auxiliary Systems

The UFSAR will be revised to reflect the changes made by modification M01-0-89-021. This modification: 1) removed the non-operational hypochlorite system, 2) installed equipment capable of injecting a hypochlorite/sodium bromide mixture into the water tunnel inlet lines, and 3) installed equipment capable of injecting polyacrylate. The new chemical feed system will minimize biological fouling in the Core Standby Cooling System. Also, the new system will minimize biological fouling, silting, and scaling of all heat exchangers and piping that uses water from the water tunnel. The installation was in response to a commitment made to the NRC in regards to Generic Letter 89-13.

This modification involves the addition of a non-safety related system with no direct control or interaction with any other plant system. Construction of this system does not interface directly with any plant systems which control reactivity, assure pressure boundary integrity, or provide core cooling.

UFSAR Chapter 10 - Steam And Power Conversion System

The UFSAR will be revised to reflect the addition of a test tap line on the Unit 2 condenser outlet dewatering line. This line will be used to provide warm water for the Unit 1 condenser chemical cleaning. When chemical cleaning is not in progress, the line will be isolated by an isolation valve and a blind flange.

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

(continued)

UFSAR Chapter 11 - Radioactive Waste Management

During review of UFSAR section 11.5.5, "High Radiation Sampling System", it was determined that this section needed to be revised to reflect the actual plant conditions and to provide an enhanced description of the system. A past modification to the plant installed an in-line dissolved oxygen probe in the high radiation sampling system panel to measure dissolved oxygen concentration. Another modification installed gas partitioners, capable of separating gaseous, iodine, and particulates. The gas partitioners replaced the need to obtain an air sample from containment. These changes were included in the revision to the UFSAR. To clarify the location of where the analysis for boron would occur, the chemistry laboratory was specified. Finally, a section was added to the UFSAR to describe the backup off site chemical analysis capabilities that the plant has in place.

Since the changes to the plant were evaluated separately and found not to affect plant safety as described by the UFSAR, by including these changes in the UFSAR, plant safety will also not be adversely affected. The enhancements to the UFSAR will only provide a more descriptive analysis of plant operations.

UFSAR Chapter 11 - Gaseous Waste Management Systems

The offgas hydrogen analyzers require a minimum offgas flow of 35 scfm. If the offgas flow rate is less than 35 scfm, then the hydrogen analyzer must be considered inoperable. The offgas purge piping, originally used to add service air to the offgas system when a unit was shut down, will now be opened up to allow service air to enter the offgas system continuously. By adding service air to the offgas system, the offgas flow increases from 20 to 80 scfm. The offgas system was designed to operate with flows up to 250 scfm and the offgas post treatment radiation monitors will isolate the offgas system in the event of high radiation doses. The UFSAR will be revised to reflect these changes in the 1992 revision.

UFSAR Appendix G - Reactor Recirculation System

The reactor recirculation differential temperature circuit has been modified. The reason for the modification was to reduce the number of downshifts experienced by the reactor recirculation pump due to spurious low voltage noise in the differential temperature circuitry. The new instrumentation provides signal conditioning between existing transmitters, resistive temperature devices, and existing logic relays. The new instrumentation has a signal range of 1-5 Vdc opposed to a range of 0-1 mVdc that was used previously. This change does not functionally change the circuitry.

G. Summary of Changes to the Facility Which are Described in the
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(continued)

UFSAR Appendix H - Fire Hazards Analysis

The walls of the main steamline tunnel that extend from elevation 736 feet-7 inches to 768 feet-0 inches at column 11 and rows G.5 to H.8, and column 12.7 and rows G.5 to H.8 have been re-classified as non fire barrier walls. It was determined in a letter to G. Iiederich, LaSalle Station Manager, from R. Bishop, Production Services Manager, that these walls did not need to be classified as fire barriers since they do not separate safety shutdown cables, safety shutdown equipment, and associated non-safety circuits of redundant trains. The UFSAR will be revised to reflect this evaluation.

UFSAR Volume X - Drawings

The UFSAR drawing M-82 sheet 1 has been revised to reflect the installation of differential pressure gauges across the service air dryer afterfilters. The gauges have been installed in the three service air trains to measure differential pressure across the afterfilters. The gauge does not affect the operation of the filter. The service air system is not safety or ASME code related therefore the installation of the gauge will not affect the safe shutdown of the units.

H. Summary of Safety Related Modifications

Modification M01-0-82-065

This modification involved providing a logic change for the Control Room Emergency Makeup Fans so the dampers OVC05YA/B and OVC57YA/B would close upon manual start of the emergency makeup fans. This change was installed as to prevent scavenging of the air to the Emergency Makeup Fans from the normal supply fans. This will ensure that the Emergency Makeup Fans are supplied air from an outside source. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-0-82-084

This modification involved providing the permanent disability of the OVC01YA/B Tornado Dampers installed in the minimum outside air intake duct for the Control Room/Auxiliary Electrical Equipment Room HVAC (VC) system. This work entailed removal of control room indication lights and switches for both sets of tornado dampers, removal of the tornado damper blades from the duct work, and the removal of the instrument air supply from the damper solenoid valve. A change to the UFSAR was required to support the removal of the Tornado Dampers. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-0-86-014

This modification involved the physical removal/abandonment of the HVAC System VC Chlorine Detectors and associated equipment such as temperature switches, heaters, probes and sample lines. The control room HVAC chlorine detection system is no longer required at LaSalle County Station due to the absence of chlorine shipments around the plant. This analysis was performed in accordance with the requirements of Reg. Guide 1.78, Guide 1.70 (Section 2.2.3.1) which justified the removal/abandonment of the chlorine detection system. A change to the Technical Specification had been previously issued to eliminate all chlorine detection requirements (section 3/4.7.2 and 3/4.3.7.8). However, changes to the UFSAR were required to support the removal/abandonment of the HVAC System VC Chlorine Detectors. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M-0-90-004

This modification involved the installation of the required mechanical and electrical components for the IDNS Facility. The existing IDNS SBT and Main Stack Effluent Monitoring System was demolished and only the SBT Penetration was used for the new equipment. This installation also included additional tubing, heat tracing and supports from the plant stack to the new IDNS Facility. Connections to existing plant system were completed under this modification. The Safety Evaluation concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications
(continued)

Modification M01-1-82-273

This modification involved replacing the existing Division III 125V DC Ground Detector with an Esterline Angus Ground Detector. The replacement detector was mounted on the Division III 125V DC Instrumentation Panel 1PLH2J. The ground detector was replaced in order to meet the production instruction specification of alarming at 125K ohms to ground. The existing ground detector was alarming at 40K ohms which resulted in an alarm setpoint too close to the normal operating voltage. The Esterline Angus ground detector is capable of recording and detection of a ground condition on both sides of the bus. A change to the UFSAR was required to support the new Ground Detector. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-1-83-062

This modification involved relocation of the "B" RHR valve 1RE043 and orifice 1E12-D310 from line 1RE37AB to 1RE37AA. Relocating the 1RE043 valve will permit warm-up flow from both "A" and "B" RHR loops to be sent to the condenser rather than to the reactor building equipment drain tanks. This modification will also allow the line-up of the "B" RHR system in a more timely manner for Shutdown Cooling Operations. There were no UFSAR or Technical Specifications changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-1-84-018

This modification involved the modification of the control circuitry for the 1A Diesel Generator Circuit Breaker Close Circuit 1DG01K. This has involved the closure of the diesel generator 1423 breaker onto the 142Y bus if the bus is faulted. This change would also trip the breaker upon the bus fault indication as long as an ECCS signal is not present. This benefits the diesel generator from supplying excessive currents to a faulted bus. There were no UFSAR or Technical Specification changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-1-87-078

This modification involved the replacement of the Petter diesel engine in the starting air system for the HPC's Diesel Generator 1B with an AC motor. This was necessary since the diesel engine starting motor load was not included in the battery service test and secondly the diesel engine is a high maintenance item and was not reliable. There were no Technical Specification changes required for this modification. However, changes to the UFSAR section 9.5.6.2 were required to delete references to the diesel engine from the system description. Also information on the new motors was inserted in the section as required. The Safety evaluation concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications
(continued)

Modification M01-1-87-089

This modification involved revision of the 1A Diesel Generator to prevent a fail-to-start trip unless the air start solenoids have been energized, allow continuous cranking of the diesel engine for the entire time delay setting of crank limit timer K39, and reduce electrical noise in the speed sensing signal. This change has improved the reliability and availability of the 1A Diesel Generator by correcting a potential problem with the start circuit. The crank and rest relays K37 and K38 were removed and changes to the permissive for the S6 lube oil pressure switch in interlock the air start solenoids. No changes to the Technical Specification or UFSAR were required. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-1-87-097

This modification involved replacement of the reactor water level Static-O-Ring (S-O-R) switches on the ECCS Systems, Low Pressure Core Spray (LPCS), Residual Heat Removal (RHR), Automatic Depressurization System (ADS), High Pressure Core Spray (HPCS) and the Reactor Core Isolation Cooling (RCIC) with an analog trip system consisting of Rosemount level transmitters, trip units, and control relays. This modification was installed as a result of the NRC Bulletin 86-02. Changes to both the Technical Specification and the UFSAR were completed. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-1-88-001

This modification involved the replacement of the existing 250 Volt battery 1DC01E and rack and revising the current monitoring instrumentation of the battery and it's associated charger. This was accomplished by removal of the existing Plante type FPS-13 battery and racks and installing the new GNB Lead Calcium type NCX-27 battery and rack. This included the installation of inter-cell, inter-row, inter-rack and main feed connections, and additional and reconnection of all grounding cable. The battery's rack have been changed from a two step to a two tier design to facilitate the battery's larger physical size. No Technical Specification changes were required. A revision to the UFSAR Section 8.3 was required. The Safety evaluation concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications
(continued)

Modification M01-1-88-002

This modification involved adding a 125 Volt Division II Battery charger, 1DC17E, rated at 200 amps. This change is required to accommodate the new 125 volt, Division II, GNB type NCX-17, batteries which are to also be installed under M01-1-88-003. The new 1DC17E charger will be the primary charger and the existing charge 1DC16E will remain as a back up charger and may be used in the event of a primary charger failure. The scope of this modification included the addition of instrumentation cables, new conduit for the charger, addition of AC and DC cables for the new charger, addition of the AC breaker for the new charger, and addition of the DC breaker and a new 300 amp shunt in the 2D cubical. No Technical Specification changes were required. A revision to the UFSAR Section 8.3 was required. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-1-88-003

This modification involved the replacement of the 60 lead-antimony Plante type FPS-15, 125 VDC Division II batteries with 58 GNB Lead-calcium NCX-17 type batteries, and also replaced the battery rack with one of a two-tier design so as to fit the new, larger batteries in the existing battery room. This also revised the current monitoring instrumentation of the batteries. No Technical Specification changes were required. A revision to the UFSAR Section 8.3 was required. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-1-88-049

This modification involved the upgrade of the existing "1A" Diesel Generator Room Carbon Dioxide System from a unsupervised detection system to a Class A supervised detection system as specified in NFPA 72D-1975. The replacement of the existing control panels with seismically qualified NEMA Type 4 CO2 control panels. Alarm horns, pushbutton stations, and electrol manual pilot cabinets were also installed. There were no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-1-89-010

This modification involved the installation of four instantaneous Agastat time delay relay at 1H13-P621 panel to prevent an erroneous trip of the RCIC Main and Feedwater Turbines. This time delay has provided a four minute span for the operators to determine if the start of the RCIC system was spurious and secure RCIC if the system is not needed to maintain vessel inventory to shutdown the RCIC Trip. The installation of new annunciator and labels, new MCR annunciator window, SER printout message, relay labels, and selector switch and indicating lights were also included with this modification. There were no Technical Specification and UFSAR changes required. The Safety concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications (continued)

Modifications M01-1-89-026

This modification involved the changes in logic to Anticipated Transient Without Scram (ATWS) from one-out-of-two to one-out-of-two taken twice using the Alternative Rod Insertion (ARI) level and pressure instrumentation for tripping the Reactor Recirculation pumps. The removal of the existing ATWS, pressure and level instruments, rewire AEER parts to use ARI pressure and level logic relays, change selector switch at AEER panels, and additional reset pushbutton at MCR panel. This change has been made to comply with the ATWS Rule 10 CFR50.62. The Technical Specifications required changes to Table 3.3.4.1-1 to change the minimum number of operable trip channels from one to two, since the new logic required both channels of a division (trip system) to be operable in order for the division to be operable. The UFSAR also required changes to be made to Section 15.8, Appendix G.3.1.2.2. The Safety evaluation concluded that there were no unreviewed safety questions.

Modification M01-2-87-052

This modification involved the replacement of the Petter diesel engine in the starting air system for the HPCS Diesel Generator 2B with an AC motor. This was necessary since the diesel engine starting motor load was not included in the battery service test and secondly the diesel engine is a high maintenance item and was not reliable. There were no Technical Specification changes required for this modification. However, changes to the UFSAR section 9.5.6.2 was required to delete references to the diesel engine from the system description. Also information on the new motors was inserted in the section as required. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-90-019

This Minor Plant Change involves the permanent installation of the temperature sensors in the Drywell to monitor temperature of selected safety-related equipment. This change will abandon five (5) temperature sensors (1TE-VP041, 042, 076, 081, and 082) and associated cables in place. It will however, install five (5) new temperature sensors (1TE-VP-113, 114, 115, 116, and 117) and cables with associated junction boxes and conduit. This will allow all required temperature data for the drywell to be collected from the CM and the 1PM05J panel in the Control Room. Changes to Technical Specification and UFSAR were required. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-90-020

This Minor Plant Change involves the installation of a small drain line to the upper and lower motor bearing oil reservoir of the "A" RHR pump motors. This drain line replaced the existing oil plug. The drain line consists of 3/4" line and a globe valve in order to facilitate oil sampling and draining of the pump. There were no changes to Technical Specification or UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications
(continued)

Minor Plant Change P01-1-90-021

This Minor Plant Change involves the installation of a small drain line to the upper and lower motor bearing oil reservoir of the Low Pressure Core Spray (LPCS) pump motors. This drain line replaced the existing oil plug. The drain line consists of 3/4" line and a globe valve in order to facilitate oil sampling and draining of the pump. There were no changes to Technical Specification or UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-90-022

This Minor Plant Change involves the installation of a small drain line to the upper and lower motor bearing oil reservoir of the High Pressure Core Spray (HPCS) pump motors. This drain line replaced the existing oil plug. The drain line consists of 3/4" line and a globe valve in order to facilitate oil sampling and draining of the pump. There were no changes to Technical Specification or UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-90-028

This Minor Plant Change involves the addition of a clamp assembly to the Jet Pump sensing lines (#5 and #15) which are susceptible to failure by the recirculation pump vane passing frequency induced vibrational effects. Addition supports and reinforcement to existing supports were added to the sensing lines. This change will increase the natural frequency of the unsupported length of the sensing line resulting in lower alternating stresses acting on the welded attachments. There were no Technical Specification changes. However, changes to the UFSAR were required to provide clarity and completeness of the as-built condition. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-90-033

