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LaSalle Generating Station
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February 29, 2000

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Subject: Annual Report for LaSalle County Station

This report is submitted in accordance with Technical Specification 6.6.A.2.

Enclosed is the Annual Report of LaSalle County Station for the period of January, 1999, through December, 1999.

Should you have any questions concerning this letter, please contact Mr. Frank A. Spangenberg, III, Regulatory Assurance Manager, at (815) 357-6761, extension 2383.

Respectfully,

A handwritten signature in black ink, appearing to read "Frank A. Benjamin", written over a horizontal line.

Jeffrey A. Benjamin
Site Vice President
LaSalle County Station

Attachment

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - LaSalle County Station

**ANNUAL REPORT FOR LASALLE
COUNTY STATION**

**JANUARY 1999
THROUGH
DECEMBER 1999**

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I. Introduction

The LaSalle County Nuclear Station is a two-unit facility owned by Commonwealth Edison Company and located near Marseilles, Illinois. Each unit is a Boiling Water Reactor with a designed net electrical output of 1078 Megawatts. Waste heat is rejected to a man-made cooling pond using the Illinois River for make-up and blow-down. The Architect-Engineer was Sargent and Lundy and the 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 power operation commenced in January 1984.

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

This report was compiled by Sherard R. Anderson, telephone number (815) 357-6761, extension 2620.

II. Annual Reportable Documentation for Unit 1 and Unit 2

A. Summary of Operating Experience

The summary of the operating experience has been reported monthly in LaSalle's NRC Monthly Reports for January 1999 through December 1999. For safety related maintenance (non-outage related) performed during the period of January through December 1999, see Attachment A.

B. Outages and Forced Downpowers

Unit 1 and Unit 2 outages are summarized in Attachment B and forced downpowers are summarized in Attachment C. Note that forced downpowers were determined using the NEI definition for the "Unplanned Power Changes" indicator. These include all load drops greater than 20% of rated reactor power that occurred less than 72 hours from an initiating event.

C. Radiation Exposure

For the radiation exposure of LaSalle Station personnel for the reporting period of January 1999 through December 1999, see Appendix C.

D. Indications of Failed Fuel Elements

On March 25, 1999, Unit 1 had indications of leaking fuel. Flux tilt testing was completed, and control rods were inserted to suppress power in the leaking bundle. On August 18, 1999, Unit 1 had new indications of leaking fuel. Flux tilt testing was again performed to determine the location of the new leaking bundle; however, no new leaking fuel bundle was identified. The cycle was completed on October 23, 1999 with multiple rods inserted. During core unload, both in-mast and vacuum can sipping were performed. Bundles YJD643 (cell 11-16) and YJD636 (cell 19-08) were identified as the leakers. After visual inspections, the root causes of the fuel failures were still unknown. More detailed inspections of the bundles will be performed at a later date.

E. Tests and Experiments Not Described in the Safety Analysis Report (SAR)

Summaries of all tests and experiments not described in the SAR that were performed during this reporting period, January 1, 1999, through December 31, 1999, will be provided in a separate report at a later date in accordance with the requirements of 10CFR50.71(e) and 10CFR50.59.

F. Changes to Procedures Covered in the SAR

Summaries of all changes to procedures covered in the SAR performed during this reporting period, January 1, 1999, through December 31, 1999, will be provided in a separate report at a later date in accordance with the requirements of 10CFR50.71(e) and 10CFR50.59.

G. Summary of Changes to the Facility Which are Described in the SAR

Summaries of all changes to the facility as described in the SAR performed during this reporting period, January 1, 1999, through December 31, 1999, will be provided in a separate report at a later date in accordance with the requirements of 10CFR50.71(e) and 10CFR50.59.

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

Per the USFAR, every 3 years a survey will be conducted to re-evaluate the use of chlorine, within 5 miles of the control room, to ensure that a chlorine hazard does not exist. The last survey performed was in 1997 and the results were included in the NRC Annual Report for that year. The next survey is scheduled to be performed in 2000, and will be included in next year's annual report.

I. Summary of Events Exceeding Technical Specification 3.4.5 – Specific Activity Limits

During this reporting period, January 1, 1999 through December 31, 1999, there were no events exceeding the limits of Technical Specification 3.4.5, Specific Activity Limits.

ATTACHMENT A

**SAFETY-RELATED CORRECTIVE MAINTENANCE
NON-OUTAGE RELATED**

ATTACHMENT A
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT COMMON
(NON-OUTAGE RELATED)