This Minor Plant change involves installation of 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, 1D18-K610A, B, C, and D. The varistor was installed in the control room panels 1H13-P635 and 1H13-P636. This change was recommended by GE in SIL No. 499 to protect the power supplies from low energy transients. There were no Technical Specification or UFSAR changes involved. The Safety Evaluation concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications
(Continued)

Minor Plant Change P01-1-90-064

This Minor Plant Change involves the installation of a small drain line to the upper and lower motor bearing oil reservoir of the "1C" RHR pump motors. This drain line replaced the existing oil plug. The drain line consists of 3/4" line and a globe valve in order to facilitate oil sampling and draining of the pump. There were no changes to Technical Specification or UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Changes P01-1-90-065

This Minor Plant Change involves the installation of a small drain line to the upper and lower motor bearing oil reservoir of the "1B" RHR pump motors. This drain line replaced the existing oil plug. The drain line consists of 3/4" line and a globe valve in order to facilitate oil sampling and draining of the pump. There were no changes to Technical Specification or UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-91-501

This Minor Plant Change involves the replacement of the motor pinion gear and worm shaft gear for the RHR 1E12-F064A Motor Operator. This motor pinion gear will increase the operator's overall gear ratio from 31.9 to 52.2. The springpack has also been replaced as part of a Technical Parts Evaluation. This change is in response to NRC Generic Letter 89-10 which requires that nuclear plant licensees evaluate the ability of certain motor operated valves to be repositioned when subjected to design basis conditions of flow and differential pressure. There were no changes to the Technical Specifications or the UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-91-503

This Minor Plant Change involves the replacement of the existing 2 ft-lbf motor with a 5 ft-lbf motor for the Reactor Building Closed Cooling Water (RBCCW) 1WR179 valve. To accommodate this new motor the magnetic circuit breaker setting is being lowered from 12.6 to 11.0. The thermal overload is being changed from 1.0 to 1.1. This change will increase the thrust that the actuator delivers to the 1WR179 valve stem. This change is in response to NRC Generic Letter 89-10 which requires that nuclear plant licensees evaluate the ability of certain motor operated valves to be repositioned when subjected to design basis conditions of flow and differential pressure. There were no changes to the Technical Specifications or the UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications
(continued)

Minor Plant Change P01-1-91-505

This Minor Plant Change involves the replacement of the existing 15 ft-lbf motor with a 25 ft-lbf motor for the RHR 1E12-F008 valve. To accommodate this new motor the thermal overload setting is being increased from 4.0 to 6.6. The circuit breaker setting is being changed from 52 to 70. This change will increase the thrust that the actuator delivers to the 1WR179 valve stem. This change is in response to NRC Generic Letter 89-10 which requires that nuclear plant licensees evaluate the ability of certain motor operated valves to be repositioned when subjected to design basis conditions of flow and differential pressure. There were no changes to the Technical Specifications or the UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-90-507

This Minor Plant Change involves the replacement of the motor pinion gear and worm shaft gear for the Low Pressure Core Spray (LPCS) 1E21-F012 Motor Operator. This motor pinion gear will increase the operator's overall gear ratio from 138.4 to 186.4. This change is in response to NRC Generic Letter 89-10 which requires that nuclear plant licensees evaluate the ability of certain motor operated valves to be repositioned when subjected to design basis conditions of flow and differential pressure. There were no changes to the Technical Specifications or the UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-1-91-511

This Minor Plant Change involves the replacement of the existing 2 ft-lbf motor with a 5 ft-lbf motor for the Reactor Building Closed Cooling Water (RBCCW) 1WR029 valve. To accommodate this new motor the magnetic circuit breaker setting is being lowered from 12.6 to 11.0. The thermal overload is being changed from 1.0 to 1.1. This change will increase the thrust that the actuator delivers to the 1WR029 valve stem. This change is in response to NRC Generic Letter 89-10 which requires that nuclear plant licensees evaluate the ability of certain motor operated valves to be repositioned when subjected to design basis conditions of flow and differential pressure. There were no changes to the Technical Specifications or the UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-2-90-022

This Minor Plant Change involves the installation of a small drain line to the upper and lower motor bearing oil reservoir of the "2A" RHR pump motors. This drain line replaced the existing oil plug. The drain line consists of 3/4" line and a globe valve in order to facilitate oil sampling and draining of the pump. There were no changes to Technical Specification or UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications
(continued)

Minor Plant Change P01-2-90-024

This Minor Plant Change involves the installation of a small drain line to the upper and lower motor bearing oil reservoir of the High Pressure Core Spray (HPCS) pump motors. This drain line replaced the existing oil plug. The drain line consists of 3/4" line and a globe valve in order to facilitate oil sampling and draining of the pump. There were no changes to Technical Specification or UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-2-90-044

This Minor Plant Change involves the installation of a small drain line to the upper and lower motor bearing oil reservoir of the "2B" RHR pump motors. This drain line replaced the existing oil plug. The drain line consists of 3/4" line and a globe valve in order to facilitate oil sampling and draining of the pump. There were no changes to Technical Specification or UFSAR. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-2-90-055

This Minor Plant change involves installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Isolation and Drywell Pneumatic Valcor solenoid valve 2CM020A. 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. There are no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-2-90-056

This Minor Plant change involves installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Isolation and Drywell Pneumatic Valcor solenoid valve 2CM020B. 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. There are no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Changes P01-2-90-060

This Minor Plant change involves installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Isolation and Drywell Pneumatic Valcor solenoid valve 2CM024A. 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. There are no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

H. Summary of Safety Related Modifications
(continued)

Minor Plant Change P01-2-90-067

This Minor Plant change involves installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Isolation and Drywell Pneumatic Valcor solenoid 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. There are no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-2-90-068

This Minor Plant change involves installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Isolation and Drywell Pneumatic Valcor solenoid valve 2CM019A. 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. There are no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Minor Plant Change P01-2-90-069

This Minor Plant change involves installation of high temperature wires to replace deteriorated lead wires of the Containment Monitoring Isolation and Drywell Pneumatic Valcor solenoid valve 2CM019B. 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. There are no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Component Replacement 90-140

This Component Replacement involves the replacement of the obsolete NAMCO 750-7000 limit switch on the #4 Main Turbine Stop Valve 1C71-N006G with a 740-80001 model. The new switch required the mounting to be changed to horizontally in a blister box attached to the side of the EHC cabinet that houses the existing switch. There were no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Component Replacement 90-141

This Component Replacement involves the replacement of the obsolete NAMCO 750-7000 limit switch on the #2 Main Turbine Stop Valve 1C71-N006E with a 740-80001 model. The new switch required the mounting to be changed to horizontally in a blister box attached to the side of the EHC cabinet that houses the existing switch. There were no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Summary of Safety Related Modifications
(continued)

Component Replacement 90-142

This Component Replacement involves the replacement of the obsolete NAMCO 750-7000 limit switch on the #1 Main Turbine Stop Valve 1C71-N006A with a 740-80001 model. The new switch required the mounting to be changed to horizontally in a blister box attached to the side of the EHC cabinet that houses the existing switch. There were no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

Component Replacement 91-026

This Component Replacement involves the replacement for the "A" RHR Pump Room 2TS-VY001 temperature switch. The United Electric temperature switches Model C402-120 has been determined to be an acceptable replacement for the existing switch Model C30 103. There was no change to the mounting configuration or electrical connections. There were no Technical Specification or UFSAR changes required. The Safety evaluation concluded that there were no unreviewed safety questions.

I. Summary of ECCS Outages

This information has been reported monthly in LaSalle's NRC Monthly Reports (Section 11.F.2) dated January 1991 through December 1991.

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

For a copy of the evaluation that was completed in 1991 see Attachment D.

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

During this reporting period, January 1, 1991 through December 31, 1991, 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	SYS	EPN	DESCRIPTION
L03081	AP	OWM09T	1A28E BUS 131B 104D KNOB BROKE
L03811	DC	ODC21E	TSC BATTERY CHARGER VOLTMETER READS 130V
L04331	DC	ODC19E	RSH BATTERY CHRGR TRIPPED WHEN RESTARTED
L05921	DC	ODC20E	TSC D/G 24 VDC BATT CELLS # 1 & # 4 LOW SPECIFIC GRAV
L06219	DC	ODC20E	TSC BATTERY CELL # 47 FAILED LOS-DC-Q3
L07869	DC	ODC19E	RSH BATTERY CHARGER NOT WORKING
L08563	DC	ODC36E	TSC 24 VOLT BATTERY HIGH FLOAT VOLTAGE
L09273	DC	ODC19E	RSH 125V CHARGER WON'T ADJUST LOW ENOUGH
L11132	DC	ODC02E	SYS II BATT RMV CORROSION FROM CELL TERM CONNECTION
L89124	DC	ODC22E	125V CELL #47 ICV OF 2.19
L04067	DG	ODG08CA	0 DG A A/C SUCT/DISCH HOLD-DOWN SCREW LOOSE
L04068	DG	ODG08CB	0 DG B A/C SUCT/DISCH HOLD-DOWN SCREW LOOSE
L04596	DG	ODG08CA	0 DG A AIR COMPRESSOR SECURE OIL LEVEL
L04597	DG	ODG08CB	0 DG B AIR COMPRESSOR SECURE OIL LEVEL
L04764	DG	OPDS-VD004	OVD01F DG ROOM VENT SUPPLY AIR FILTER HIGH
L05249	DG	ODG000	ODG SPACE HEATER NOT WIRED PER WIRING DIAGRAM
L05320	DG	ODG08CB	0 DG B A/C RELIEF VALVE LIFTING
L05434	DG	ODD01PB	0 DO TK ROOM SUMP PUMP B NOISE/VIBRATION
L05453	DG	ODG01K	0 D/G POWER PACK REBUILD POWER PACK
L05766	DG	ODD01P	DG FUEL OIL TRANS PUMP REPLACE
L06093	DG	OPS-DG047	DG CRANKCASE PRESS SW WILL NOT RESET
L06600	DG	ODG01K	0 DG WIRING VERIFIED
L08256	DG	OLIS-DO004	0 DG FOTP VLV INDICATED CLOSED
L10678	DG	OTIS-DG100	0 DG REPLACE ROSEMONT PROCESS MON COVER
L10698	DG	OLIS-DO008	B DFP DAY TANK LEVEL IND ERRATIC
L11393	DG	OLE-DO008	DFP FUEL DAY TANK LEVEL IND LOCAL HORN INOP
L08823	NR	1C51-000	ION CHAMBER LOW OUTPUT VOLTAGE
L11829	NR	1H13-P603	A307 1H13-P603 LIGHTS RESET ON BACK, ALARM STAYED
L05864	RD	OC11-F099	CRD N2 CHARGING HEADER BOTTLE BANK PR REG
L05971	RD	OC11-9437	REBUILD CRD PER LMP-RD-01 DRIVE SPUD DAMAGED
L06184	RD	OC11-F350	CRD N2 CHARGING RELIEF LEAKS AIR
L01800	VC	OPL15J	VC CONTROL PANEL DOOR HANDLE BROKEN OFF
L02812	VC	OFS-VC002	VC AUX RELAY CHATTERING
L03816	VC	OVC27YA	VC SUPPLY DAMPER MOTOR DOESN'T WORK
L04412	VC	OTZ-VC043	OVC19YB DAMPER DOES NOT RESPOND TO TEMP CHANGE
L04593	VC	OVC05CB	VC COMPRESSOR DISCH PINHOLE FREON LEAK
L04836	VC	OXY-VC165B	NH3 DET POST'S WORN CASSETTE CARRIER
L04837	VC	OXY-VC165A	NH3 DET POST'S WORN CASSETTE CARRIER
L04838	VC	OXY-VC125B	NH3 DET POST'S WORN CASSETTE CARRIER
L04839	VC	OXY-VC125A	NH3 DET POST'S WORN CASSETTE CARRIER
L05073	VC	OPDS-VC013	CR M/U FAN REPLACE MICRO-SWITCH
L05088	VC	OPDI-VC029	EMERG M/U FAN UNABLE TO CALIBRATE INDICATOR
L05089	VC	OFS-VC005	CR HVAC MIX DAMPER FLOW UNABLE TO CALIBRATE
L05090	VC	OFS-VC006	CR HVAC FLOW SWITCH UNABLE TO CALIBRATE
L05331	VC	OTIC-VC003	MIXING TEMP CONTROLLER METER STICKS
L05379	VC	OFS-VC072	MIXING DAMPER WOULD NOT CALIBRATE
L05898	VC	VC22YB	VC TEMP CONTROL DAMPER LEAKING OIL

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

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

WRNUM	SYS	EPN	DESCRIPTION
L06001	VC	0FZ-VC101	0VC52YA OUTSIDE AIR ISOLATION DAMPER DOES NOT CLOSE
L06002	VC	0FZ-VC009C	0VC14YA PURGE ISO DAMPER DOES NOT CLOSE TIGHTLY
L06083	VC	OXY-VC125B	AMMONIA DETECTOR WILL NOT RESET
L07069	VC	OFSY-VC004X	VC RELAY BURNED
L07667	VC	OXY-VC165A	AMMONIA DETECTOR TAPE DOESN'T ADVANCE
L08177	VC	0FZ-VC001A	0VC05YA & 0VC52YA DAMPERS FUSE KEEPS BLOWING
L08192	VC	OXY-VC125A	A NH3 DET MAG DRIVE MECHANISM PROBLEM
L08331	VC	OXY-VE087A	VC DUCT DETECTOR DID NOT RESPOND
L08666	VC	0VC01YB	SECURE OUTBOARD SET OF DAMPER BLADES
L08692	VC	OXY-VC165B	AMMONIA DETECTOR FILTER PAPER DRIVE NOT WORKING
L08987	VC	OXY-VC125A	AMMONIA DETECTOR TAPE KEEPS TEARING
L08994	VC	0VC05CB	(B) VC EVAP COOLING COILS NOT OPERATING
L09118	VC	OXY-VC125B	AMMONIA DETECTOR REEL NOT FUNCTIONING
L09275	VC	OXY-VC165A	AMMONIA DETECTOR FLOW LIGHT INOP
L11277	VC	0VC11YA	INLET DAMPER DOES NOT OPEN
L11633	VC	OXY-VC125B	AMMONIA DETECTOR PEGGED DOWNSCALE
L11723	VC	OXY-VC165A	B VC A NH3 DET READING 17 PPM, ALARM UP
L12047	VC	OXY-VC165A	DETECTOR RECIEVED ALARM TAPE NOT ADVANCING
L99459	VC	0FZ-VC007A	0VC11YA ODOR-EATER INLET DAMPER DUAL INDICATION
L99961	VC	0VC52YA	CR OUTSIDE AIR ISOLATION DAMPER
L99962	VC	0VC52YB	CR OUTSIDE AIR ISOLATION DAMPER

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

UNIT=1

WRNUM	SYS	EPN	DESCRIPTION
L03157	AP	1VT01CA	1AP11E GE BKR BUSHING MISSING IDENT, AS REF 105
L05474	AP	1AP01E	151 CMPT 3 BRKR FOR SAT MAIN FEED 4-PT TB BROKEN
L06308	AP	1AP75E-G1	MCC 135Y-1 HANDLE BROKEN ON BREAKER G-1
L06505	AP	1AP75E-E1	MCC 135Y-1 E1 BREAKER HANDLE INOP
L08590	AP	1AP63E	MCC 133-3 COMP B-5 PHASE-PHASE FAULT
L11356	AP	1AP80E	MCC 136X-2 B2 DOOR WILL NOT OPEN
L09249	APRM	1NR000	1F APRM RECEIVED HALF SCRAM
L110803	APRM	RY-1C51-K605GT	APRM SPIKING CAUSING 1/2 SCRAMS
L12009	APRM	RY-1C51-K605GT	APRM SPURIOUS 1/2 SCRAMS
L01741	DC	1DC33E	24/48 BATT CELLS 11&12 HAVE LOW SPEC GRAVITY
L02194	DC	1DC12E	125 VDC BUS 112X/112Y 10V GROUND INDICATE
L03781	DC	1DC03E	250VDC BATTERY CHARGER OUTPUT VOLTAGE
L04217	DC	1PA08J	ANNUNCIATOR PANEL 90V POS GROUND EXISTS
L04428	DC	1DC09E	DIV 1 BATT CHARGER ALARM CHATTERING ON TYPER
L05130	DC	1DC11E	DIST PANEL 111Y BROKEN DOOR LATCH
L06108	DC	1DC000	DC EMERG LIGHT REPLACE FIXTURE AND CONDUIT BOX
L07022	DC	1PA03J	BAY 4 SCREW STRIPPED OUT R-POINT 507/508
L07028	DC	1DC000	U1/2 250V BUSES MON FOR BASELINE VOLT READINGS
L08107	DC	1PA03J	1ER-DC015 DIV 1 125V GROUND
L08220	DC	1DC000	DIV 2 GROUND DETECTOR METER DOOR GLASS BROKEN
L09838	DC	RR-1E22-R542	DIV 3 GROUND DET PEN NOT INKING
L09970	DC	1DC16E	DIV II CHARGER AMPS OSCILLATING 10-15 AMP
L10798	DC	1FPEL63	EMERG LIGHTING ENERGIZED EMERG LIGHTING CHARGER
L110800	DC	1FPEL67	EMERG LIGHTS ARE ON WITH NORMAL LIGHTING ON
L11067	DC	1E22-S001	125 VDC BATTERY LOOSE CABLE ON CELL #1
L04441	DG	1E22-S001	1B DG COUPLER LOOSE
L04598	DG	1DG08CA	DG A AIR COMPRESSOR SECURE OIL LEVEL
L04599	DG	1DG08CB	DG B AIR COMPRESSOR SECURE OIL LEVEL
L04605	DG	1E22-C302B	HPCS DG AIR COMP "B" FAN GUARD REPAIR
L04823	DG	1DG011	STRAINER BACKWASH LOCAL INDICATION READS 75%
L05051	DG	1E22-S001	1B DIESEL GENERATOR WELDED TO CLOSE TO FLYWHEEL
L05167	DG	1PLG7J	WHITE CONDUCTOR OF CABLE 1VD132 CUT IN JACKET
L05952	DG	1DG08CA	D/G AIR COMPRESSOR (A); REPAIR
L07537	DG	1PA08J	DG HVAC TROUBLE ALARM CHATTERING NUISANCE
L08288	DG	1E22-F316A	DG AIR COMP DISCHARGE RELIEF VALVE LIFTING
L08540	DG	1E22-C302B	DG B AIR COMP BLOWN HEAD GASKET
L08816	DG	1DGK008	1A D/G K-8 TDDE RELAY, REPLACE K-8 AGASTAT RELAY
L09151	DG	1DG08CB	P/G AIR COMPRESSOR LEAKING AIR AT HEAD
L09285	DG	TS-1E22-N901B	AIR DRYER 1DG09DB REL 1E22-F361B LIFT
L09353	DG	1DO021	SUCTION STOP LEAKING FUEL OIL
L09354	DG	1DO062	TEST TAP LEAKING
L10822	DG	1E22-S001	CIRC OIL PUMP LEAK ON FITTING
L10823	DG	1E22-S001	OIL LEAK AROUND SOAKBACK OIL FILTER DRAIN PLUG
L94404	DG	1VD17Y	1TCU-VD013 HPCS DG COOL WTR PP RM TEMP UP
L98231	DG	1DG01K	DG FILTER INLET SCREENING BROKEN ON VENT INTAKE
L01335	HP	1E22-C302B	1B DG AIR COMPRESSOR 1B REINSTALL PIPING
L04773	HP	1E22-F028	HPCS DG COOLING WATER PUMP DISCH CHECK VALVE

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

UNIT-1

WRNUM	SYS	EPN	DESCRIPTION
L08291	HP	1E22-C302A	HPCS DG COMPRESSOR HIGH PRESS GASKET BLOWN
L08805	HP	1E22-F361B	D/G STARTING AIR COMP DISCH PRESS REL
L09088	HP	1E22-C003	HPCS WATER LEG PUMP HAS A 5 DPM LEAK
L09119	HP	1E22-C003	HPCS WATER LEG MACHINE MOTOR BASEPLATE
L06630	IRM	1C51-K601C	C IRM NO DOWNSCALE INDICATION
L05269	LP	PIS-1E21-N005B	LPCS PUMP LOW DISCH PRESS RETORQUE
L04724	LPRM	RY-1C51-K605BZ	LPRM A METER INDICATES DETECTORS IN BYPASS MODE
L08239	LPRM	AY-1C51-K605AJ	LPRM 40-41D DOWNSCALE RECEIVED
L08984	LPRM	1C51-000	PERFORM COMPLETE SET OF IV PLOTS ON U1 LPRM'S
L09052	LPRM	RE-1B13-D193L	LPRM 16-49C RECEIVED LPRM DOWNSCAL
L04886	MS	1E51-D011	RCIC MIN FLOW ORIFICE INCREASE FLOW
L05271	MS	PS-1B21-N056A	COND LOW VAC MSIV ISOL RETORQUE
L08552	MS	FI-1B21-R865	BLANKET STM SUPPLY FLOW INDICATION
L10355	MS	FI-1B21-R865	BLANKET STM SUPPLY FLOW INDICATION RECAL
L05110	NB	TR-1B21-R006	RX VESSEL TEMP RECORDER ERRATIC
L05124	NB	TR-1B21-R816	MSR TEMP RECORDER POINT BAD
L07985	NB	LR-1B21-R615	RX FUEL ZONE RECORDER LED BAR GRAPH
L08174	NB	1B21-000	FUEL ZONE LEVEL READS ONSCALE; SHOULD BE OFF
L08541	NB	LT-1B21-N044A	FUEL ZONE LEVEL XMTR LOSS OF OIL
L09479	NB	LT-1B21-N406C	RX VESSEL LEVEL LEAKS FOUND
L09480	NB	LT-1B21-N406A	RX VESSEL LEVEL LEAKS FOUND
L09481	NB	LT-1B21-N406D	RX VESSEL LEVEL LEAKS FOUND
L09482	NB	LT-1B21-N409B	RX VESSEL LEVEL LEAKS FOUND
L09679	NB	1B21-N403A	RX VESSEL LEVEL TRANSMITTER OUT OF TOLERANCE
L03569	RD	1C11-D001-107	ACCUMULATOR WATER SIDE VENT LEAKS
L05080	RD	1C11-000	CRD BLOCK STOP VLV LEAK N2 BY STEM WHEN OPEN
L05418	RD	1AP06E	1B CRD FD PP TRIP CIRCUIT RELAY BAD @ LES-RD-104
L07045	RD	1C11-C001B	CRD PUMP DIRTY SPEED CHANGER
L08160	RD	1C11-D001-161	HCU 58-19 THREADS ROUGH; N2 LEAKS SLOWLY
L08335	RD	1C11-C001B	CRD PMP LEAK ON LUBE OIL COOLER FLNG
L08669	RD	PI-1C11-R022	HCU 18-59 NITROGEN LEAK ON PIPE
L08995	RD	1C11-D001-023	HCU 10-43 CHARGING NIPPLE LEAKS
L09005	RD	1C11-D001-023	HCU 10-43 INST BLOCK ISOL VLV LEAKS PAST STEM
L09127	RD	1C11-F379	SDV VENT & DRAIN STUCK CLSD
L09156	RD	1C11-F023A	CRD DRIVE FLTR BROKEN DRN VLV STEM
L09195	RD	1C11-F022A	CRD FILTER VENT VLV H/D BROKE OFF
L09197	RD	1C11-C001A	CRD PUMP HIGH LUBE OIL INLET TEMP
L09331	RD	1C11-D001-071	HCU 30-15 BUZZING 118 AIR SOLENOID VLV
L09415	RD	1C11-D001-126	CRD ACCUMULATOR LEAKS AT INSTRUMENT
L09945	RD	1C11-D001-111	06-35 LEAKS BY UNLESS BACKSEATED
L10254	RD	1C11-D001-107	ACCUM 30-51 GAS NIPPLE & CAP LEAKS
L11428	RD	1C11-D001-111	CRD # 50-35 REPAIR
L80365	RD	1C11-C001B	1B CRD PUMP CASING EROSION
L03526	RH	1E12-F094	FUEL POOL EMERG M/V LEAKS PAST SEAT
L03899	RH	TDS-1E31-N614A	RHR EQ AREA VENT TRIPS INTERM.
L04681	RH	1E12-F052A	STEAM LINE ISOLATION VALVE INOP
L04755	RH	1E12-F052A	STEAM LINE ISOLATION VALVE INOP

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

UNIT=1

WRNUM	SYS	EPN	DESCRIPTION
L04769	RH	1E12-F331C	WS PUMP DISCH CHECK VLV INSTALL ACCESS
L05280	RH	PS-1E12-N512A	RHR PUMP DISCH PRESS LOW SW RETORQ
L05614	RH	1E12-F094	F.P. EMU TO B RHR DE/RETERM FOR L03526
L06543	RH	1E12-F004C	1C RHR PUMP SUCT STEM IND MISSING
L06548	RH	TI-1E12-R509	RHR SERV WTR SUCTION TMP OUT OF TOL
L07870	RH	PD1-1E12-N029A	DIV 1 LINE INTERGRITY ALARM UP
L08117	RH	1E12-F336B	B WS STRNR B/W STOP VLV PACKING LEAK
L08268	RH	PT-1E12-N034C	RHR DISCH PRESS COVER SIEZED/LOOSE
L09348	RH	PS-1E12-N016B	1E12-C002B RHR PP 90 VOLT NEGATIVE GROUND ON 112
L09845	RH	1E12-F332A	RHR SW PP DISCH STOP PACKING LEAK
L09932	RH	1E12-F074B	MCC 136Y-1 TRIPPED C RCUIT BKR FOR VL
L10791	RH	1E12-KX60B	O/L BYPASS CRACKED GLASS COVER
L11990	RH	PI-1E12-R528	RHR SW PP 1C SUCT GAGE BLOCKED
L02989	RI	1E51-C003	RCIC WTR LEG PUMP USES EXCESSIVE OIL
L04832	RI	1E51-C003	RCIC WTR LEG PUMP LEAKED OIL
L04907	RI	1E51-R604	RCIC PUMP SUC PRESS IND ERRATIC
L05272	RI	PSL-1E51-N006	RCIC LO SUCTION PRESS SW RETORQUE
L07046	RI	PI-1E51-R907	RCIC TURB OIL FACE PLATE IS MISSING
L10085	RI	1E51-F358	RCIC WLP REPLACE VLV HANDWHEEL
L11033	RI	1E51-C002	RCIC TURB TRIPPED ON MECH OVERSPEED
L07606	RM	1C11-000	RMCS TRANSPONDER CARD FAILED
L07628	RM	1C11-000	RMCS TRIPPED ON ROD 34-31; OPER BYPASSED
L08807	RM	1C11-000	RMCS KEEPS TRIPPING SUSPECT BJM
L09601	RM	1C11-000	RMCS TRIPS
L11535	RM	1RD000	RMCS TRIPPED AND WILL NOT STAY RESET
L08885	RP	1C71-AK10F	#3 TSV SCRAM RELAY CHATTERING/HUMMING
L08294	SRM	RI-1C51-R601C	SRM METER IND DRIFTS UP-SCALE
L09051	SRM	RR-1C51-R602	SRM REC VFRY ERRATIC W/ STABLE 10HZ
L08261	TIP	RY-1C51-J600H	1E TIP FUSE #5 FLICKERS; REPL FUSE
L10888	TIP	RR-1C51-R904	TIP X-Y PLOTTER OUT OF TOLERANCE
L09232	VG	1FR-VG009	VG FLOW RECORDER DOES NOT ADVANCE
L09419	VY	1FE-DG030	REMOVE FLOW ELEMENT FROM 1VY03A DISCH
L09663	VY	1TIC-VY023	SERV WATER PUMP WILL NOT GO CLOSE
L11418	VY	1TIC-VY017	HPCS ROOM DUCT TEMP RECALIBRATE