| | | | | |
|-----|-----------|------------|---|---|
| | 1060 | | SPING-3B BACKUP FOR WRGM | LED READOUT NOT FUNCTIONING FOR CHANNELS 14 AND 15. |
| DC | 980063859 | 0DC22E-CB8 | SPACE | INSTALL FME BARRIER OVER CB-8 SPACE |
| DG | 970031388 | 0DG01K | ENGINE, DIESEL GENERATOR | CORRECT LEAKS FOUND DURING PMT |
| DG | 980034064 | 0DG01K | ENGINE, DIESEL GENERATOR | REPLACE TWO BROKEN BOLT ON DG AIR INTAKE BOX MOUNTED ON GEN |
| DG | 990102054 | 0DG01P | 0 DG COOLING WATER PUMP | PUMP DP IN REQUIRED ACTION RANGE |
| DG | 980008109 | 0DG018 | DG "0" COOLING WTR STRNR DRN STOP | VALVE DIFFICULT TO OPERATE |
| DG | 990009224 | 0DG12MB | 0 DG B STARTING AIR STRAINER | CLEAN/INSPECT Y-STRAINER ON ODG 'B' STARTING AIR |
| DG | 980008112 | 0DG22A | PIPE, | PIPE CAP IS ONLY ENGAGED BY ONE THREAD / REPOSITION ANGLE |
| DG | 990074887 | 0PS-DG043A | 0 DG A AIR COMP CONTROL (S38) | CHECK CALIBRATION OF PRESSURE SWITCH 0PS-DG043A |
| DO | 970136673 | 0DO02T | 0 DG DAY TANK | GASKET LEAK ON DIESEL DAY TANK MANWAY COVER, REPLACE GASKET |
| D18 | 990051592 | 0D18-R519 | RECORDER, SBGT WIDE RANGE NOBLE GAS MONITOR | GREEN PEN STICKS, NOT RESPONDING TO SOURCE CHECKS |
| PL | 990091036 | 0PLD1J | ASSY_- PANEL, SBGT VENT SAMPLE CONDITIONER | "A" PREFILTER DISCHARGE SOLENOID VALVE LEAKING BY |
| PL | 990009242 | 0PLD2J | ASSY_- PANEL, SBGT WIDE RANGE GAS MONITOR | SBGT WRGM MID/HIGH RANGE FLOW IS LOW |
| VC | 990060560 | 0FZ-VC041B | CONT RM AIR COND SYSDMPR 18YB | TROUBLESHOOT 0FZ-VC041B DAMPER ACTUATOR FOR 0VC18YB |
| VC | 980085047 | 0PDI-VC026 | CR A/C EMERG M/U AIR FLTR D/P | 0PDI-VC026 LEAKS. WOULDN'T HOLD PRESSURE DURING CAL. |
| VC | 990018585 | 0PDR-VC027 | D/P RECORDER | BLACK PEN READING 2 PSID WITH NO SYSTEM FLOW |
| VC | 980065515 | 0PI-VC134 | VC COMPRESSOR A LO OIL PRESS | GAUGE NEEDLE IS VIBRATING AND HARD TO READ PRESSURE. |
| VC | 990028244 | 0PI-VC135 | VC COMPRESSOR A HI DISCH PRESS | GAUGE READING 50 PSI WITH NO PRESSURE ON IT |
| VC | 990001705 | 0TI-VC143 | HEATER IN TEMP TRAIN 0VC01SB | PERFORM BOP CAL |
| VC | 990001706 | 0TI-VC144 | HEATER OUT TEMP TRAIN 0VC01SB | PERFORM BOP CAL |
| VC | 990114527 | 0TS-VC172 | VC COMPRESSOR 0VC05CB HIGH OIL TEMP | SWITCH DOES NOT AGREE WITH INDICATOR, MAY TRIP ERRONEOUSLY |
| VC | 980102415 | 0VC000 | MISCELLANEOUS WORK REQUESTS | REPLACE "A" VC & VE DUCT INSULATION TO SUPPORT DCP 9800194 |
| VC | 980080773 | 0VC03AA | CNSDR COIL CONT ROOM HVAC AIR COOLED | COILS HAVE DIRT AND FEATHERS STUCK TO THEM |
| VC | 980054079 | 0VC03CA | MOTOR, CR HVAC EMERG M/U AIR FAN 0A | SECURE MOTOR BEARING DUST SEAL |
| VC | 990064387 | 0VC05CA | 0A CONTROL ROOM HVAC REFER | TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| VC | 990079339 | 0VC05CA | 0A CONTROL ROOM HVAC REFER | TRIPPED ON HIGH OIL TEMP DURING SD SEQUENCE |
| VC | 990079648 | 0VC05CA | CONTROL RM HVAC REFRIG COMP 0A | REPAIR DAMAGED 1/4 IN FREON LINE |
| VC | 980133679 | 0VC24YA | DAMPER, CR A/C SYST | DAMPER IS MISSING LOCKING DEVICE |
| VC | 990088073 | 0VC52YA | DAMPER, MIN OUTSIDE AIR ISOLATION | TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| VC | 980061226 | 0XY-VC087B | CONT RM A/C SYS B CONT RM A/C SYS | RECONFIGURE AIR DUCT DETECTOR SAMPLE TUBES FOR 0XY-VC087B |
| VD | 990009146 | 0VD01F | FILT SB DIESEL GEN ROOM VENT SPLY | FILTER ARE DIRTY. NEED TO CHANGE. HIGH DIFF PRESS ALARMING |
| VD | 970060527 | 0VD02C | FAN, HP DG FUEL STOR TANK ROOM VENT | FAN FLEX CONNECTORS HAVE BECOME BRITTLE AND NEED REPLACED |
| VD | 990113077 | 0VD03YA | DAMPER DG RM VENT | DAMPER DID NOT MODULATE PROPERLY/SEE NOTES |
| VE | 990028951 | 0FS-VE004 | AEER A/C MIX DMPR REHTR CONT | FLOW SWITCH SPURIOUSLY ACTUATING |
| VE | 990029128 | 0PI-VE104 | COMPRESSOR, 0VE04CA HI DISCH PRESSURE | GAUGE IS LEAKING AT THE FITTING. FIX FITTING TO GAUGE |
| VE | 990020055 | 0VE000 | MISCELLANEOUS WORK REQUESTS | LOCATE REFRIGERANT LEAK AND REPAIR IT. |
| VE | 980058718 | 0VE01CB | ASSY_- FAN, HVAC SUPPLY | VE SUPPLY END OF BELL HOUSING DAMAGED. HAS A CRACK IN IT. |

ATTACHMENT A
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT COMMON
(NON-OUTAGE RELATED)

| | | | | |
|----|-----------|------------|--|--|
| VE | 980058749 | 0VE01CB | ASSY_-_FAN, HVAC SUPPLY | FLEX CONNECTION AT DISCHARGE OF SUPPLY FAN LEAKING |
| VE | 970011159 | 0VE02AA | AIR COOLED CONDENSING UNIT | ENCLOSURE HAS AN ACCESS PANNEL THAT IS MISSING LATCHES WHICH |
| VE | 990016364 | 0VE02CB | BRKR, 236X-2 B5 AEER RETURN FAN O/B | REPLACE BREAKER CONTACTOR (SEE WR 98034868) |
| VE | 980125132 | 0VE04AB | HEATING COIL AUX ELEC EQUIP RM HVAC U-1 ZONE | LIGHTS CANNOT BE INSTALLED ON SIDE OF DISCONNECT PANEL |
| VE | 980111265 | 0VE04CA | A VE COMPRESSOR, REFRIGERATION | OIL LEAK UNDER FILTER AND OIL PUMP AREA. |
| VE | 990043949 | 0VE04CA | REFRG COMP AUX EL EQUIP RM SPLY SYS | OIL TEMPERATURE IS RUNNING HIGH - CLOSE TO TRIP SETPOINT. |
| VE | 990063856 | 0VE04CA | A VE COMPRESSOR, REFRIGERATION | COMPRESSOR IS LEAKING FREON AND OIL OUT OF THE SHAFT SEAL |
| VE | 980054888 | 0VE05AA | HEATING COIL AUX EL EQUIP RM HVAC UNIT-2ZONE | TASK 01 FAILED PMT - CONTINUE TROUBLESHOOTING |
| VE | 980133691 | 0VE17YB | DAMPER, HVAC ISOLATION | DAMPER IS MISSING LOCKING DEVICE |
| XX | 990021587 | 0XXDR011 | DOOR #011, WATERTIGHT, RX BSMNT FROM PP | REPAIR / REPLACE WATERTIGHT DOOR SEAL |
| XX | 990084163 | 0XXDR011 | DOOR #011, WATERTIGHT, RX BSMNT FROM PP | DOOR 11, RB RACEWAY TO HPCS PUMP ROOM |
| ZZ | 970035816 | 0ZZ-AB000 | AUXILIARY BUILDING | HOLE IN NORTH WALL AIR SUCKING THROUGH SEE NOTES. |
| ZZ | 970058314 | 0ZZ-AB000 | AUXILIARY BUILDING | REPAIR CREVICE IN N/WEST CORNER OF WALL "AUX BLDG AIR LOCK" |
| ZZ | 970125331 | 0ZZ-AB000 | AUXILIARY BUILDING | GROUT VOIDS IN SLAB AND AT BASE OF WALL IN FAN ROOM |
| ZZ | 980022341 | 0ZZ-AB000 | AUXILIARY BUILDING | GROUT TWO HOLES LOCATED ABOVE FIRE EXTG 214 |
| ZZ | 980041749 | 0ZZ-AB000 | AUXILIARY BUILDING | REPAIR LOOSE FIREPROOFING ON STRUCT STEEL |
| ZZ | 980042642 | 0ZZ-AB000 | AUXILIARY BUILDING | FILL VOID SPACES W/ FIREPROOFING AT COLUMN/MASONRY INTERFACE |
| ZZ | 980092021 | 0ZZ-AB000 | AUXILIARY BUILDING | JUNCTION BOX IS SLIGHTLY AJAR WITH A CABLE HANGING OUT OF IT |
| ZZ | 980105693 | 0ZZ-AB000 | AUXILIARY BUILDING | WATER FROM VR SH COILS LEAKING THRU WALL INTO 0DA01 DRAIN. |
| ZZ | 980118866 | 0ZZ-AB000 | AUXILIARY BUILDING | GROUT OPENINGS IN WEST WALL OF U1, DIV.1, 250VDC BATTERY RM |
| ZZ | 990001336 | 0ZZ-AB000 | AUXILIARY BUILDING | SAFETY CONCERN HOLE IN FLOOR |
| ZZ | 990013965 | 0ZZ-AB000 | AUXILIARY BUILDING | TOILET OR DOWNSTREAM PIPING IS PLUGGED |
| ZZ | 990015463 | 0ZZ-AB000 | AUXILIARY BUILDING | REPAIR LOOSE AND MISSING FIREPROOFING ON STRUCT STEEL |
| ZZ | 990015464 | 0ZZ-AB000 | AUXILIARY BUILDING | REPAIR LOOSE AND MISSING FIREPROOFING ON STRUCT STEEL |
| ZZ | 990015994 | 0ZZ-AB000 | AUXILIARY BUILDING | REPAIR LOOSE AND MISSING FIREPROOFING ON STRUCT STEEL |
| ZZ | 990015995 | 0ZZ-AB000 | AUXILIARY BUILDING | REPAIR 2 SMALL HOLES (1/2") WITH GROUT. |
| ZZ | 990015998 | 0ZZ-AB000 | AUXILIARY BUILDING | REPAIR SMALL HOLE (1/2") WITH GROUT. |
| ZZ | 990017285 | 0ZZ-AB000 | AUXILIARY BUILDING | AREA 10"X 84" OF FIRE PROOFING MISSING ON BEAM |
| ZZ | 990020128 | 0ZZ-AB000 | AUXILIARY BUILDING | REPAIR SMALL HOLE (1/2") WITH GROUT. |
| ZZ | 990102333 | 0ZZ-AB000 | AUXILIARY BUILDING | FLOOR DRAIN IS PLUGGED |
| ZZ | 980012247 | 0ZZ-DG001 | UNIT 1 DIESEL GENERATOR BUILDING | REPAIR GOUGE IN FIRE BARRIER BTWN. 1A & 1B DG ROOMS |
| ZZ | 980089034 | 0ZZ-DG001 | UNIT 1 DIESEL GENERATOR BUILDING | GROUT FOUR HOLES IN BLOCK WALL. |
| ZZ | 970042644 | 0ZZ-LSH000 | LAKE SCREEN HOUSE | GROUT AT BASE WHERE DISCHARGE LINE MEETS WS TUNNEL IS CRACKE |
| ZZ | 970049759 | 0ZZ-RB000 | REACTOR BUILDING | 2" HOLE IN WALL/PATCH HOLE / DRY PACK THE EXISTING HOLE |
| ZZ | 980098235 | 0ZZ-RB000 | REACTOR BUILDING | SAFETY RAILS/GATE NEEDS REPLACING ON PLATFORMS IN MS TUNNEL |