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

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

WRNUM	SYS	EPN	DESCRIPTION
L05817	AP	2AP72E	MCC 235X-2 C1 BURNED CONTACTS
L08194	AP	2VY01C	MCC 235Y-2/E4 RELAY CONTACTS FOR AUTO TRI
L08195	AP	2VY04C	MCC 235Y-2/E3 74 RELAY CONTACTS
L08205	AP	2AP04E	2SF01PB MCC 241Y CMPT 8 TRIP LATCH ROLLER
L0964C	AP	2AP03E	OVERCURRENT RELAY MELTED INSULATION
L10231	AP	2AP82E-D4	MCC 236Y-1 CUB D4 FD TO 2E12-F064B REPL CIRCUIT BRK
L10580	AP	2AP74E	TRACKWAY DOOR TRIPPING BREAKER
L96547	AP	2AP05E	TERMINAL B CK CRACKED
L98399	AP	2AP19E	480V SWGR 235X ORDER 6 RPLC 2 FUSE BLOCKS
L03859	APRM	RY-2C51-K605CW	LPRM 32-57 NOT FEEDING APRM CURRENT
L05120	APRM	RY-2C51-K605GN	APRM SPURIOUS FIXED NEUTRON UPSCALE 1/2-SCRAM
L05547	APRM	2NR000	APRM C WILL NOT ALM UPSCALE HI 2H13-P608
L05662	APRM	2NR000	2E APRM NO THERMAL TRIP OCCURRED @ LIS-NR-403
L09750	APRM	RR-2C51-R603A	APRM SPURIOUS UPSCALE NEUTRON TRIP
L03994	DC	2AP03E	DIV 1 125 VDC GROUND EXISTS ON 125 VDC BUS FLUC
L05923	DC	2II-DC054	DIV 2 CHRGR AMMETER IN CR NEEDLE STUCK
L06066	DC	2EI-DC055	250VDC BUS VOLT INDICATION LOW
L09560	DC	2DC15E	DIV II 125 BUS GROUND OF 8 VOLTS ON DIV II 125 V
L10509	DC	2DC000	OBTAINED 60 V GROUND IND ON DIV 2 125 VDC
L10521	DC	2DC14E	DIV II BATTERY VERIFY SPACING BET JATT
L96969	DC	2DC31E	24 VDC BATTERY LOW ICV CELL #7
L02103	DG	2DG08CB	2A DG STARTING AIR COMP CHK SUCTION
L03061	DG	2VD19Y	HPCS CWP RM EXH FAN OUTL FAILED CLOSED
L03323	DG	2DG006	A DG COOLER OUTLET VLV VIBRATES EXCESS.
L04166	DG	2E22-S001	2B DG SOAKBACK PUMP BULB BROKEN OFF
L04317	DG	2PDS-VD004	2PL24J ALARM WILL NOT RESET DG VENT SPLY FILTER
L04557	DG	2DG08CB	DG B AIR COMPRESSOR SECURE OIL LEVEL
L04558	DG	2DG08CA	DG A AIR COMPRESSOR OIL LEVEL
L04795	DG	2PL24J	DEV 27/2PL74J UNDER VOLTAGE RELAY STICKS
L04803	DG	2DG08CA	COMPRESSOR 2A DIESEL CHECK SUCTION
L04844	DG	2PDS-DG051	FUEL FILTER RESTRICTED ALARM
L04896	DG	2PDI-VD004	DG ROOM VENT D/P ALARM UP ON 2PL24J
L05254	DG	2AP72E	235X-2 NICK IN MOTOR LEAD OFF T1 RELAY
L05356	DG	2E22-C302B	AIR COMP REPLACE PRESS RELIEF VALVE
L05492	DG	2VD19Y	DIV 3 SWGR VENT DAMPER REBUILD/REPAIR
L05654	DG	2PDS-VD004	2PL24J ALARM UP WITH NO HIGH D/P
L06171	DG	2TZ-VD013B	2VD17Y DAMPER ACTUATOR LEAKING OIL
L06197	DG	2DG01K	2A DG REPL COOLING WTR RUBBER HOSES ON HOLD TANK
L06330	DG	2FI-DG029	HEAT EXCHANGER FLOWMETER READS 200
L06847	DG	2E22-C302A	DG AIR COMP A CLNG COIL LEAKS AIR
L07153	DG	2PM01V	COMP PT D292 DG CWP CONTROL POWER UP SPORADIC
L07527	DG	2TS-DG040	DG HTR TEMP REPL DG IMMERSION HEATER
L08676	DG	2E22-S001	DIV 3 BATT CORROSION ON CELLS 4,7 & 13
L08762	DG	0SI-DG028B	D/G FREQ METER READS HIGHER ON 2PM01J
L08817	DG	2DGK008	K-8 TDDE RELAY REPLACE K-8 TDDE AGASTAT
L09128	DG	2DG08CB	DIESEL CHECK SUCTION & DISCHARGE VLV
L09129	DG	2DG08CA	DIESEL CHECK SUCTION & DISCHARGE VLV

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

UNIT-2

WRNUM	SYS	EPN	DESCRIPTION
L09587	DG	2DO02P	DG FUEL XFER PUMP MOTOR MONITOR CURRENT @ OPS
L10095	DG	2DG011	2A DG CLNG WTR STRNR B/W OUT PACKING LEAK
L10315	DG	2DG000	CAL & DOCUMENT CAL OF 2B DIESEL GENERATOR
L10643	DG	2E22-T302A	2D DG A AIR RECEIVER DRAIN VLV LEAKS
L10647	DG	2DG000	2A DG STORAGE TANK SAFETY CHAIN TOO SHORT
L10648	DG	2DG000	2A DG FUEL STORAGE INSTALL SAFETY CHAIN AT TOP
L10683	DG	2E22-T302A	2B DG AIR DRYER CLAMP NEEDS TIGHTENED
L10684	DG	2E22-C302A	2B DG A COMP DRAIN LEAKING 1/2" CAP
L10688	DG	2E22-S001	2B DG FUEL OIL FLANGE TIGHTEN FLEX HOSE FLANGE
L10828	DG	2DG000	TIGHTEN LOOSE AC SOAKBACK PUMP MOTOR TERM BOX
L10835	DG	2DG02JB	ALARM HORN INSTALL PROTECTIVE COVER
L11662	DG	2DG08DB	DG AIR DRYER CHECK VLV 2DG049B HAS WATER
L11696	DG	2PDS-VD004	2VD01F 2B DG RM FILT D/P HI ALARM UP
L11776	DG	11-2E22-M005	RECAL DG AMMETER TO CONFIRM CERT TST INSTR
L03308	HP	2E22-C302A	PETTER DIESEL REPLACE W/ AC MOTOR
L04774	HP	2E22-F028	HPCS DG CLNG WTR PMP DISCH CK VLV INST
L04887	HP	2E22-F023	HPCS FULL FLOW TEST VALVE H/WHEEL OFF
L05070	HP	PDS-2E22-N009	LOW SIDE VENT HARD TO REMOVE
L08248	HP	LS-2E22-N002A	2H13-P601 A307 SUPP CHAMBER LVL HI
L08818	HP	2E22-BK008	K-8 TDDE RELAY REPLACE THE K-8 TDDE
L09012	HP	2E22-P301B	HPCS ANNUNCIATORS ALARMS SPURIOUS
L09028	HP	2AP079E	MCC 243-1 BROKE OFF; TAB ON O/LOAD DEVICE
L09874	HP	HS-2E22-K015	LOCKOUT RELAY NOT CRIMPED TO TERMINAL
L04955	IRM	#V-2C51-K601D	IRM D CHATTERS; DOWNSCALE TRIP
L05446	IRM	RY-2C51-K002H	IRM (H) LOCAL PRE AMP HIGH
L06827	IRM	RY-2C51-K601D	IRM D BAD PRE-REG (NEG); REPL
L11350	IRM	RY-2C51-K601G	2G IRM HIGH VOLTAGE CONNECTOR ON DRAWER J7 BAD
L06476	LC	E32-B001J	HEATERS PERF EQ 18-MO SURV CHK
L09282	LC	PI-2E32-R651E	MSIV-LCS WON'T CAL @ LIS-LC-201
L09947	LC	2LL000	FIX LIGHT DOES NOT HAVE PROPER VOLTAGE
L10191	LC	PT-2E32-N058	REPLACE LUGS AT PNL 2H22-P027
L05268	LP	PS-2E21-N005B	LPCS PUMP LOW DISCH PRESS RETORQUE
L05263	LP	2H13-P601	C508 LPCS INJ FLOW HI ALARM UP
L05263	LP	TE-2E21-C001AB	PUMP MTR UPPER THRUST BRNG ALARM
L06807	LP	2E21-R002	LPCS PUMP DISCH IND 12# CR IND 60#
L11444	LP	2E21-C001	REPLACE (B) CONTACTS
L01842	LPRM	RY-2C51-K605BK	LPRM 24-25D FAILED UPSCALE/BYPASSED
L06223	LPRM	RY-2C51-K605CF	LPRM 48-17C INSTALL AN OMNIGHT RECORDER
L05270	MS	PS-2B21-N056A	COND LOW VAC MSIV ISOL RETORQUE
L08671	MS	2B21-1433A	TDRFP DAMPER SOCKET STUCK ON VALVE
L11678	MS	TR-2B21-R816	MSR TEMP RECORDER DOES NOT PRINT
L03564	NB	FR-2C34-R607	FEED/STEAM FLOW RECORDER MISMATCH
L04628	NB	PT-2B21-N051A	SPDS RX PRESS IND READING HIGH; WIDE RANGE
L05276	PC	PS-2B21-N048A	DRYWELL HIGH PRESS SW RETORQUE
L05278	PC	PS-2B21-N047A	DRYWELL PRESS SW RETORQUE
L05367	PC	2PL15J	ATMOSPHERE CONT MON PANEL NO LOW FLOW ALM
L09627	PC	2ZL-PC001A	VAC BRKR REPL DIV 2 LIGHT SOCKET

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

UNIT-2

WRNUM	SYS	EPN	DESCRIPTION
L06177	BBM	BR-2C51-R603C	BBM/APRM/IRM RECORDER PEN #2
L02496	RD	2C11-C001B	2B CRD PP 1/B SEAL LEAK
L05237	RD	2C11-D001-107	HCU 50-31 DRAIN LEAKS BY
L05369	RD	2C11-D001-079	CONTROL ROD 26-11 N2 LEAK ON INST BLOCK PR SW
L05388	RD	2C11-D001-121	HCU 34-43 N2 LEAK @ CHARGING CAP
L05793	RD	2C11-D001-064	26-19 SCRAM OUTLET VLV LEAKING AIR
L08313	RD	2RD000	CRD DRIVE FLTR VLV LEAKS BY APPROX 1/2 GPM
L08436	RD	2C11-C001B	CRD PUMP O/B BRNG USING OIL
L09153	RD	2C11-C001B	CRD PUMP LEAKING CASING SEAL CROSSTIE
L10459	RD	FI-2C11-R003	CRD HDR FLOW REPLACE GE180
L10555	RD	TR-2C11-R018	CRD TEMP RECORDER NOT PRINTING
L10854	RD	FI-2C11-R007	CRD PRESS PEGGED TO MAX OR STUCK
L11279	RD	2C11-000	2H13-P603 CORF DISPLAY LIGHTS ALL LITE AT ONCE
L96487	RD	2C11-D001-113	REBUILD CRD
L03293	RH	2D18-J005	B & C RHR SERV WTR PRM 1/4 GPM LEAK
L04770	RH	2E12-F331A	WS PUMP DISCHARGE CHECK VLV
L0493	RH	2E12-C300D	RHR SW PUMP OILER PIPING LEAKING
L05279	RH	PS-2E12-N512A	RHR PUMP DISCH PRESS LOW SW RETORQ
L05663	RH	PI-2E12-R529	2D RHR WS PUMP PRESS IND ZERO SHIFT
L06063	RH	PS-2E12-N413B	RHR INJ VLV THREADS STRIPPED
L06433	RH	TRS-2E12-R601	RHR TEMP REC CAUSES P601 C302 ALMS
L09220	RH	2E12-F048B	RH HEX BYPASS TRIPPED ON T/O CLOSING
L09493	RH	TRS-2E12-R601	RHR HX INLET/OUTLET TEMP RCDR IND
L10119	RH	2TIC-VY016	RHR A CUB TEMP CONT DOWNSCALE
L10695	RH	PIS-2E12-N022C	2C RHR PP DISCH PRESS HI ALARM
L11627	RH	CI-2E12-N030B	RHR HX COND TRANS CURRENT OUTPUT
L11660	RH	PS-2E12-N512B	PP DISCH PRESS LOW ALARM UP
L98760	RH	2E12-F332C	RHR SERV WTR PP DISCH VLV PACKING
L05188	RI	LSH-2E51-N010	RCIC TURBINE OPEN W/O 2H13-P601
L05201	RI	LSH-2E51-N010	RCIC DRAIN POT LEVEL INSTALL NEW
L05448	RI	PSH-2E51-N009A	RCIC TURB STM EXH TO SUP POOL
L05449	RI	PSL-2E51-N006	RCIC PUMP SUC PRESS RETORQUE PRESS
L05775	RI	2E51-C005	RCK BAR COND VAC PUMP ALM WHILE RUNNING
L09206	RI	2E51-D306	RCIC INJ SIGHTGLASS CRACKED HIGH POINT
L08806	RM	2C11-000	RMCS TRIPS ON ACTIVITY ERROR ON ROD 46-35
L08826	RM	2C11-D001-135	ROD 46-35 TRIPPED RMCS ON DIFF.
L05273	RP	PS-2C71-N002A	PRI CONT PRESS SW RETORQUE
L11349	RP	2C71-K101A	CRD CHRG WTR HDR PRESS TDR OUT OF CAL
L94227	RP	2C71-S003E	RPS M6 SET LOCALLY CKT BKR RPLC W/NEW
L06737	TIP	RY-2C51-J600K	TIP MACHINE DOES NOT ENERGIZE
L08657	TIP	RY-2C51-J60CK	TIP DRAWR OUTPUT LVL NOT WORKING
L08814	TIP	RE-2C51-N003A	TIP DETECTOR FAILED UPSCALE
L10607	TIP	RY-2C51-J600	TIP CNTL LIGHT GOES OUT WHEN MACHINES IN AUTO
L10130	VC	2FSY-VC002X	VC HEATER & HUMIDITY RELAY BURNED
L02926	VG	2VG01C	PRIMARY SBTG FAN VIBES HIGH
L07784	VG	2FZ-VG003	SBGT DAMPER PERF INSP/CHANGE-OUT PER EQ
L10220	VY	2TIC-VY018	HPCS PP TEMP ALM 2H13-P601 A408 CYCLE

ATTACHMENT B
11.B UNIT SHUTDOWNS
(UNIT 1)

=====

DATE: 910216 GENERATOR OFF-LINE: 1980.7 OUTAGE TYPE: Scheduled (L1R04)
(YYMMDD) (Hours)

REASON: Refueling Outage

CRITICAL ACTIVITY PATH: See Appendix A

CORRECTIVE ACTIONS (DVR/LER# if applicable): N/A

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: See Appendix B

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DATE: 910519 GENERATOR OFF-LINE: 62.1 OUTAGE TYPE: Forced (L1F12)
(YYMMDD) (Hours)

REASON: Control failure of the 1A Turbine Driven Reactor Feed Pump.

CRITICAL ACTIVITY PATH: Investigation of the feed pump failure.

CORRECTIVE ACTIONS (DVR/LER# if applicable):
DVR# 1-1-91-0062 LER# 91-006-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

WRNUM	SYS	EPN	DESCRIPTION
L09964	LC	1E32-F008	Blowing steam from valve packing
L07352	DC	1ER-DC015	Division I 125V ground detector
L07582	MS	1B21-F022B	Inboard MSIV blowing air from norgan valve
L07951	LC	1E32-F008	Valve packing leak
L07952	LC	1E32-F006	Valve packing leak
L07605	MS	ZS-1B21-MSBPV1	#1 Bypass valve improper indication
L07634	RD	1C11-D001-030	HCU 10-39 replace scram pilot sol valve
L07642	RD	1C11-D001-034	HCU 22-35 replace scram pilot sol valve
L07658	MS	1B21-MCVCA-3	Drain valve packing leak
L07659	MS	1B21-MOVCA-2	Drain valve packing leak
L07666	AS	1B21-F511	Blowing steam at packing
L07723	MS	1B21-F049A	Valve packing leak
L07860	MS	1B21-F408A	Valve packing leak
L07941	FW	ZS-1B21-F032A	Adjust check valve limit switches
L07982	IRM	RI-1C51-N002D	IRM inserts improperly
L08002	FW	1FW005	Flow control valve leaks oil
L96946	TG	1B21-CIV-1	#1 valve leaks oil

APPENDIX A
CRITICAL PATH ACTIVITY
REFUEL OUTAGE (L1R04)

DESCRIPTION

COMMENCE POWER REDUCTION
MAIN TURBINE GENERATOR OFF LINE
PERFORM TURBINE OVERSPEED TEST
PERFORM STATOR COOLING PUMP LOGIC TEST
SAMPLE DRYWELL FOR DEINERTING
PLACE MAIN TURBINE GENERATOR ON TURNING GEAR
DE-INERT DRYWELL
OBTAIN DATA ON REACTOR RECIRC FLOW CONTROL VALVES
PURGE GENERATOR OF HYDROGEN
MAIN TURBINE GENERATOR OFF TURNING GEAR
SHUTDOWN REACTOR
COOL REACTOR TO LESS THAN 135 PSIG
COOL REACTOR TO COLD SHUTDOWN
TURBINE GENERATOR FIRE PROTECTION SYSTEM, OUT OF SERVICE
MAIN TURBINE, REMOVE HEAT DETECTORS
REACTOR WATER CLEANUP HEAT EXCHANGER CAPACITY TEST
DEWATER EAST CONDENSER WATERBOX
DEWATER WEST CONDENSER WATERBOX
SHUTDOWN HEATER DRAIN SYSTEM
IDENTIFY HEATER DRAIN, CONDENSATE, FEEDWATER OIL LEAKS
PRE FLUSH SURVEY, LOW PRESSURE CORE INJECTION 'A'
PERFORM PRE MAINTENANCE HYDROGEN COOLER LEAK CHECK
UNIT AUXILIARY TRANSFORMER OUT OF SERVICE
REMOVE MAIN GENERATOR LINKS
MAIN POWER SYSTEM MAINTENANCE
DIVISION III OPEN
EXTRACTION STEAM MAINTENANCE
PERFORM MAIN POWER TRANSFORMER 1E & 1W DELUGE TEST
PERFORM LOW PRESSURE CORE INJECTION 'A' FLUSH
PERFORM REACTOR CORE ISOLATION COOLING HEAD SPRAY FLUSH
SHUTDOWN CIRCULATING WATER SYSTEM
PULL VACUUM TO PLUG TUBE LEAKS
SHUTDOWN TURBINE DRIVEN REACTOR FEED PUMP
PLACE MOTOR DRIVEN REACTOR FEED PUMP IN HOT STANDBY
FEEDWATER SYSTEM MAINTENANCE
TURBINE DRIVEN REACTOR FEED PUMP B MAINTENANCE
SHUTDOWN OFF GAS SYSTEM
OFF GAS SYSTEM MAINTENANCE
TRANSFER A RHR SHUTDOWN COOLING TO B RHR
TURBINE LUBE OIL SYSTEM, HANG PARTIAL OOS
REMOVE DRYWELL HATCHES
PRIMARY CONTAINMENT MAINTENANCE
REACTOR RECIRCULATION SYSTEM MAINTENANCE
REACTOR BUILDING CLOSED COOLING WATER MAINTENANCE
REMOVE SHIELD WALL
REMOVE TURBINE GENERATOR VIBRATION DETECTORS
CIRCULATING WATER SYSTEM MAINTENANCE

APPENDIX A
CRITICAL PATH ACTIVITY
REFUEL OUTAGE (LIR04)

DESCRIPTION

CONDENSER TUBE LEAK PLUG/INSPECTION OUT OF SERVICE
LOCATE & PLUG CONDENSER TUBE LEAKAGE
OPEN WEST CONDENSER WATERBOX MANWAY
OPEN EAST CONDENSER WATERBOX MANWAY
PIN HEATER DRAIN SYSTEM HANGERS
SHUTDOWN CONDENSATE, CONDENSATE BOOSTER SYSTEM
CONDENSATE, CONDENSATE BOOSTER SYSTEM MAINTENANCE
DIESEL GENERATOR B MAINTENANCE
MAIN TURBINE GENERATOR OUT OF SERVICE TAGGING COMPLETE
TURBINE GENERATOR MAINTENANCE
MAIN TURBINE GENERATOR POST CONDENSER-VACUUM MAINTENANCE
REMOVE THE A LOW PRESSURE TURBINE A & B COUPLING COVERS
REMOVE MAIN TURBINE GENERATOR DELUGE PIPING
DRAIN REACTOR WATER CLEANUP SUCTION
REMOVE # 3 & 4 TURBINE BEARING COVERS
A LOW PRESSURE TURBINE-BREAK A & B COUPLINGS
FAB AND INSTALL TEMPORARY PIPING, REACTOR WATER CLEANUP SYS
CONDENSER TUBE INSPECTION
BREAK VACUUM AFTER CONDENSER TUBE INSPECTION
LOCAL LEAK RATE TEST VALVES 1G33-F001/1G33-F004
RESTART REACTOR WATER CLEANUP USING FEEDWATER INJECTION
REACTOR RECIRCULATION SYSTEM LOOP 'A' MAINTENANCE
A LOW PRESSURE TURBINE-A & B COUPLINGS ALIGNMENT CHECKS
A LOW PRESSURE TURBINE-REMOVE EXHAUST HOOD
25KV ISO-PHAS'. BUS DUCT MEGGER AFTER LINK REMOVAL
REMOVE TURBINE GENERATOR INSTRUMENTATION
A LOW PRESSURE TURBINE-REMOVE UPPER INNER SHELL
DRAIN CONDENSATE BOOSTER SYSTEM FOR MAINTENANCE
LOW PRESSURE HEATER STRING OUT OF SERVICE
DRAIN LOW PRESSURE HEATER STRING
CONDENSATE SYSTEM OUT OF SERVICE
CONDENSATE BOOSTER SYSTEM OUT OF SERVICE
DRAIN HEATER DRAIN SYSTEM HEATER STRINGS
HEATER DRAIN SYSTEM MAINTENANCE
A LOW PRESSURE TURBINE-REMOVE UPPER DIAPHRAGMS
A LOW PRESSURE TURBINE-ROTOR CLEARANCE CHECKS
DRAIN HEATER DRAIN SYSTEM TANK
HEATER DRAIN SYSTEM OUT OF SERVICE
A LOW PRESSURE TURBINE-REMOVE ROTOR
A LOW PRESSURE TURBINE-REMOVE LOWER DIAPHRAGM
PIN CONDENSATE BOOSTER SYSTEM HANGERS PRIOR TO DRAINING
A LOW PRESSURE TURBINE-LOWER DIAPHRAGM REPAIRS
DRAIN CONDENSATE SYSTEM
REMOVE FRONT STANDARD INSTRUMENTATION
REMOVE TURNING GEAR COVER
A LOW PRESSURE TURBINE-LOWER CASE INSPECTION/REPAIR
A LOW PRESSURE TURBINE-INSTALL LOWER DIAPHRAGMS
1A BUS DUCT FAN OUT OF SERVICE

APPENDIX A
CRITICAL PATH ACTIVITY
REFUEL OUTAGE (L1R04)

DESCRIPTION

15C LOW PRESSURE HEATER LEAKAGE
1CW006A CW PUMP DISCHARGE VALVE HYDROLAZE SOFT SEATS
1UR-TS002 TURBINE EXHAUST/TEMPERATURE RECORDER READING HIGH
SHAFT VOLTAGE DETECTOR ERRATIC
MAIN TURBINE GENERATOR ON TURNING BEAR
ALT COLLECTOR RING REFURBISHED BY VENDOR
FILL CIRCULATING WATER SYSTEM
1CW006B CW PUMP DISCHARGE VALVE, HYDROLAZE SOFT SEATS
PIN CONDENSATE SYSTEM HANGERS PRIOR TO DRAINING SYSTEM
ALT COLLECTOR RING REFURBISH, INSTALL
COMPLETE CIRCULATING WATER SYSTEM MAINTENANCE
STARTUP & OPERATION OF CONDENSATE SYSTEM
REPLACE EXCITER HEAT SENSOR
TURBINE BEARING AREA FIRE PROTECTION SYSTEM FUNCTIONAL TEST
STARTUP CIRCULATING WATER SYSTEM
1WR179 RBCCW SUPPLY TO DRYWELL FAILED AIR LEAK RATE TEST
COMPLETE TURBINE DRIVEN REACTOR FEED PUMP B MAINTENANCE
COMPLETE REACTOR RECIRCULATION SYSTEM LOOP 'A' MAINTENANCE
COMPLETE REACTOR RECIRCULATION SYSTEM MAINTENANCE
COMPLETE REACTOR BUILDING CLOSED CLNG WATER SYS MAINTENANCE
RESTART REACTOR RECIRCULATION SYSTEM PUMPS
DRYWELL CLOSEOUT
REPLACE 1PCM111 DRYWELL PERSONNEL ACCESS HATCH
1CD002A 1A CONDENSATE PUMP DISCHARGE VALVE FAILED TO CLOSE
SERVICE AIR O-RING LOCAL LEAK RATE TEST
CLEAN CONDENSATE O-RING LOCAL LEAK RATE TEST
LOCAL LEAK RATE TEST VALVES 1SA042/1SA046
LOCAL LEAK RATE TEST VALVES 1MC027/1MC033
DRYWELL TO SUPPRESSION POOL BYPASS LEAK TEST
DRYWELL PERSONNEL AIRLOCK LOCAL LEAK RATE TEST
REMOVE DRYWELL CLEAN CONDENSATE SPOOL PIECE
REMOVE DRYWELL STATION AIR SPOOL PIECE
REACTOR RECIRC SYS FLOW CONTROL VALVE OPERABILITY TEST
ALTEREX CO2 FLOW TEST
1CB018D 1D PUMP MFV AIR DIAPHRAGM BLOWING AIR
1CR-GC001 GC COND METER NOT ADVANCING & INKING
1ES001A EXTRACTION STEAM TO HIGH PRESSURE HEATER 16A PROBLEMS
1B DIESEL GENERATOR TRIP DIVISION 3 GROUND DETECTION PROBLEM
1DV060A 16A HIGH PRESSURE HEATER VENT VALVE PACKING LEAK
DRYWELL PERSONNEL ACCESS HATCH LOCAL LEAK RATE TEST
DRYWELL PERSONNEL ACCESS HATCH INTERLOCK TEST
DRYWELL CLOSEOUT AFTER OUTAGE
1A BUS DUCT FAN AND DAMPER INSPECTION
MODE SWITCH TO STARTUP
PULL CONTROL RODS TO CRITICAL
COMMENCE HEATUP AND PRESSURIZATION
START UP GLAND STEAM AND HOGGER
1LT-TE004 OFF GAS PRESS DRAIN TANK LEVEL TRANSMITTER PROBLEMS

APPENDIX A
CRITICAL PATH ACTIVITY
REFUEL OUTAGE (L1R04)

DESCRIPTION

PDT-1N62-N031 OFF GAS AFTER FILTER DP TRANSMITTER READS HIGH
1LT-HD015 AIR SUPPLY TO LEVEL TRANSMITTER, AIR LEAK
1FW01KB TURB DRIVEN REAC FEED PUMP TURNING GEAR ENGAGED
1FW01KB TURB DRIVEN REAC FEED PUMP UNCOUPLE FOR OVERSPEED TEST
REACTOR CORE ISOLATION COOLING TURBINE OVERSPEED @ 150PSI
DRYWELL PERSONNEL ACCESS HATCH LOCAL LEAK RATE TEST
VERIFY SATISFACTORY CONDITION OF CONDENSATE POLISHER BEDS
RECOUPLE REACTOR CORE ISOLATION COOLING TURBINE
CLEAR OUT OF SERVICE AFTER RCIC TURBINE IS RECOUPLED
START UP MOTOR DRIVEN REACTOR FEED PUMP (300PSI)
500PSI EMERGENCY CORE COOLING SYTEMS PERMISSIVES CLEAR
MAIN STEAM ISOLATION VALVE SCRAM FUNCTIONAL TEST
REACTOR CORE ISOLATION COOLING PUMP OPERABILITY TEST
REACTOR PRESSURE >600 PSIG ON STARTUP
SAFETY RELIEF VALVE MANUAL CYCLING TEST
PROCESS COMPUTER NUCLEAR PROGRAM CHECK
REACTOR CORE ISOLATION COOLING INSERVICE TESTING
SYNCHRONIZE GENERATOR TO THE GRID
CONTROL ROD DRIVE SCRAM TIME TESTING
INCREASE POWER ABOVE 25%

APPENDIX B
REFUELING OUTAGE (L1R04)
SAFETY RELATED CORRECTIVE MAINTENANCE

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

WRNUM	SYS	EPN	DESCRIPTION
L01987	DG	0DO02T	0 DG FUEL DAY TANK MANWAY COVER LEAKING
L01994	DG	0DG01P	SRM CNTROL SWITCH CLEAN AND INSPECT @ 1PM01J
L03661	DG	0DO01P	0 DG FOTP BEARING REPLACED
L05752	DG	0TSH-DG048	DG LUBE OIL TEMP LEAKING FLUID
L05762	DG	0TI-DG062	DO 0 ENG JACKET WATER TEMP WILL NOT CALIBRATE

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

WRNUM	SYS	EPN	DESCRIPTION
L00533	RH	1E12-F068A	RHR WS HX OUTLET FAILED TO CLOSE
L00931	PC	LS-1E22-N002A	SUPP POOL LEVEL HI ALARM NOT UP
L00932	MS	1B21-F421C	VALVE AIR LEAK AT DIAPHRAGM
L01063	RI	1E51-F008	RCIC STEAM VALVE PACKING LEAK
L01436	RD	1C11-D001-026	REPLACE HCU 26-39 PER LMP-RD-14
L01437	RD	1C11-D001-075	REPLACE HCU MANIFOLD DRIVE WTR SUPPLY FILTER
L01438	RD	1C11-D001-010	REPLACE HCU MANIFOLD DRIVE WTR SUPPLY FILTER
L01624	RD	1C11-C001A	A CRD PUMP REBUILD
L01767	DG	1E22-S001 -N	1B DG COOLER ADD PROTECTIVE COATING
L01959	RH	1E12-F085B	WATER LEG DISCHARGE CHECK VALVE STICKS
L02041	RD	1C11-D001-103	HCU 54-47 LEAKS EXCESSIVELY AT N2 CHARGING NIPPLE
L02046	AP	1AP21E	136X COMPT 302A INSULATION DAMAGE
L02098	RH	1E12-BC01A	RHR HX DP IS LOW MAY IND BAFFLE PLATE
L02122	RD	1C11-D001-108	HCU 54-47 REPLACE ACCUMULATOR
L02123	RD	1C11-D001-053	HCU 06-27 REPLACE ACCUMULATOR
L02124	RD	1C11-D001-184	HCU 38-07 REPLACE ACCUMULATOR
L02125	RD	1C11-D001-183	HCU 42-07 REPLACE ACCUMULATOR
L02126	RD	1C11-D001-060	HCU 10-23 REPLACE ACCUMULATOR
L02127	RD	1C11-D001-059	HCU 14-23 REPLACE ACCUMULATOR
L02128	RD	1C11-D001-048	HCU 26-27 REPLACE ACCUMULATOR
L02354	MS	1B21-1BSFV-2	1B 2ND STAGE MSR STEAM LEAK
L02679	LP	1AP04E	LPCS FEED PUMP BREAKER CRACKS
L02802	RI	PDS-1E31-N013BA	RCIC ISOL DP SW MANIFOLD REPLACE
L03118	RD	1C11-D001-017	HCU 10-47 EXCESSIVE TIME TO DRAIN AND CHARGE
L03176	MS	1B21-MOVCA-4	MSR DRAIN STOP VALVE PACKING LEAK
L03215	AP	1AP83E	1B33-F023 B BACKUP BKR 136Y BROKEN INTERLOCK
L03550	RD	1C11-38-35	CRD REPLACE DRIVE
L03551	RD	1C11-34-55	CRD REPLACE DRIVE
L03552	RD	1C11-30-47	CRD REPLACE DRIVE
L03553	RD	1C11-30-43	CRD REPLACE DRIVE
L03554	RI	1E51-F045	RCIC STEAM SUPPLY LEAKING BY WHILE SYS
L03610	RD	1C11-D001-039	HCU 02-35 2 ALARMS IN LESS THAN ONE WEEK
L03933	IRM	RY-1C51-K601F	F IRM CHATTERING OFF OF DOWNSCALE
L03953	MS	FZ-1B21-L903	1B21-RSHL V-1 2ND STG HIGH LOAD BEGAN CYCLING O/C
L04008	MS	1H13-P642	MS TUNNEL DT RELAY 1B21-K38 DID NOT TIME OUT