ATTACHMENT A
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT COMMON
(NON-OUTAGE RELATED)

| | | | | |
|----|-----------|-----------|-----------------------------|--|
| ZZ | 980109950 | 0ZZ-RB000 | REACTOR BUILDING | TROUBLESHOOT FOR POTENTIAL CAVITY LEAK THROUGH DRAIN PIPES |
| ZZ | 980118921 | 0ZZ-RB000 | REACTOR BUILDING | J-BOX JB453R COVER IS NOT SECURED. THIS IS LOCATED IN PIPE |
| ZZ | 990002238 | 0ZZ-RB000 | REACTOR BUILDING | REPAIR IDENTIFIED RECESSED AREA IN THE CONCRETE |
| ZZ | 990091713 | 0ZZ-RB000 | REACTOR BUILDING | R-133 (U1) WHIP RESTRAINT, ONE NUT IS LOOSE, REINSTALL |
| ZZ | 970042406 | 0ZZ000 | MISCELLANEOUS WORK REQUESTS | 1 LOOSE SCREW ON JUNCTION BOX 2JB159R, POT DIV 1 PROBLEM |

ATTACHMENT A
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 1
(NON-OUTAGE RELATED)

| | | | | |
|-----|-----------|--------------|--|--|
| AP | 960026498 | 1AP83E-F3 | LV 1VQ050 | THE RIGHT BUCKET LOCKING TAB IS BROKE OFF AND WILL NEED TO |
| AP | 980011068 | 1AP04E-10 | BUS TIE BREAKER | 141Y BUS TO 141X BRKR RACKING DIFFICULTY |
| AP | 980036085 | 1AP06E-3 | DIESEL GENERATOR 1A MAIN FEED | RBM: SBM SWITCH STUCK IN THE CLOSED POSITION DURING TESTING |
| AP | 980041345 | 1AP21E-303C | A AEER HVAC AIR COOLED CNDSR FAN 0VE03CA | 0VE03CA RACKING POSITION INDICATOR IS BROKEN, REPLACE |
| AP | 980043676 | 1AP21E-303D | A AEER HVAC SUPPLY FAN 0VE01CA | TRIP INTERLOCK RACKING MECHANISM SLIDE TUBE STICKS. |
| AP | 980134483 | 1AP72E-A5 | CUBICLE, MCC 135X-2 | BKR HANDLE BROKEN--REPLACE |
| AP | 990010584 | 1APD5E | VOLTAGE REGULATING TRANSFORMER | VOLTAGE TRANSFORMER FAILURE: REPLACE/REPAIR AND TEST |
| AP | 990016490 | 1AP22E-403C | B PRIMARY CONTAINMENT VENT SUPPLY FAN 1VP02CB | 1VP02CB: RMS-9 TRIP UNIT DOES NOT FUNCTION PROPERLY |
| AP | 990027138 | 1APD5E | VOLTAGE REGULATING TRANSFORMER | TROUBLESHOOT AND REPAIR PER LAP-1300-1T2 |
| AP | 990027222 | 1AP80E-E1-25 | FEEDWATER INLET CHECK VALVES 1B21-F032A/B VOLTAGE REG XFMR 1APD5 | BREAKER NEEDS TO BE REPLACED FOLLOWING TRANSFORMER FAILURE |
| B21 | 990026514 | 1B21-N517 | MSR-B BETWEEN STAGES (BRS-1) | COMPUTER POINT T375 FAILED HIGH |
| B21 | 990100393 | 1B21-K104C | RELAY, H13P609, | TERMINAL #7 ON RELAY IS LOOSE |
| B33 | 980092962 | 1B33-K606C | RX RECIRC PUMP 1B FLOW | CONTINGENCY TO TROUBLESHOOT 1/2 SCRAM DURING LIS-NR-107 |
| B33 | 990042164 | 1B33-K607C | RX RECIRC PUMP TOTALFLOW C | FLOW UNIT C MOVING MODE SWITCH CAUSES 1/2 SCRAMS |
| C11 | 990002840 | 1C11-D5439 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 54-39 | N2 LEAK BETWEEN CHARGING CAP AND NIPPLE |
| C11 | 990035138 | 1C11-N044 | HCU 14-39 ACCUMULATOR PRESS SWITCH | ALARM DID NOT CLEAR WITH PRESSURE AT 1060# AND WATER DRAINED |
| C11 | 990035138 | 1C11-N044 | HCU 14-39 ACCUMULATOR PRESS SWITCH | FAILED PMT, REPAIR/REPLACE |
| C11 | 990078039 | 1C11-N088 | HCU 22-15 ACCUMULATOR PRESS SWITCH | INTERMITTENT ALARM---PRESS GOOD AT 1120PSI NO WATER PRESENT |
| C51 | 980131584 | 1C51-K601H | IRM CHANNEL H MONITOR | IRM H READ HIGHER THAN EXPECTED DURING L1P02 STARTUP |
| C51 | 980132024 | 1C51-K601A | IRM CHANNEL A MONITOR | IRM A RANGE 6 TO 7 OVERLAP NEEDS ADJUSTMENT |
| C51 | 980132026 | 1C51-K601D | IRM CHANNEL D MONITOR | IRM D RANGE 6 TO 7 OVERLAP NEEDS ADJUSTMENT |
| C51 | 980133009 | 1C51-K601E | IRM CHANNEL E MONITOR | IRM E READING IS BOUNCING AROUND AS COMPARED TO OTHER IRM'S |
| C51 | 990023642 | 1C51-R603B | IRM/APRM CHANNELS RECORDER | PEAK TO PEAK OSCILLATIONS ARE HIGHER THAN OTHER APRM RECDRS |
| C51 | 990029106 | 1C51-K605GN | AVERAGE PWR RANGE MONITOR CHNL B | FAILED TO CHANNEL CHECK ON TRIP TEST. READS 108 VS 101 |
| C51 | 990053265 | 1C51B-S001B | ALARM LEVEL APRM B & APRM D | P/B CONTACTS NOT ALWAYS MAKING UP. REPLACE P/B. |
| C51 | 990065855 | 1C51-K605GR | AVERAGE PWR RANGE MONITOR CHNL D | TROUBLESHOOT 1C51-K605GR OPRM |
| C51 | 990065862 | 1C51-K605GS | AVERAGE PWR RANGE MONITOR CHNL E | TROUBLESHOOT APRM "E" |
| C51 | 990090395 | 1C51-K605GR | AVERAGE PWR RANGE MONITOR CHNL D | CAUSED INADVERTENT 1/2 SCRAM WHILE INSTALLING OPRM |
| C51 | 990098082 | 1C51-K605GL | LOCAL PWR RANGE MON DET 48-09 LEVEL D | CONNECTOR NEEDS TO BE REPAIRED/REPLACED |
| C51 | 990098936 | 1C51-K605GL | LOCAL PWR RANGE MON DET 48-09 LEVEL D | LPRM IS DRIFTING-1C51-K605GL-48-09 LVL D. |
| C51 | 990100718 | 1C51A-S003B | REC 1C51-R603 B SEL IRM B OR APRM B | APRM TRIP LEVEL P/B STICKS CAUSING FALSE APRM READING |
| C51 | 990105304 | 1C51-K605GT | AVERAGE PWR RANGE MONITOR CHNL F | UNEXPECTED 1/2 SCRAM FROM APRM F WHILE HOLDING INOP-INHIBIT |
| C71 | 990065248 | 1C71-S003C | ELEC PROT ASSEMBLY | TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| C71 | 990082127 | 1C71-N006E | TURBINE STOP VALVE 2 POSITION SWITCH | SWITCH MAY BE DEGRADED, TROUBLE SHOOT & REPAIR |
| CM | 980121030 | 1PT-CM032 | S-POOL PRESS XMITTER | SEALTITE COMING OUT OF CONDUIT CONNECTION |
| CM | 980134622 | 1LT-CM030 | SUP POOL WIDE RANGE LEVEL XMTR | COMPUTER POINT A911 IS INDICATING LOWER THAN RECORDER PEN. |
| CW | 980020338 | 1PI-CW005 | B CIRC WATER PUMP DSCH PRESSURE | INSTRUMENT STAND BOLTS BROKEN FROM |