APPENDIX B
REFUELING OUTAGE (L1R04)
SAFETY RELATED CORRECTIVE MAINTENANCE

UNIT=1

WRNUM	SYS	EPN	DESCRIPTION
L04194	MS	1B21-F418B	MS TO AS ALARM SHOWS NOT OPEN
L04232	RD	1C11-D001-096	HCU 30-59 EXCESSIVE WATER ALARMS
L04233	RD	1C11-D001-091	HCU 22-03 EXCESSIVE WATER ALARMS
L04253	HG	1HG001B	H2 RECOMB INBD INLET REPLACE SPRING PACK
L04424	MS	PS-1B21-N015C	MS LINE LOW PRESS SW LEAKS BY
L04477	RD	1C11-D001-175	REPLACE WATER ACCUMULATOR
L04478	RD	1C11-D001-178	REPLACE WATER ACCUMULATOR
L04479	RD	1C11-D001-052	REPLACE WATER ACCUMULATOR
L04480	RD	1C11-D001-168	REPLACE WATER ACCUMULATOR
L04481	RD	1C11-D001-129	REPLACE WATER ACCUMULATOR
L04482	RD	1C11-D001-080	REPLACE WATER ACCUMULATOR
L04483	RD	1C11-D001-011	REPLACE WATER ACCUMULATOR
L04484	RD	1C11-D001-135	REPLACE WATER ACCUMULATOR
L04485	RD	1C11-D001-050	REPLACE WATER ACCUMULATOR
L04655	LC	1E32-F008	OUTBOARD MSIV LGS NO CONTROL POWER
L04885	MS	RIY-1D18-K610A	MS HI RAD MONITOR KEYBOARD LOCKED
L04892	RF	1C71-AK010G	#4 TSV SCRAM RELAY HUMMING NOISE
L04929	DC	1JY-DC040	POWER SUPPLY 250 VDC INST NO OUTPUT
L04976	RD	1C11-34-23	CRD REMOVE CRD MECHANISM FROM 34-23
L04977	RD	1C11-46-31	CRD REMOVE CRD MECHANISM FROM 46-31
L04978	RD	1C11-54-35	CRD REMOVE CRD MECHANISM FROM 54-35
L05245	DC	1E22-S001	DIV III BATT CELLS 9 AND 16 LOW GRAVITY
L05380	RD	1C11-D001-107	ACCUM 38-11 DRAIN VALVE LEAKING BY
L05408	RD	TR-1C11-R018	CRD 34-55 POS IND PROBE T/C OUTPUT BAD
L05460	RH	1E12-F052A	STEAM LINE ISOL VALVE INSTALL SEAL-IN TSC
L05490	DG	1E22-F377A	1B DG PRESS REG REPAIR TUBE FITTING
L05520	MS	1B21-F019	MSIV LINE DRAIN OUTBOARD PACKING BLOWING
L05541	LPRM	1NR000	LPRM 16-57A NO DOWNSCALE LITE UP ON BACK PANEL
L05543	PC	1PC001C	PC VACUUM BRKR FAILED LLRT OUTBOARD FLANGE
L05553	RD	1C11-02-43	02-43 CRD MECHANISM REMOVE/REPLACE/REBUILD
L05558	MS	1B21-F067b	MSL DRAIN VALVE FAILED LLRT
L05559	MS	1B21-F067A	MSL DRAIN VALVE FAILED LLRT
L05571	RH	TRS-1E12-R601	RHR TEMP RECORDER ALARMING AT 140 DEG F
L05599	RF	1C71-S003B	RMS MG SET REPLACE CIRCUIT BOARD IN RELAY
L05619	MS	1B21-F019	MSL DRAIN VALVE (OUTBOARD) ADJ LIMITS
L05633	RD	1H13-P801	RELAY 1C22-K1 DEFECTIVE
L05684	RI	1E51-F084	RCIC TURB VACUUM BREAKER LEAKS BY SEAT
L05685	RI	1E51-F028	RCIC VAC PUMP DISCH ISOL VALVE FAILED LLRT
L05686	IRM	RY-1C51-K600C	IRM C REPLACE FAULTY INOP INHIBIT SWITCH
L05693	MS	MS01-1314S	MISSING NUT FROM PIPE CLAMP LOAD BOLT
L05695	MS	MS01-1240S	MISSING NUT FROM PIPE CLAMP LOAD BOLT
L05717	RH	1E12-F041A	RHR TEST CHECK VALVE WILL NOT OPEN & CLOSE
L05755	HP	1AP07E	1E22-C001 HPCS PUMP BREAKER CHARGING MTR DAMAGED
L05756	RH	1H13-P629	1E12-K98A1 DEGRADED VOLTAGE RELAY LEADS REVERSED
L05776	R	1E51-F004	BARO CONDENSER COND PUMP HAD OPEN IND
L05777	LB	1B21-F381	EXCESS FLOW CHECK WOULD NOT OPEN OR CLOSE
L05778	NB	1B21-F367	EXCESS FLOW CHECK WOULD NOT OPEN OR CLOSE

APPENDIX B
REFUELING OUTAGE (L1R04)
SAFETY RELATED CORRECTIVE MAINTENANCE

UNIT-1

WRNUM	SYS	EPN	DESCRIPTION
L05780	RI	1H13-P601	1E51-C004 BARO CONDENSER COND PUMP REPLACE LIGHT
L05786	AP	1AP07E	BUS 143 FUSE HOLDERS REPLACE IN CUB 1 & 3
L05798	HP	1E22-F341	HPCS LEVEL SWITCH CHECK DID NOT RESET
L05799	HP	1E27-F342	SUPP POOL LEVEL CHECK DID NOT RESET
L05813	RI	FIC-1C61-R001	RCIC FLOW CONTROLLER LOOSE
L05847	PC	1PC001C	PRI CONTAINMENT VACCUUM BKR DETERM AND REMOVE
L05855	AP	1AP75E-E5	MCC 135Y-1 CUB E5 DOOR INTERLOCK BROKE
L05858	HG	1HG001A	DW UPSTREAM INLET STOP VALVE FAILED LLRT
L05859	AP	1AP75E	135X-3 CUB B3 FITTED & BURNED MOLDED CASE BREAKER
L05869	AP	1AP04E	AO OVERCURRENT RELAY FAILED TO FULLY DROP TRIP
L05879	MS	1B21-000	B MSR REPAIR BOTTOM OF PANEL
L05887	DG	1TSH-DG048	DG LUBE OIL TEMP CAPILLARY TUBE BROKE
L05888	DG	1DG01K	1A DG BROKEN WELDS ON COVER FOR EXCITER
L05889	DG	1TS-DG041	DG HIGH WATER TEMP SWITCH CANNOT CALIBRATE
L05903	DG	1DG01K	DG MANIFOLD COVER WELD FRONT EXH MANIFOLD
L05904	RH	1E12-F041B	(B) RHR TESTABLE CHECK VALVE LEAKING
L05908	DG	1TS-DG040	DG IMMERSION HEATER SWITCH WOULD NOT WORK
L05909	RH	1E12-F050B	SDC RETURN TEST CHECK VALVE LEAKS
L05910	RH	1E12-F099B	SDC RETURN TEST CHECK EQUAL VALVE SEAT
L05934	MS	MS04-1391S	REPLACE SNUBER DUE TO HIGH DRAG
L05938	RH	1E12-F359B	EXCESS FLOW CHECK VALVE FAILED
L05939	RH	1E12-F359A	EXCESS FLOW C&K VALVE FAILED
L05951	RD	LT-1B21-N400B	RX WATER ARI LEVEL XMITTER LEAKING
L05970	PC	1AP96E	DW EIEC PENE E6 PRESS DECREASED BELOW ALERT LIMIT
L05972	DC	1DC06E	MCC 121Y CUB 7B INSULATION NOT CRIMPED
L05973	DC	1DC06E	MCC 121Y CUB 3C INSULATION NOT CRIMPED
L05976	MS	MS01-1329S	SNUBER ON LINE 1MS01DA CLAMP LOOSE
L05977	MS	MS01-1320S	SNUBER FOR LINE 1MS01DD28 HEX NUT
L05979	MS	MS01-1338S	SNUBER FOR LINE 1MS01DB MISSING HEX NUT
L05999	DG	TS-1E22-N516	HPCS D/G ENGINE TEMP SWITCH FAILED
L06034	RD	LS-1C11-N211	HCU 10-51 LOOSE SEALTITE
L06069	RH	1AP83E	1E12-F004C POWER CABLE 1RH037 SLICED INSULATION
L06073	AP	1AP11E	SWGR 131X FAULTED DUE TO MELTING SNOW DRIPPING
L06088	RH	1E12-F011A	HX DRAIN VALVE CYCLE IN 21.7 SECONDS
L06089	NA	1B13-D003	RX STEAM DRYER CRACKED WELDS ON DRYER
L06107	DC	1LL28E	ELC # 142 BATTERY GROUND CAME UP WHEN AC WAS OFF
L06125	MS	1B21-F016	MSL DRAIN VALVE LOOSE PACKING GLAND
L06148	RD	1C11-D001-073	HCU 22-15 AIR BLOWING OUT OF 1/4" HOSE
L06151	PC	1LV94E	D/W PENETRATION READS 0 PSIG, SHOULD READ > 15
L06160	RH	1E12-B001B	RHR HEAT EXCHANGER CORRODED
L06166	TIP	1NR000	TIP TUBE SUPPORT BROKEN WELD
L06168	RD	1C11-D006-	SCRAM AIR SUPPLY FILTER LEAKING AIR
L06170	RD	1C11-000	HCU 18-15 DIRECT CONTROL SOLENOID COVER MISSING
L06178	AP	1EI-AP038A	RELAY BUS UV PROTECTION SETPOINT DRIFT
L06189	RI	1E51-F361	RCIC EG-R ACTUATOR INSPECT & CLEAN
L06191	DG	1E22-S001	1B DG COOLING WATER HX WATER LEAK AT FLANGE
L06192	PC	1PC000	U1 DRYWELL ELECT PENE RECHARGE E-20, E-11 & E-4

APPENDIX B
REFUELING OUTAGE (L1R04)
SAFETY RELATED CORRECTIVE MAINTENANCE

UNIT-1

WRNUM	SYS	EPN	DESCRIPTION
L06213	DG	1DG000	DEVICE K-33 TIMER CONTACTS FAILED; REPLACE K-33
L06216	RH	1E12-B001A	RHR HX REPAIR ERODED BAFFLE PLATE
L06218	RH	FC13-1401A	REMOVABLE SECTION INTERFS W/STUFFING BOX
L06246	AP	1AP12E	SWGR 131Y CUB 204B LEAKING OIL
L06247	AP	1AP12E	SWGR 131Y CUB 204C CRACKED CONTACT BLOCK
L06266	RD	1C11-000	HCU 38-31 CHARGE WTR VALVE LEAKS BY
L06301	DC	1DC14E	CHARGE CELL #42 DIV II BATTERY
L06311	RH	1E12-F049B	LEAKGE FOUND
L06333	RD	1C11-000	HCU 38-23 STUCK OPEN
L06360	DC	1DC06E	MCC 121Y CRACKED INSULATOR IN BACK PANEL
L06364	RH	1E12-F090A	BROKE, H/W SPINS BUT NO MOVEMENT
L06377	DG	1E22-F361B	D/G BYPASS RELIEF LEAKS
L06378	DG	1E22-C302B	D/G AIR COMPRESSOR ADJUST SET POINTS
L06379	DG	1E22-C302B	D/G (B) AIR COMPRESSOR LEAKS
L06392	RD	1C11-D001-122	HCU 58-31 LITTLE FLOW WHEN VENTING
L06393	RD	1C11-000	HCU 38-31 LEAKS N2 AROUND STEM INST BLOCK VALVE
L06394	RH	1E12-F004A	RHR SUP POOL SUCTION VALVE NO INDICATION
L06406	RH	1E12-AS003A	RHR PUMP START LOGIC BAD
L06411	RH	1E12-F027A	SUPP POOL SPRAY PACKING LEAK WHEN OPEN
L06412	RH	PS-1E12-N032A	RHR RECIRC PRESS REPAIR OR REPLACE
L06426	VY	1TI-VY015	1A RHR DUCT TEMP INDICATION READS ABNORM HIGH
L06431	RH	1E12-F074B	1B HX VENT VALVE POSITON INDICATION SPORADIC
L06434	NB	1C22-N701D	MASTER TRIP UNIT CH 1D WIRE LOOSE
L06435	RP	1RP000	CABLE 1RP042, 44 & 43 DAMAGED AND BRITTLE CABLES
L06441	RH	1E12-F009	SDC INBOARD ISOL VALVE WON'T CLOSE
L06443	MS	1B21-F067D	D MSL DRAIN VALVE TORQUE SW SETTING
L06502	RD	1C11-D001-044	HCU 10-31 REPLACE AIR LINE CONNECTION
L06519	HP	1E22-F004	HPCS INJ VALVE OPEN SEAL-IN RELAY BROKEN
L06520	DG	1E22-S001	1B DG BINDS UP FUEL RACK ON START
L06524	RH	1E12-F009	SDC SUCT INBOARD ISOL TRIP'ED
L06526	RH	1E12-F053A	SDC RETURN SET LIMS OFF BACKSEAT
L06532	MS	1B21-F019	INBD MSIV DRAIN ISOL VALVE FAILED LLRT
L06541	MS	1MS93AB	F.P.E SUPPORT NEAR U1 MSV-1 HANGING LOOSE
L06546	RD	1C11-D001	HCU 14-07 N2 LEAK AROUND STEM ON 111 VALVE
L06550	HG	1HG018	HG CROSS-TIE REFURBISH LIMITORQUE OPERATOR
L06551	MS	ZS-1B21-F022B	(B) I/B MSIV LIMIT NOT RESETTING
L06552	MS	1B21-F016	MSL DRAIN VALVE INSPECT OPERATOR, TEST SPRING PACK
L06564	MS	1B21-F028D	OUTBOARD MSIV AIR LEAKS AT FITTING
L06568	IRM	RY-1C51-K601H	IRM H IND READING HIGHER THAN NORM
L06569	MS	1B21-F028A	OUTBOARD MSIV CLOSURE SCREW BROKE OFF
L06570	MS	1B21-F022B	INBOARD MSIV INDICATION LOST WHILE OPENING B MSIV
L06571	MS	1B21-F022D	INBOARD MSIV AIR LEAK BETWEEN SOL
L06572	MS	1B21-F022B	(B) 1B MSIV AIR LEAKAGE BETWEEN SOL
L06573	MS	1B21-F022C	(C) 1B MSIV AIR LEAK BETWEEN SOL
L06576	DG	1E22-S001	DG SOAKBACK PUMP FAILED TO START
L06591	RD	1C11-000	CRD ACCUMULATOR PACKING LEAK, REPL VALVE PACKING
L06594	RH	1E12-F090B	RHR SPC RETURN WILL NOT OPEN

APPENDIX B
REFUELING OUTAGE (L1R04)
SAFETY RELATED CORRECTIVE MAINTENANCE

UNIT=1

WRNUM	SYS	EPN	DESCRIPTION
L06597	RH	TE-1E12-N031	RHR FLUSH TO RW BROKEN FLEX CONDUIT
L06598	MS	1B21-F028	OUTBOARD MSIV ACTUATORS LEAK
L06633	RD	1C11-D001-080	22-11 SCRAM AIR SOL MOUNTING BOLTS LOOSE
L06677	RI	1E51-F045	RCIC STEAM SUPP STOP VALVE WILL NOT DECLUTCH
L06682	RD	1C11-D001-171	HCU 42-15 CRD INSTR BLOCK STOP 111 / LEAKS
L06683	RD	1C11-000	ACCUM 50-31 111 VLV LEAKS BY WHEN BACKSEA"ED
L06746	DC	1PA03J	DIV I GROUND COMING FROM 1PA03J IN AEER
L06808	VY	1TS-VY004	LPCS/RCIC CUB COOLER FAN LOOSE CONNECT
L06844	DC	1EY-DC044	250 VOLT CHARGER AMMETER DOES NOT WORK
L06855	RP	1C71-K8B	1C71-K8B TCV FAST CLOSURE RELAY FAILED
L06952	RI	1E51-C004	1E51-C004 RCIC COND CONDENSATE PUMP BRUSHES WORN
L06956	RM	1C11-D001-013	HCU 26-47 TRIPS RMCS
L07000	RI	TI-1E51-R904	RCIC TURBINE VAC TANK UNABLE TO CALIBRATE
L07005	NR	1NRG00	ROD BLOCK MON FAILS WHEN SETTING FROM LO ROD BLK
L07015	RP	1RP000	RFIS FULL CORE DISPLAY COOLING FAN
L07016	RI	1E51-F063	INBCARD STEAM ISOL VALVE CAL C-CLAMP DAMAGE
L07060	MS	1B21-2BSFV-2	MSR BLANKETING VALVE DUAL INDICATION
L07061	MS	1B21-7BSFV-1	MSR BLANKETING VALVE DUAL INDICATION
L07062	MS	1B21-1BSFV-2	1ST STAGE MSR DUAL INDICATION
L07084	LC	FT-1E32-N053E	LC BLEED OFF INSTALL, NEW FLOW TRAN
L07087	HP	1E22-C003	HPCS WATER LEG PUMP HIGH VIBES, REPLACE BEARINGS
L07104	AP	1AP27E	SWG R 1" BENT METAL BRACKET ON SLIDING BREAKER
L07118	RH	1E12-F047B	RHR HEAT EXCHANGER INLET PACKING LEAK
L07123	DG	1E22-S001	REPL 1B DG K1 HFA RELAY & K8 AGASTAT TIMER
L07189	RD	1C11-D001-143	CRD 42-31 SCRM VLVs OPENED RPS CH B TRIPPED
L07190	RI	1E51-F045	RCIC STEAM SUPP INLET ISOL BULB SHORTED
L07197	MS	1B21-F507	TEST VALVE FOR NON-RET CK BLOWING AIR
L07200	NB	LPR-1B21-R884	RX WIDE RANGE PRESS/LEVEL REC INOP
L07227	HG	1HGFV1	H2 RECOMB INLET MOV NO FULL OPEN IND
L07228	DG	1E22-S001	1B DG ENGINE TRIP/DIV 3 GRND DET PROBLEM
L07266	RI	1RI000	RCIC TURB TRIP LOGIC LOW RX PRESS RCIC ISOLATION
L07289	DG	1E22-S001	1B DG GOVENOR RUN SOL OUT OF ADJUSTMENT
L07305	DG	1E22-S001	1B D/G SPEED GENERATOR, VERIFY OPERATES
L07311	RH	PDI-1E12-N029B	RHR 1B/1C LINE INTER MON SW ALARM
L07366	RD	1C11-D001	HCU 54-23 LEAKING TUBE FITTING ABOVE 116 AIR VLV
L07408	RI	1E51-F045	STEAM SUPPLY VALVE PACKING LEAK
L07555	MS	1B21-F022B	INBOARD MSIV B CLOSED INDICATION
L74194	RD	1IA000	AJR STOP TO 1C11-K001 30# REGULATOR
L79939	RH	1E12-F369A	RHR SUCT H.P. VENT VALVE DOESN'T OPEN
L80708	LPRM	RE-1B13-D193AJ	LPRM 40-41D FAILED TEST
L88969	RH	1E12-F076B	1B RHR HX DRAIN UPSTREAM STOP VALVE LEAKS
L91552	RP	1C71-S001B	OVERVOLTAGE RELAY RPS M-G SET B RESET
L93018	RP	1C71-S001B	OVERVOLTAGE RELAY, B RPS MG INOP
L93019	RP	1C71-S001A	OVERVOLTAGE RELAY, A RPS MG INOP
L93883	AP	1AP21E	SWGR 136X CLAMP BOLT IS DIGGING INTO CABLE JACKET
L93932	RH	1E12-F021	1C RHR TEST RETURN VLV DECLUTCH LEVER
L94071	RH	1E12-F053B	RHR S/D INJECTION VALVE DECLUTCH LEVER INOP

APPENDIX B
REFUELING OUTAGE (L1R04)
SAFETY RELATED CORRECTIVE MAINTENANCE

UNIT-1

WRNUM	SYS	EPN	DESCRIPTION
L94596	AP	1AP01E	BUS 151 O.V.RELAY FAILED CAL
L94730	LPRM	RY-1C51-K605DY	LPRM 48-41B BENT
L95093	NB	1H13-P628	SW 534A WRONG ESCUTCHEON PLATE
L95103	NB	1H13-P631	CONTROL SWITCH 1B21C-S34B ESCUTCHEON PLATE
L95408	LP	1E21-F005	LPCS INJECTION VALVE LEAKS
L95457	NB	1PC000	DRYWELL HEAD REPLACE DRYWELL HEAD BOLTS 36,3,40
L95863	RH	1E12-C300D	RHR SERVICE WATER PUMP INBOARD SEAL LEAK
L95909	DC	1ER-DC009	250 VDC GROUND DET TEST CHART PEN IRRATIC
L95954	RD	1C11-D001-009	HCU 18-51 OUT ENTIRELY
L95982	MS	1B21-F076C	STEAM LINE DRAIN STOP VALVE PACKING LEAK
L95991	LC	1E32-F001E	VALVE PACKING LEAK
L95992	LC	1E32-F001J	VALVE PACKING LEAK
L95995	RD	XY-1C11-K946BG	CRD 46-19 NO POSITION INDICATION
L96002	MS	1TD20C	MAIN STEAM CONTROL VALVE LEAK OFF LINE STEAM LEAK
L96143	TIP	1XX000	TIP TUBE SUPPORT REPLACED
L96246	RI	1E51-F063	RCIC INBOARD ISOL VALVE STEM LEAKOFF
L96249	RH	1E12-F041C	LPCI INBOARD TESTABLE CHECK STEM LEAK
L96298	LPRM	RY-1C51-K605GH	LPRM 48-09A READING DOWNSCALE
L96684	MS	1B21-MOVCA-3	MSR CROSS-AROUND DRAIN VALVE DUAL INDICATION
L97115	RD	1C11-D001-027	CONTROL ROD 22-39 OUT LIGHT WON'T ILLUMINATE
L97265	RD	XY-1C11-K946EC	CONTROL ROD 18-51 IND HAS NO POS AT 46 (IND XX)
L97274	MS	1B21-F022B	I/B MSIV HIGH TEMP; STEAM LEAKOFF 200
L97735	RD	1C11-D001-110	HCU 46-47 WATER ALARMS FREQUENT
L98191	DG	1E27-S001	1B DG KVAR METER ADD DECIMAL PTS NUMBER
L98475	RD	1C11-D001-123	HCU 58-39 HAS HISTORY OF WATER ALARMS
L99021	RH	1E12-F011B	B HX STM COND STOP TO S.P. SLOW
L99126	RH	1E12-F085C	RHR WATER LEG PUMP STOP CHECK VALVE STICKS
L99338	MS	1B21-F022B	INBOARD MSIV OPENED TOO QUICKLY
L99435	RD	1RD000	FULL CORE DISPLAY FULL OUT IND FOR ROD 26-39
L99772	RD	1DC13E	REPLACE EXISTING INSTALLED BKR ARI LOGIC
L99773	RD	1DC11E	REPLACE EXISTING INSTALLED BKR ARI LOGIC
L99775	HP	1AP79E	REPLACE EXISTING INSTALLED BKR 1E22-F004
L99842	RD	1C11-34-59	REPLACE CRD MECHANISM 34-59
L99843	RD	1C11-22-51	REPLACE CRD MECHANISM 22-51

ATTACHMENT B
II.B UNIT SHUTDOWNS
(UNIT 1)

DATE: 910522 GENERATOR OFF-LINE: 0.5 OUTAGE TYPE: Scheduled (L1R04)
(YYMMDD) (Hours)

REASON: Performance of Turbine Overspeed Trip Test.

CRITICAL ACTIVITY PATH: Successful completion of overspeed trip test.

CORRECTIVE ACTIONS (DVR/LER# if applicable): N/A

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

DATE: 911018 GENERATOR OFF-LINE: 87.1 OUTAGE TYPE: Forced (L1F14)
(YYMMDD) (Hours)

REASON: Manual reactor shutdown due to hydraulic control fluid leakage
used for positioning of the 1B Reactor Recirculation Flow
Control Valve.

CRITICAL ACTIVITY PATH: Replacement of the Flow Control Valve actuator.
Calibration of the Electro-Hydraulic valve
positioning system.

CORRECTIVE ACTIONS (DVR/LER# if applicable):
DVR# 1-2-91-045 LER# 91-02-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

WNUM	SYS	EPH	DESCRIPTION
L07172	MS	1B21-2BSFV1	MSR blanket valve control switch loose
L07531	MS	1B21-F503B	Valve leakage
L10787	RD	1C11-C001A	Change pump oil
L10942	APRM	1C51-R603D	APRM/IRM recorder erratic
L10953	PC	1PCM111	Personnel access hatch failed to operate
L10978	NB	1B21-L904	MSR control valve, blown diaphragm
L10979	NB	1B21-L903	MSR blown diaphragm regulator

ATTACHMENT B
II.B UNIT SHUTDOWNS
(UNIT 1)

DATE: 911018 GENERATOR OFF-LINE: 87.1 OUTAGE TYPE: Forced (L1F14)
(YYMMDD) (Hours)

REASON: Manual reactor shutdown due to hydraulic control fluid leakage
used for the positioning of the 1B Reactor Recirculation Flow
Control Valve.

CRITICAL ACTIVITY PATH: Replacement of the Flow Control Valve actuator
Calibration of the Electro-Hydraulic valve
positioning system

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

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES:
DVR# 1-2-91-045 LER# 91-012-00

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

WR NUM	SYS	EPN	DESCRIPTION
L07172	MS	1B21-2BSFV1	MSR blanket valve control switch loose
L07531	MS	1B21-F503B	Valve leakage
L10787	RD	1C11-C001A	Change pump oil
L10942	APRM	1C51-R603D	APRM/IRM recorder erratic
L10953	PC	1PCM111	Personnel access hatch failed to operate
L10978	NB	1B21-L904	MSR control valve, blown diaphragm
L10979	NB	1B21-L903	MSR blown diaphragm regulator

ATTACHMENT B
11.B UNIT SHUTDOWNS
(UNIT 2)

DATE: 910906 GENERATOR OFF-LINE: 128.2 OUTAGE TYPE: Forced (L2F11)
(YYMMDD) (Hours)

REASON: Manual reactor scram due to Turbine Electro-Hydraulic Control leakage at the #2 Turbine Control Valve.

CRITICAL ACTIVITY PATH: Inspect EHC piping and supports, repair/replace damaged supports and leakage
Non-Destructive examination to insure that incipient damage to the system was not present beyond the identified leaks
Replace insulation on the Main Steam piping soaked by hydraulic fluid
Test and replace seismic supports on the Main Steam system damaged by hydraulic fluid

CORRECTIVE ACTIONS (DVR/LER# if applicable):
DVR# 1-2-91-0038 LER# 91-010-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

WRNUM	SYS	EPN	DESCRIPTION
L09907	IRM	RY-2C51-K601H	IRM, No -15 VDC from regulator
L09910	MS	2EH000	MSL piping remove and replace main steam line insulation
L09958	MS	2B21-MOVSV-5	Main Steam Line drain valve will not open
L09961	MS	2MS000	Stroke test mechanical snubber
L09962	MS	2MS000	Stroke test mechanical snubber
L09963	MS	2MS000	Stroke test mechanical snubber
L09964	MS	2MS000	Stroke test mechanical snubber
L09991	MS	2ZI-EH920B	#4 intercept valve fast acting solenoid
L09998	MS	MS01-2869S	Replace snubber clamp bolt
L09999	MS	MS01-2877S	Replace snubber clamp bolt
L10000	MS	MS01-2856S	Replace snubber clamp bolt
L10026	IRM	EL-2C51-AZ009D	IRM Upscale alarm high

ATTACHMENT B
II.B UNIT SHUTDOWNS
(UNIT 2)

DATE: 910924 GENERATOR OFF-LINE: 216.2 OUTAGE TYPE: Forced (L2F12)
(YYMMDD) (Hours)

REASON: A reactor scram resulted when an erroneous Turbine
Electro-Hydraulic Control overspeed signal caused the Main
Turbine Control Valves to close.

CRITICAL ACTIVITY PATH: Investigation into the cause of the scram
Repairs to the Electro-Hydraulic Control system
Replacement of the Main Turbine Master Trip
Solenoid assembly with an improved model

CORRECTIVE ACTIONS (DVR/LER# if applicable):
DVR# 1-2-91-0045 LER# 91-012-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

<u>WENUM</u>	<u>SYS</u>	<u>EPN</u>	<u>DESCRIPTION</u>
L04264	IRM	RY-2C51-K601G	2G IRM erratic on ranges 1,2
L09972	RD	2C11-D001-006	Rod 18-55, sticking 120 or 122 valve after driving
L10329	RP	2H13-P603	Reactor mode switch loose
L10358	RP	2C71-S003F	EPM alternate feed breaker failed
L10440	RP	2C71-S003E	RPS alternate power supply, unable to set underfrequency
L10464	MS	2B21-F022A	Onboard MSIV limit switch
L97868	RP	2C71-S003B	MG Set, trouble resetting breaker

DATE: 911029 GENERATOR OFF-LINE: 51.5 OUTAGE TYPE: Forced (L2F13)
(YYMMDD) (Hours)

REASON: A reactor scram was initiated when the Main Turbine tripped due
to high vibrations on bearing #6. The cause was attributed to a
failed turbine vibration card.