ATTACHMENT A
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 1
(NON-OUTAGE RELATED)

| | | | INDICATOR | FLOOR, REPLACE |
|-----|-----------|-------------|--|--|
| D18 | 970075031 | 1D18-N009D | REACTOR BLDG VENT DETECTOR | REPLACE HEAT SHRINK FOR MOISTURE SEAL ON CONNECTOR |
| D18 | 990032838 | 1D18-R800 | RECORDER, CR HVAC AIR INTAKE | RECORDER NOT FOLLOWING MONITORS, PRINTING A STRAIGHT LINE |
| D18 | 990086920 | 1D18-K611B | CARBON BED VAULT MONITOR | HI RAD ALARM COMING IN W/ LOCAL READINGS OF 20 MR/HR |
| D18 | 990090393 | 1D18-R800 | RECORDER, CR HVAC AIR INTAKE | RECORDER IS NOT PRINTING |
| D18 | 990092908 | 1D18-K751C | CONTROL ROOM HVAC AIR INTAKE | CR RAD MON 1D18-K751C FAILED DOWN SCALE |
| D18 | 990098420 | 1D18-R800 | RECORDER, CR HVAC AIR INTAKE | RECORDER IS NOT PRINTING - BELT NEEDS TO BE REPLACED. |
| DC | 990014911 | 1DC01E | 250VDC BATTERY | CORROSION FOUND ON 26 CELLS DURING PERFORMANCE OF LOS-DC-W1 |
| DG | 980031319 | 1DG067A | 1A DG A STARTING AIR AUXILIARY ACCUMULATOR DRAIN VALVE | VALVE LEAKS BY SLIGHTLY WHEN FULL CLOSED. REPAIR/REPLACE VLV |
| DG | 980042759 | 1DG08CA | 1A DG A STARTING AIR COMPRESSOR | GUARD SCREEN ON AFTERCOOLER RUBBING ON PULLEY |
| DG | 990050128 | 1DG061A | ASSY_ VALVE, 1A D/G BANK A STARTER AIR SUPPLY | 1A DG FAILED TO START THE FIRST TIME DURING LOS-DG-M2 ATT 1A |
| DG | 990050128 | 1DG061A | 1A DG A/C STARTING AIR MOTORS SUPPLY CONTROL VALVE | DISSASSEMBLE/INSPECT/REPAIR NEW CONTROL VALVE |
| DG | 990050132 | 1DG059A | 1A DG A STARTING AIR PRESS REGULATING VALVE | 1A DG FAILED TO START THE FIRST TIME DURING LOS-DG-M2 ATT 1A |
| DG | 990063362 | 1DG049A | 1A DG A STARTING AIR COMPRESSOR DSCH CHECK VALVE | CHECK VALVE HAD DISC STUCK IN SEAT/DISASSEMBLE AND INSPECT |
| DO | 970066250 | 1DO05T | 1A DIESEL GEN DAY TNK | MANWAY ON NORTH END OF TANK HAS DEVELOPED A SLOW LEAK. |
| E12 | 960026231 | 1E12C300B | PUMP, RESIDUAL HEAT REMOVAL SER WTR | LOWER SUCTION FLANGE BOLTS LT STD FOR THREAD ENGAGEMENT |
| E12 | 960026232 | 1E12C300A | PUMP, RESIDUAL HEAT REMOVAL SER WTR | SUCTION FLANGE BOLTS LT STD FOR THREAD ENGAGEMENT |
| E12 | 970114592 | 1E12-F330D | D RHR SERVICE WATER PUMP SUCT VALVE | CLEAN FOLLOWER AND BOLTS |
| E12 | 980049985 | 1E12-F335A | A RHR SERVICE WATER PUMP SUCT PRESS IND 1E12-R526 ROOT VALVE | NUT MISSING FROM PACKING GLAND, REPLACE |
| E12 | 990051604 | 1E12-F330D | D RHR SERVICE WATER PUMP SUCT VALVE | PACKING LEAK, PUDDLE ON YOKE AFTER PUMP RUNNING 1/2 HR |
| E12 | 990075769 | 1E12-N016A | A RHR PUMP DSCH PRESS | SWITCH APPARENTLY STUCK CLOSED, AND WON'T RESET OPEN. |
| E12 | 990075769 | 1E12-N016A | A RHR PUMP DSCH PRESS | REPAIR / REPLACE SWITCH IDENTIFIED IN TASK 01 |
| E12 | 990102446 | 1E12-R601 | TEMP RECORDER | CAUSES POINT #5 TO PEG UPSCALE WHEN PULLED OUT |
| E22 | 970006525 | 1E22-C003 | MOTOR, HPCS WTR LEG | CLEAN DIRTY AIR INTAKES ON HPCS WATER LEG PUMP MOTOR |
| E22 | 980010100 | 1E22-P301B | 1B DG AUXILIARY CONTROL PANEL | "LOW AIR PRESS" ANNUNCIATOR (1E22-N504 & 5) ERRONEOUS INDICA |
| E22 | 980043411 | 1E22B-S018 | HPCS DG FUEL PRIMING PMP MOTOR | REPOSITION FUEL OIL LINE FROM SKID MOUNTED PANEL |
| E22 | 980052524 | 1E22-S001 | GOVERNOR ASSEMBLY / DIESEL DRIVEN GENERATOR HPCS | GOVERNOR OIL SIGHTGLASS IS LEAKING OIL. |
| E22 | 980057374 | 1E22-S001-N | HEAT EXCHANGER, DIESEL COOL WTR | ADJUST BOLT TORQUE TO STOP FLANGE LEAK |
| E22 | 980057374 | 1E22-S001-N | HEAT EXCHANGER, DIESEL COOL WTR | REMOVE SEISMIC SUPPORT, TORQUE FLOATING END, AND REINSTALL. |
| E22 | 980089131 | 1E22-N521 | 1B DG JACKET WATER LOW PRESS | DURING THE IDLE START OF THE 1B DG IAW LOS-DG-M3 LOCAL LOW |
| E22 | 990007749 | 1E22-S001-C | PUMP, AC LUBE OIL CIRC (B7) | THERE IS OIL LEAKING FROM A PLUG ON THE DISCHARGE LINE. |
| E22 | 990060631 | 1E22-S001 | 1B DIESEL GENERATOR | FUEL OIL LEAK ON 1B DG MOTOR DRIVEN PUMP SUCTION STRAINER |
| E22 | 990064575 | 1E22-K500 | POWER SUPPLY | TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| E22 | 990085041 | 1E22-S001-C | COUPLING, AC LUBE OIL CIRC (B7) PP | 1B DG AC CIRCULATING OIL PUMP MOTOR TO PUMP RUBBER COUPLING |
| E22 | 990097509 | 1E22-S001 | GOVERNOR, DIESEL GENERATOR | GOVERNOR ALLOWED THE DIESEL TO OVERSPEED |

ATTACHMENT A
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 1
(NON-OUTAGE RELATED)

| | | | | |
|-----|-----------|--------------|--|--|
| E22 | 990119775 | 1E22-S001 | ENGINE, HPCS DG | EXHAUST PIPE SEAL BROKEN |
| E31 | 980081716 | 1E31-N009A | B MS LINE HI FLOW | 1E31-N009A LO / HI SIDE SNUBBER (DAMPNER) SMAL LEAK |
| E31 | 990069844 | 1E31-N009A | B MS LINE HI FLOW | REPALCE 1E31-N009A |
| E31 | 990073584 | 1E31-N010A | C MS LINE HI FLOW | OUT OF TOLERANCE BEYOND REJECTION LIMIT AND CONTACTS ERRATIC |
| E31 | 990122703 | 1E31-N012A | RHR SUCTION HIGH FLOW SWITCH | SWITCH WOULDN'T HOLD PRESSURE. |
| E51 | 980097007 | 1E51-D317 | RCIC TURBINE EXHAUST DRAIN LINE STRAINER | DISASSEMBLE, INSPECT AND REPAIR STRAINER PLUG THAT LEAKS. |
| E51 | 990000469 | 1E51-N002 | RCIC PUMP DSCH HI/LOW FLOW | REPLACE 1E51-N002 |
| E51 | 990122697 | 1E51-N012A | RCIC TURB EXH RUPTURE DISK HI PRESS | COULD NOT MAINTAIN PRESSURE DURING CAL WITH STOP VLV CLOSED |
| F21 | 960049809 | 1F21E003 | BRIDGE, REFUEL | TROLLEY AND BRIDGE GEAR BOXES HAVE OIL LEAKS / REPAIR |
| FC | 970080640 | 1FC03PA | MOTOR, FUEL POOL EMERG M/U PUMP | MOTOR AIR INTAKE SCREEN IS BROKEN |
| G33 | 970106919 | 1G33-Z00108A | DRN OTLT VLV UA | VALVE PACKING LEAKS 2-3 DROPS/MINUTE |
| G33 | 980016280 | 1G33-Z001-81 | SIGHT FLOW GLASS | SIGHTGLASS NEEDS CLEANING |
| H13 | 970006522 | 1H13-P611 | ASSY_-_PANEL, RX PROTECTION TRIP SYST B | REPLACE & SECURE SPECIFIC TB SHIELDS IN 1H13-P611. |
| H13 | 970020918 | 1H13-P603 | ASSY_-_PANEL, RX CONTROL | VARIOUS TERMINAL STRIP COVERS ARE MISSING SCREWS - REPLACE. |
| HG | 940059577 | 1HG005A | ASSY_-_VALVE, GATE | 2 OF 8 BONNET TO BODY STUDS DON'T HAVE FULL THREAD ENGAGEMEN |
| HG | 990036077 | 1HG027 | ACTUATOR, VLV | VALVE DID NOT CLOSE AS EXPECTED PER LOP-HG-01 |
| PA | 970063584 | 1PA12J | ASSY_-_PANEL, H2 RECOMBINER CONTROL | ALARM WINDOW PANEL FOR F2 RECOMBINER PANEL BROKEN |
| PC | 990076721 | 1PC000 | MISC WORK REQS - SAFETY RELATED PKG REQD | INSTALL BANANA JACKS FOR LIS-MS-102. |
| PL | 990028151 | 1PL25J | ASSY_-_PANEL, DG ROOM VENT SYST DIV-2 | DG VENT SUPPLY AIR FILTER D/P HI ALARMUP AND WILL NOT RESET. |
| PL | 990037195 | 1PL25J | ASSY_-_PANEL, DG ROOM VENT SYST DIV-2 | DOOR #3 OPEN ALARM WILL NOT RESET WITH DOOR #3 CLOSED. |
| RH | 960028896 | 1RH80AB | PIPE, | 1RH80AB - REPLACE BOLTS ON RHR SW PUMP D SUCTION FLANGE |
| RH | 990082655 | 1RH85BB | PIPE, | ALIGN AND TIGHTEN CLAMP |
| RH | 990082689 | 1RH03-1052X | 1RH03AB-18.00-SUBSYS-1RH08:RIGID SEISMIC RESTRAINT | STRUT MOUNTING CONFIGURATION UNACCEPTABLE, REPAIR |
| VD | 980114059 | 1UAI-VD021 | DG RM VENT ANNUN | ANNUNCIATOR 2-1 FAILED LAMP TEST ON PANEL 1PL24J |
| VD | 990106012 | 1TZ-VD013C | DIESEL GEN RM 1DG01PMOD DPR 1VD19Y | CONTINGENCY TO TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| VG | 980023136 | 1FZ-VG003 | POSITIONER, SGBT TRAIN SUCTION DMPR | DAMPER ACTUATOR IS CYCLING |
| VG | 980023136 | 1FZ-VG003 | POSITIONER, SGBT TRAIN SUCTION DMPR | ACTUATOR IS LEAKING OIL |
| VG | 980075796 | 1VG01S | SGTS EQUIP TRAIN | PREFILTER HAS SOME SEPARATOR DAMAGE / REPLACE |
| VX | 970042751 | 1VX30Y | DAMPER, SWGR HEAT RMVL | LOUVERS ARE MISSING 3 OF 6 HOLD DOWN NUTS AND 1 LUG. |
| VY | 960029571 | 1VY03A | B / C RHR PUMP ROOM COOLER | DIRECTIONAL BLADES ON REGISTER BENT OUT OF SHAPE |
| VY | 980030876 | 1VY000 | MISCELLANEOUS WORK REQUESTS | UPPER DIFFUSER FOR 1VY01A COOLER DUCT BROKEN BLADES |
| VY | 980053562 | 1VY04C | ASSY_-_FAN, LPCS PUMP ROOM COOLING | 1 BOLT MISSING FROM SUCTION BOOT - REPLACE |
| VY | 980097183 | 1TIC-VY023 | RHR WS PP A/B TEMP CONT MOD DMPR | TROUBLESHOOT/REPAIR TEMPERATURE CONTROL LOOP. |
| VY | 980114449 | 1VY04A | LPCS PUMP ROOM COOLER | INLET DOOR SPRUNG IN MIDDLE - HAS SLIGHT GAP - ADJUST STOPS |
| VY | 980118122 | 1TZ-VY023C | RHR SER WTR PUMP A&BTEMP CONT DPR 1VY03Y | REPLACE ACTUATOR PER LEP-EQ-127 |