CRITICAL ACTIVITY PATH: Investigation into the cause of the scram
Replacement of the Turbine Vibration Card

CORRECTIVE ACTIONS (DVR/LER# if applicable):
DVR# 1-2-91-0056 LER# 91-014-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

ATTACHMENT C
II.B FORCED REDUCTIONS IN POWER
GREATER THAN 20% IN DESIGN POWER LEVEL
(UNIT 1)

DATE: 910513
(YYMMDD)

OPERATION AT REDUCED POWER: 145.4
(Hours)

REASON: Air leakage of the 4-Way air valve on the Main Steam Isolation Valve 1B21-F022B.

CRITICAL ACTIVITY PATH: Replace air valve and completion of operational testing.

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

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>
L07582	MS	1B21-F022B	4-way air valve leaking

DATE: 911021
(YYMMDD)

OPERATION AT REDUCED POWER: 24.3
(Hours)

REASON: Turbine Control Valve #4 failed to fast close during testing.

CRITICAL ACTIVITY PATH: Resolution of the Turbine Control Valve problem and completion of operational testing.

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

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>
L11018	MS	1B21-CV4	Turbine Control Valve failed testing

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

DATE: 910228
(YYMMDD)

OPERATION AT REDUCED POWER: 14.0
(Hours)

REASON: Scram outlet valve air diaphragm for hydraulic control unit 26-19 was leaking air. The control rod was declared inoperable and was fully inserted.

CRITICAL ACTIVITY PATH: Replacement of air diaphragm and operational testing.

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

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

WR NUM	SYS	EPN	DESCRIPTION
L05793	RD	2C11-D001-064	HCU# 26-19 scram outlet valve leaking air

DATE: 910601
(YYMMDD)

OPERATION AT REDUCED POWER: 15.5
(Hours)

REASON: Reduced reactor power level due to reactor coolant high conductivity caused by maintenance error.

CRITICAL ACTIVITY PATH: None

CORRECTIVE ACTIONS (DVR/LER# if applicable): DVR# 1-2-91-0020

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

DATE: 910906
(YYMMDD)

OPERATION AT REDUCED POWER: 0.8
(Hours)

REASON: At 0525, due to a Turbine Electro-Hydraulic Control leak, a unit shutdown commenced. At 0615 a manual scram of the unit was initiated.

CRITICAL ACTIVITY PATH: None

CORRECTIVE ACTIONS (DVR/LER# if applicable):
DVR# 102091-0038 LER# 91-010-00

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

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

DATE: 911012
(YYMMDD)

OPERATION AT REDUCED POWER: 22.0
(Hours)

REASON: Reduced power level to 650 Mwe due to low suction pressure on the
2B Condensate Booster Pump.

CRITICAL ACTIVITY PATH: Clean suction strainers.

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

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

DATE: 911020
(YYMMDD)

OPERATION AT REDUCED POWER: 48.0
(Hours)

REASON: Reduced power level to 730 Mwe due to broken valve stems on
Heater Drain Valves 2HD045A, 2HD045B and 2HD045C.

CRITICAL ACTIVITY PATH: Replace valve stems and operational testing.

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

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% ALLOWABLE VALUES: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

ATTACHMENT D

SURVEY OF CHLORINE SHIPMENT IN THE VICINITY OF LA SALLE COUNTY STATION

A. INTRODUCTION

The 1991 survey of chlorine shipments was conducted during June and July. The discussion which follows updates previous surveys performed in 1975, 1986, and 1988. Potential or actual users of bulk quantities of chlorine within a five mile radius of La Salle station are identified. Also included are the shippers and modes of transportation of chlorine shipment.

The purpose of the survey is to review the shipment of chlorine by barge on the Illinois River near La Salle station. This information is used to evaluate the need for special protective measures against chlorine to ensure control room habitability. The information collected during the 1991 survey is consistent with the previous surveys, and supports the conclusion that no special protective provisions against chlorine are required at La Salle County station.

B. REGULATORY GUIDES

The applicable regulatory guide is 1.78, "Assumptions for Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release." Regulatory Guide 1.95, "Protection of a Nuclear Power Plant Control Room Against an Accidental Chlorine Release," describes types of chlorine releases and methods of protection against these releases.

Position 1 of Regulatory Guide 1.78 states that chlorine stored or situated at distances greater than five miles from the station does not have to be considered in the analysis of control room habitability.

C. ORIGINAL SURVEY EXPLANATION

The location of the plant and the transportation routes in the vicinity of the site are described in section 2.1.1 of the La Salle County Station Final Safety Analysis Report (FSAR). FSAR section 2.2.2 describes the industrial facilities, products and materials, pipelines, waterways located nearby and projections of industrial growth. There are no industries or bulk users of chlorine within a five mile radius of the plant. FSAR section 2.2.2.4 briefly describes the uses of the Illinois River in the vicinity of the plant as a waterway.

FSAR section 2.2.3.1 states that the Illinois River is the only transportation route carrying hazardous material within 5 miles of the plant. Section 2.2.3.2.c requires that this survey be performed every three years to ensure that a chlorine hazard does not exist. FSAR table 2.2-4 listed the commodities shipped on the Illinois River in 1974. There was no breakdown on chemical shipments to provide data on chlorine shipments. The original survey showed that small quantities of chlorine were being used by the Illinois Nitrogen Corporation, approximately 5 miles north of the station. There was not enough information available to determine that Illinois Nitrogen was not receiving chlorine shipments by barge. Therefore, in order to expedite the station licensing process, chlorine detectors were installed in the outside air intake of the control room ventilation system.

D. CURRENT SURVEY

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A current list of active chlorine barges in the United States and Canada was obtained from the Chlorine Institute, a national trade organization in the chlorine industry. This is included as Table 1. The Institute is not aware of any bulk users or producers which would utilize the Illinois River as a route of transporting chlorine. According to the Institute's Vice-President of Storage and Transport, there are no chlorine barges operating on the Illinois River.

Illinois Nitrogen Corporation facilities at river mile 248.7 have been taken over by Kaiser-Estech, Inc. This company was contacted, and it was stated that chlorine is neither shipped nor received by barge at their location. Review of La Salle County records showed no new industries within a five mile radius of the plant. The five mile radius includes a small portion of westernmost Grundy county. Grundy County had no similar records to review, but a physical survey of the area did not show that any industries were in the area.

Table 2 lists the government agencies contacted. The nearest water treatment facilities, in Marseilles and Seneca, were not contacted in this survey, because a representative of a larger facility in Morris, which was contacted, stated that a barge shipment of chlorine would be far too large a quantity for the Morris facility to use or keep on hand. Table 3 shows the barge terminals located between the Marseilles and Dresden locks. Table 4 lists the potential bulk users of chlorine that can conceivably receive chlorine by barge.

Representatives of two of the companies listed in Table 4 stated that they do not use any appreciable amounts of chlorine in their processes. These companies are Jefferson Smurfit Corporation and Sponge-Cushion, Inc. A third company, Akzo Chemie, is not located on the river, and has no capability of receiving a barge shipment. There is no need for these three companies to be contacted in future surveillances. Federal Paperboard Co., located in Marseilles, was not contacted, as it was in previous surveillances, because it produces the same type of products as Jefferson Smurfit.

The results of the 1991 survey are identical to the 1988 survey, and are summarized below:

- the United States Coast Guard records did not show any new barge docking facilities constructed between the Marseilles and Dresden locks since 1988;
- the government agencies contacted (U.S. Army Corps of Engineers, U.S. Coast Guard, and the lockmaster at the nearest upstream dam) do not track chlorine shipments on the Illinois River;
- the Chlorine Institute is not aware of any chlorine shipments on the Illinois River, and a representative of the Institute has stated that there are no such shipments, to the best of his knowledge;
- no chlorine barges operate on the Illinois River;
- none of the barge terminals between the upstream and downstream dams ship or receive chlorine;

E. CONCLUSION OF FINDINGS

The 1991 survey did not turn up any significant amounts of chlorine shipped on the Illinois River. There are no chlorine producers located on the river, nor are there any bulk users of chlorine that receive the chemical between the Marseilles and Dresden locks on the river. No chlorine is known to pass through the Dresden locks. The conclusion of the 1991 survey is that chlorine is not shipped on the Illinois River in significant amounts within 5 miles of La Salle station, and that chlorine detectors on the outside air intake of the control room ventilation system are not necessary.

TABLE 1

ACTIVE CHLORINE BARGES IN THE U.S. AND CANADA

<u>OWNER</u>	<u>Reporting Marks/Name</u>	<u>Barge Nos.</u>	<u>Nom. Cl₂ Capacity(T)</u>
Canadian Occidental(3)	Metlakatla*		900 (3 x 300)
LCP (3)	LCP	4, 5, & 6	900 (3 x 300)
Georgia-Pacific (1)	Elaine D*		1200 (4 x 300)
Occidental (11)	DACO	1106-1109	1100 (4 x 275)
	DCS	1103-1105	1100 (4 x 275)
	EIDC	202 & 204	1100 (4 x 275)
	Griffinip*		400 (2 x 200)
	Chet Roberts*		600 (2 x 300)
Olin (7)	SBI	601-603	1110 (6 x 185)
	OMCC	651 & 652	100 (4 x 275)
	OL	654 & 655	1050 (4 x 262+)
Pennwalt (2)	Tyee*		1200 (4 x 300)
	Totem*		1200 (4 x 300)
PPG Industries (14)	PPG	150, 151, 152 153, 155, 158	600 (4 x 150)
	PPG	400-407	1100 (4 x 275)

* Coast-wise barges, operate in Pacific Northwest, rest on intercoastal waterways.

TABLE 2

GOVERNMENT AGENCIES AND TRADE ORGANIZATIONS CONTACTED

<u>ORGANIZATION</u>	<u>INFORMATION THAT CHLORINE IS TRANSPORTED ON THE ILLINOIS RIVER</u>
1. Chlorine Institute, Washington, D.C.	None
2. Illinois Dept. of Transportation, Hazardous Materials Div., Springfield, IL.	None
3. Lockmaster, Dresden Lock and Dam,	None
4. U.S. Army Corps of Engineers, Rock Island, IL.	None
5. U.S. Coast Guard, Chicago, IL.	None

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TABLE 3

BARGE TERMINALS LOCATED ON THE ILLINOIS RIVER BETWEEN
THE DRESDEN DAM AND THE MARSEILLES DAM

<u>COMPANY</u>	<u>RIVER MILE</u>	<u>CHLORINE SHIPMENTS</u>
1. Kaiser-Estech, Inc., Marseilles, IL.	248.7	None
2. Texasgulf Chemical Co., Marseilles, IL.	249.9	None
3. Continental Grain Co., Seneca, IL.	252.6	None
4. Black Marine Inc., Seneca, IL.	253.0	None
5. Shipyard Terminal and Industrial Park, Seneca, IL.	253.6	None
6. Seneca Port Operating Co., Seneca, IL.	253.6	None
7. Material Service Corp., Morris, IL.	262.0	None
8. ADM/Growmark, Morris, IL.	262.9 263.1	None
9. Cargill, Inc., Morris, IL.	263.1	None
10. Continental Grain Co., Morris, IL.	263.2	None
11. Commonwealth Edison, Co., Collins Station, Morris, IL.	265.8	None
12. Quantum Chemical Corp., USI Div.,	269.9	None

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TABLE 4

POTENTIAL BULK CHLORINE USERS BETWEEN
THE DRESDEN AND MARSEILLES DAM

COMPANY	PRODUCTS	CHLORINE RIVER SHIPMENTS
1. Texasgulf Chemical Co., Marseilles, IL	Industrial Chemicals	None
2. Asco Chemie America, Morris, IL.	Industrial Chemicals	None
3. ETI Company, Morris, IL.	Industrial Chemicals	None
4. Jefferson Smurfit Corp., Morris, IL.	Folding Cartons	None
5. Quantum Chemical Corp., USI Div., Morris IL.	Industrial Chemicals	None
6. Reichhold Chemicals, Inc. Morris, IL.	Synthetic Resins	None
7. Sponge-Cushion, Inc. Morris, IL	Sponge Rug Cushions	None
8. Water and Wastewater Treatment Facility, Morris, IL.	Drinking Water and Sewage Treatment	None
9. Water and Wastewater Treatment Facility, Marseilles IL.	Drinking Water and Sewage Treatment	None
10. Water and Wastewater Treatment Facility, Seneca, IL.	Drinking Water and Sewage Treatment	None

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REFERENCES

1. Mr. Michael Leyden, Chlorine Institute, Washington, D.C. (202)775-2790. Personal communication.
2. Mr. Tom Crawford, Illinois Department of Transportation, Hazardous Materials Division, Springfield, IL. (217)785-3064. Personal communication.
3. Lockmaster, Dresden Dam, IL. (815)942-0840, ext. 6732. Personal communication.
4. Miss Donna Jones, U.S. Army Corps of Engineers, Rock Island, IL. (309)788-6361. Personal communication.
5. Mr. Tom Manier, U.S. Army Corp of Engineers, Rock Island, IL. (309)788-6361, ext. 6416. Personal communication.
6. Mr. Bob Nedro, Kaiser-Estech, Inc., Marseilles, IL. (815)795-4151. Personal communication.
7. Miss Janet Armstrong, Texasgulf Chemical Company, Marseilles, IL. (815)795-5111. Personal communication.
8. Mr. Brian Leydens, Continental Grain Co., Seneca, IL. (815)942-0932. Personal communication.
9. Miss Paula Halbur, ADM/Growmark, Morris, IL. (815)726-5227. Personal communication.
10. Miss Diane Black, Black Marine, Inc., Seneca, IL. (815)357-6666. Personal communication.
11. Mr. George Lamb, Shipyard Terminal and Industrial Park, Seneca, IL. (815)357-6721.
12. Mr. Glenn McDonald, Seneca Port Operating Company, Seneca IL. (815)357-8811. Personal communication.
13. Miss Peggy Weber, Material Services Corp., Morris, IL. (815)942-1830. Personal communication.
14. Mr. Kevin Grudem, Cargill, Inc., Morris, IL. (815)838-1153. Personal communication.
15. Mr. Curt Strong, Continental Grain Company, Morris, IL. (815)838-1801. Personal communication.
16. Mr. Larry Banas, Commonwealth Edison, Collins Station, Morris, Illinois. (815)942-4500, ext. 600. Personal communication.
17. Mr. Jerry Starkey, Quantum Chemical Corporation, USI Division, Morris, IL. (815)942-7201. Personal communication.

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18. Petty Officer Gilbert, U.S. Coast Guard, Chicago, IL. (312)353-1226. Personal communication.
19. Miss Cathy Rollins, Akzo Chemie, Morris, IL. (815)942-6200. Personal communication.
20. Mr. Wes Geisert, ETI Company, Morris, IL. (815)357-8711. Personal communication.
21. Jefferson Smurfit Corp., Morris, IL. (815)942-1520.
22. Mr. Jim Basil, Reichhold Chemicals, Inc., Morris, IL. (815)942-4600. Personal communication.
23. Mr. Jerry Fodderm, Sponge-Cushion, Inc. Morris, IL. (815)942-2300. Personal Communication.
24. Miss June Fox, Water and Wastewater Treatment Facility, Morris, IL. (815)942-5063. Personal communication.