ATTACHMENT A
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
(NON-OUTAGE RELATED)

| | | | | |
|-----|-----------|----------------|--|--|
| AP | 970025026 | 2AP82E-F4 | MSIV - LCS OTBD SYS AIR BLOWER 2E32-C002F | CUBICLE F4 BREAKER HANDLE BROKEN OFF. REPLACE AS REQ'D |
| AP | 970100042 | 2AP21E-302D | AUX ELECTRIC EQUIP ROOM SYS REFRG COMP 0VE04CB | TRIP INTERLOCK AIR GAP NEAR ZERO. |
| AP | 970126470 | 2AP22E-402D | CONTROL ROOM HVAC REFRIGERATION UNIT 0B | TRBLSHOOT/REPAIR RIGHT DRAW OUT SLIDE |
| AP | 980122093 | 2AP82E-B2 | 2E12-F009 RHR SHTDN COOLING SUCT HDR INBD STOP NORMAL SPLY | HANDLE INTERLOCK SCREW STRIPPED |
| AP | 990030367 | 2AP83E-D4 | DRYWELL VENT & PURGE OUTBOARD ISOL VLV | COMPUTER POINT D434 INDICATES POWER NOT AVAILABLE |
| AP | 990031219 | 2AP21E-302A | RELAY, 74, 236X 302A | DID NOT RECEIVE AMBER TRIP LIGHT |
| AP | 990040508 | 2AP20E-203C | 2B RHR SERVICE WTR PMP 2E12-C300B | 2E12-C300B MOMENTARY AUTO TRIP ALARM WHEN STARTING PUMP |
| B21 | 950042834 | 2B21-F032A | VALVE, FEEDWATER CHECK | PIF #L1999-01933 FAILED PMT - ADJUST PACKING |
| B21 | 990046848 | 2B21-R884A | RX LEVEL/PRESS POST-ACCIDENT RECORDER | DIV I WR LEVEL IND STRAIGHT LINING ON RECORDER |
| B21 | 990065288 | 2B21-N051A | RX PRESS | PRESSURE INDICATION SLOWLY DECREASING |
| B21 | 990092316 | 2B21-R614B | RX STEAM LINE RELIEF & SAFETY VLV | SRV TEMP CYCLING |
| C11 | 990022619 | 2C11-D3059-107 | CRD HCU ACCUMULATOR WATER SIDE DRAIN VALVE | VALVE LEAKS BY 10 DPM. LEAKS WITH CAP INSTALLED. |
| C11 | 990044371 | 2C11-D1019-123 | CRD HCU INSERT DRIVE WATER DIRECTIONAL CONTROL VALVE | ROD TRIPLE NOTCHES IN ON SINGLE NOTCH INSERT SIGNALS |
| C11 | 990049195 | 2C11-D5419 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 54-19 | CAUSING SPURIOUS HI TEMP ALARMS IN MCR |
| C11 | 990051011 | 2C11-P003 | LOCAL FLOW STATION RACK FOR COND CHAMBER 2B21-D004B | BACKFILL PANEL FLOW IS AT 0.35 GPH, NEEDS TO BE INCREASED |
| C11 | 990061761 | 2C11-D1447 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 14-47 | CAUSING SPURIOUS HI TEMP ALARMS IN MCR |
| C11 | 990064788 | 2C11-D0243 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 02-43 | THREADED NIPPLE INTO THE N2 BLOCK SLOWLY LEAKS NITROGEN. |
| C11 | 990072623 | 2C11-D5823 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 58-23 | LEAKY FITTING FOLLOWING PRESSURE SWITCH REPLACEMENT |
| C11 | 990096152 | 2C11-D001063 | CONTROL UNIT CRD HYDRAULIC 30-19 | ROD 30-19 LOST FULL OUT IND |
| C11 | 990103424 | 2C11-D5843-111 | CRD HCU ACCUMULATOR INSTRUMENT BLOCK VALVE | NITROGEN LEAK AROUND VALVE STEM AND WHERE CHARGING NIPPLE |
| C51 | 990040601 | 2C51-K605FP | LOCAL PWR RANGE MON DET 24-17 LEVEL D | DOWNSCALE LIGHTS ARE ILLUMINATED WITH LPRM READING 18/125THS |
| C51 | 990040608 | 2C51-K605AH | LOCAL PWR RANGE MON DET 40-41 LEVEL C | LPRM SPIKED UPSCALE. |
| C51 | 990044520 | 2C51-R603A | IRM/APRM CHANNELS A,C RECORDER | BOTH PENS SPORADIC TRACKING -- DIGITAL INDICATION GOOD |
| C51 | 990046831 | 2C51-R603D | IRM/APRM/RBM CHANNELS RECORDER | GREEN PEN ERRATIC AFTER PUSHING TEST BUTTON |
| C51 | 990061094 | 2C51-R604G | LPRM GR 2 LEVEL C | READS ERRATIC. FROM 25% TO 60% |
| C51 | 990064738 | 2C51-R603B | IRM/APRM/RBM CHNLS B,D RECORDER | DIGITAL AND PEN INDICATION DO NOT AGREE WITH BACKPANEL |
| C51 | 990073208 | 2C51-K605GP | AVERAGE PWR RANGE MONITOR CHNL C | RECEIVED UNEXPECTED A2 NEUTRON MONITORING HALF SCRAM |
| C51 | 990099429 | 2C51-K605GM | AVERAGE PWR RANGE MONITOR CHNL A | APPEARS THAT THE K11 RELAY IS MAKING A HUMMING NOISE |
| C51 | 990113089 | 2C51-K605GT | AVERAGE PWR RANGE MONITOR CHNL F | RECEIVING HIGH ALARM AND ROD BLOCK ALARM |
| C51 | 990116940 | 2C51-R603C | IRM/APRM/RBM CHNLS RECORDER | GREEN CHART PEN HOLDER/CARRIAGE BENT--WONT TRACK |
| CM | 990039598 | 2LT-CM062 | SUP POOL LEVEL XMTR | TRANSMITTER IS SLUGGISH AND WILL NOT REPEAT. REPLACE |
| CM | 990080114 | 2RR-CM011 | RECORDER, POST LOCA GROSS GAMMA RAD | RED PEN MOTOR APPEARS TO BE FROZEN IN PLACE |
| CM | 990080605 | 2LI-CM179 | P/C FLOOD LEVEL INDICATOR | CONTAINMENT FLOOD LEVEL INDICATION READING 3 FEET LOW. |
| CM | 990086245 | 2PI-CM173 | O2 ANALYZER B REAGENT GAS BOTTLE | GAS LEAK BY GAUGE ON REGULATOR |
| D18 | 970017542 | 2D18-K610A | MAIN STEAM LINE A MONITOR | PANEL COVER IS TORN, REPLACE. |

ATTACHMENT A
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
(NON-OUTAGE RELATED)

| | | | | |
|-----|-----------|-------------|---|--|
| D18 | 990039267 | 2D18-K611A | CARBON BED VAULT MONITOR | REQUIRES SET POINT CHANGE DUE TO CONTROL ROOM ALARMS |
| D18 | 990039269 | 2D18-K611B | CARBON BED VAULT MONITOR | REQUIRES SET POINT CHANGE DUE TO CONTROL ROOM ALARMS |
| D18 | 990039756 | 2D18-K611A | CARBON BED VAULT MONITOR | TROUBLESHOOT WHY THE 2A OG CRBON BED VAULT SPIKES ITS ALARM |
| D18 | 990114043 | 2D18-K751A | CONTROL ROOM HVAC AIR INTAKE | B VC A RAD MONITOR SPIKED TO > 1000MR CAUSING CR ALARM |
| DC | 990048221 | 2DC06E-2C | RCIC BARO CND SR VAC PMP | 2DC06E-2C: TROUBLE SHOOT & REPAIR 74 RELAY FAILURE/TRIP IND. |
| DG | 980130238 | 2DG060B | 2A DG B STARTING AIR STRAINER OUTLET VALVE | GLAND AROUND VLV STEM HAS BAD AIR LEAK. |
| E12 | 980135707 | 2E12-F095 | FUEL POOL EMER MU SPLY PRESS TAP DWNST STOP | STEM THRUST BEARING RETAINER NUT HAS LOOSENED AND BACKED OUT |
| E12 | 990009996 | 2E12-F330A | A RHR SERVICE WTR PMP SUCT STOP | PACKING GLAND FOR THE 2E12-F330A PAINTED BROWN/PACKING LEAK |
| E12 | 990044147 | 2E12-F445 | VALVE, ADDED PER DCP 9600198 DCN 000948M00 | DURING LOS-RH-Q1 IT WAS DISCOVERED THAT THIS VALVE LEAKS BY |
| E12 | 990044289 | 2E12-N010CA | RHR FLOW 2C PRESS DIFF | INSTALL NEW SOR. |
| E12 | 990061797 | 2E12-R602A | RHR HEAT EXCH 2A SERVICE WATER FLOW | GAUES READS HIGH PLEASE CALIBRATE |
| E12 | 990066524 | 2E12-N016A | RHR PUMP 2A DISCH PRESSURE | RELAY 2B21C-K009A IS ENERGIZED AND SHOULD NOT BE. |
| E12 | 990103676 | 2E12-N019B | RHR PUMP 2B DISCH PRESSURE | SWITCH FAILURE/REPAIR OR REPLACE |
| E12 | 990103676 | 2E12-N019B | RHR PUMP 2B DISCH PRESSURE | SWITCH FAILURE/REPAIR OR REPLACE |
| E12 | 990105537 | 2E12-N010AB | RHR FLOW 2A PRESS DIFF | 2H13-P601-C304 CHATTERS/COMES IN LATE, RECAL 2E12-N010AB |
| E12 | 990116477 | 2E12-R601 | RHR HE 2A & 2B INLT OUTLT & SW TEMP | RECORDER NOT ADVANCING. |
| E22 | 990105217 | 2E22-D317B | 2B DG B STARTING AIR STRAINER | AIR STRAINER DRAIN BUSHING/PLUG LEAKS FROM THREADS. |
| E22 | 990107454 | 2E22-S001 | 2B DIESEL GENERATOR | TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| E51 | 990061817 | 2E51-F361 | VALVE, HYDRAULIC GOVERNOR RI TURB | RCIC TURBINE GOVERNOR VALVE NEEDS INSPECTION/REPAIR |
| E51 | 990090206 | 2E51-F086 | VALVE, RI VAC BRKR ISOL VLV | TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| E51 | 990130093 | 2E51-F086 | ACTUATOR, RI VAC BRKR ISOL VLV | ADJUST CLOSED LIMIT SWITCH AND VOTES TEST |
| FC | 960045732 | 2FC047A | FUEL POOL EMER MU PMP 2A DSCH TO FUEL POOL HOSE CONN STOP | BLIND FLANGE AND GASKET DEGRADED - RUSTED AND FLAKING OFF |
| FC | 960069044 | 2FC03PA | PUMP, FUEL POOL EMERG M/U | PUMP VIBRATIONS TRENDING UPWARD. |
| LL | 980081101 | 2LL140E | ELBP | ELBP 2-40 NEEDS CAGE INSTALLED, REQUIRED BY APP. R |
| PC | 990067978 | 2PC001A | PRI CNMT VAC BKR 2A | DIV 1 OPEN LIGHT DID NOT LIGHT DURING VALVE CYCLING. |
| VD | 990080963 | 2TCU-VD003 | TEMP | CONTROLLER FAILED - INDICATES DOWNSCALE, DOES NOT CONTROL |
| VG | 980131687 | 2VG007B | SBGT FILT DELUGE VLV SOL PILOT VLV MAN OPERATOR KNOB | DISASSEMBLE AND INSPECT VALVES ASSOCIATED WITH 2VG007B |
| VX | 990116467 | 2VX08C | MOTOR, FAN MS SET ROOM 1 BATT ROOM EXH | REPLACE BOTH BEARINGS, HPI FOR BEARING CAT # IDENTIFICATION |
| VY | 970036128 | 2TS-VY004 | LPCS PP CUBE TEMP CONT | REPAIR NICKED WIRE ON N.O. CONTACT |
| VY | 990096761 | 2TIC-VY024 | RHR WS PP C/D TEMP CONT MOD DMPR | ALARMING AT 84 F/SHOULD BE AT 125 F |

ATTACHMENT B

UNIT SHUTDOWNS

**ATTACHMENT B
II.B UNIT SHUTDOWNS
(UNIT 1)**

| | | | | | |
|-------------------|----------|---------------------------------|------|--------------|-------------------|
| Date: (YYMMDD) | 99/09/02 | Generator Off- Line: (hours) | 59.5 | Outage Type: | Forced (L1F36) |
|-------------------|----------|---------------------------------|------|--------------|-------------------|

REASON: Following an operator error associated with a Feedwater Level Control subloop out-of-service, an automatic scram on low reactor level occurred.

CRITICAL PATH ACTIVITIES: Forced outage recovery.

CORRECTIVE ACTIONS (LER# if applicable): See Unit 1 LER 99-003.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

System WR # EPN Equipment Name Defect/Request/Description

| | | | | |
|-----|-----------|------------|---|--|
| C51 | 990090146 | 1C51-K601G | IRM CHANNEL G MONITOR | ERRATIC INDICATION. SPIKING UPSCALE |
| C51 | 990091714 | 1C51-000 | MISCELLANEOUS WORK REQUESTS | DISCRIMINATOR ADJUSTMENTS PER NDD FOR LIP-NR-515. |
| VG | 990091554 | 1VG01S | STANDBY GAS TREATMENT SYSTEM FILTER UNIT | OPEN DOOR AND RELOCKWIRE |

| | | | | | |
|-------------------|----------|---------------------------------|-------|--------------|----------------------|
| Date: (YYMMDD) | 99/10/23 | Generator Off- Line: (hours) | 727.0 | Outage Type: | Refueling (L1R08) |
|-------------------|----------|---------------------------------|-------|--------------|----------------------|

REASON: Refueling Outage

CRITICAL PATH ACTIVITIES: See Appendix A

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

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: See Appendix B

**ATTACHMENT B
II.B UNIT SHUTDOWNS
(UNIT 2)**

| | | | | | |
|-------------------|----------|---------------------------------|---------|--------------|----------------------|
| Date: (YYMMDD) | 99/01/01 | Generator Off- Line: (hours) | 2,411.2 | Outage Type: | Refueling (L2R07) |
|-------------------|----------|---------------------------------|---------|--------------|----------------------|

REASON: Refueling Outage Extension

CRITICAL PATH ACTIVITIES: While in recovery mode, critical path activities were system readiness reviews and system turnover. Once all systems were returned to service, critical path activities were fuel reload, reactor vessel reassembly, and startup testing.

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

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: See Appendix B

| | | | | | |
|-------------------|----------|---------------------------------|------|--------------|-------------------|
| Date: (YYMMDD) | 99/08/21 | Generator Off- Line: (hours) | 55.1 | Outage Type: | Forced (L2F27) |
|-------------------|----------|---------------------------------|------|--------------|-------------------|

REASON: Automatic Scram on low reactor water level due to a feedwater level control system transient.

CRITICAL PATH ACTIVITIES: Feedwater transient investigation and forced outage recovery

CORRECTIVE ACTIONS (LER# if applicable): See Unit 2 LER-99-002.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED:

| System | WR # | EPN | Equipment Name | Defect/Request/Description |
|--------|-----------|------------|---|---|
| B21 | 990087964 | 2B21-F032B | FW CHECK VLV POS IND SWITCH | TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| C51 | 990087963 | 2C51-K601C | IRM CHANNEL C MONITOR | INOP INHIBIT SWITCH DOES NOT WORK PROPERLY. |
| C51 | 990087967 | 2C51-K601G | IRM CHANNEL G MONITOR | INOP SWITCH DOES NOT WORK PROPERLY |
| VX | 990088960 | 2PDS-VX042 | SWGR DIV-1 BATT ROOM 107 FAN 02C D/P | D/P SWITCH FAILED |

**ATTACHMENT B
II.B UNIT SHUTDOWNS
(UNIT 2)**

| | | | | | |
|-------------------|----------|---------------------------------|------|--------------|-------------------|
| Date: (YYMMDD) | 99/11/16 | Generator Off- Line: (hours) | 61.4 | Outage Type: | Forced (L2F28) |
|-------------------|----------|---------------------------------|------|--------------|-------------------|

REASON: Manual Scram initiated in response to EHC system malfunction

CRITICAL PATH ACTIVITIES: EHC malfunction investigation and forced outage recovery

CORRECTIVE ACTIONS (LER# if applicable): See Unit 2 LER 99-003.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

ATTACHMENT C

FORCED DOWNPOWERS

**ATTACHMENT C
II.B UNIT FORCED DOWNPOWERS
(UNIT 1)**

| | | | |
|-------------------|----------|--|------|
| Date: (YYMMDD) | 99/01/05 | Operation at Reduced Power (Hours): | 27.6 |
|-------------------|----------|--|------|

REASON: Power was reduced in response to a Heater Drain system transient which caused a loss of pumped forward drains.

CRITICAL PATH ACTIVITIES: Recovery of isolated Feedwater Heaters.

CORRECTIVE ACTIONS (LER# if applicable): A failed Heater Drain Tank level controller card was replaced.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

| | | | |
|-------------------|----------|--|------|
| Date: (YYMMDD) | 99/01/24 | Operation at Reduced Power (Hours): | 14.2 |
|-------------------|----------|--|------|

REASON: Power was reduced in response to decreasing condenser vacuum during swap of Off Gas trains.

CRITICAL PATH ACTIVITIES: Recovery of condenser vacuum.

CORRECTIVE ACTIONS (LER# if applicable): A bound open manual valve in the Off Gas system was repaired and placed in the closed position.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

**ATTACHMENT C
II.B UNIT FORCED DOWNPOWERS
(UNIT 1)**

| | | | |
|-------------------|----------|--|------|
| Date: (YYMMDD) | 99/07/08 | Operation at Reduced Power (Hours): | 16.3 |
|-------------------|----------|--|------|

REASON: Perform unplanned cycling of condenser waterbox inlet isolation valves for waterbox flushing purposes.

CRITICAL PATH ACTIVITIES: Waterbox isolation valve cycling

CORRECTIVE ACTIONS (LER# if applicable): None.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

| | | | |
|-------------------|----------|--|------|
| Date: (YYMMDD) | 99/11/28 | Operation at Reduced Power (Hours): | 26.8 |
|-------------------|----------|--|------|

REASON: Power was reduced to allow for closure of the #2 Turbine Control Valve (TCV) in order to isolate an EHC fluid leak.

CRITICAL PATH ACTIVITIES: Repair of the EHC fluid leak.

CORRECTIVE ACTIONS (LER# if applicable): EHC leak was isolated.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

**ATTACHMENT C
II.B UNIT FORCED DOWNPOWERS
(UNIT 2)**

| | | | |
|-------------------|----------|--|-----|
| Date: (YYMMDD) | 99/08/21 | Operation at Reduced Power (Hours): | 0.9 |
|-------------------|----------|--|-----|

REASON: Power was reduced to allow repairs to the potential transformer associated with the 'A' phase of the main generator

CRITICAL PATH ACTIVITIES: N/A – Automatic Scram occurred 1 hour into this downpower.

CORRECTIVE ACTIONS (LER# if applicable): Blown fuses in the metering instrumentation for the Unit 2 main generator were replaced during the forced outage which followed this downpower.

RADIOACTIVITY RELEASE/EXPOSURE OVER 10% OF ANNUAL LIMITS: None

SAFETY RELATED CORRECTIVE MAINTENANCE COMPLETED: None

APPENDIX A

REFUELING OUTAGE (L1R08) CRITICAL PATH ACTIVITIES

**APPENDIX A
REFUELING OUTAGE (L1R08)
CRITICAL PATH ACTIVITIES**

TURBINE GENERATOR OFFLINE

NOBLE METALS INJECTION

REACTOR SHUTDOWN TO COOLDOWN

REACTOR DISASSEMBLY

FUEL SIPPING – SUPPRESSED BUNDLES

FUEL SHUFFLE #1 AND FUEL SIPPING

CONTROL ROD BLADE UNCOUPLING

REACTOR VESSEL WORK WINDOW

- Reactor Nozzle Flushing (N6A, N6C, N2D, N2E, N10, N2A, and N6G)
- Jet Pump 9 and 10 Repairs
- Remove IRM Dry Tubes
- IRM and LPRM Replacements
- Vessel Internal Inspections
- Vacuum Guide Tubes
- Control Rod Blade Replacements and Shuffles

FUEL SHUFFLE #2 AND FUEL SIPPING

REACTOR VESSEL REASSEMBLY

DRYWELL FLOOR BYPASS TEST

STARTUP TESTING AND POWER ASCENSION

TURBINE GENERATOR ONLINE

APPENDIX B

SAFETY-RELATED MAINTENANCE REFUELING OUTAGES L1R08 AND L2R07

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 1
REFUELING OUTAGE L1R08

| | | | | |
|-----|-----------|----------------|---|--|
| AP | 970111873 | 1AP04E-4 | LOW PRESSURE CORE SPRAY PUMP | REPLACE LUGS AT TB AA PTS 14, 15 & 16 (TOP) |
| AP | 980011073 | 1AP05E-8 | CIRCULATING WATER PUMP 1B | CUBICLE FLOOR IS UNEVEN; DIFFICULT TO INSERT/REMOVE BREAKER. |
| AP | 990110490 | 1AP07E-001 | ACB 1432 - FEED FROM SAT 1AP91E(TR 142) | PERFORM LEP-AP-06 ON SAT BRKR DUE TO TEST POSITION TESTING |
| AP | 990118450 | 1AP19E-103A | 0 DG COOLING WATER PUMP 0DG01P | 1AP19E-103A FOR 0DG01P FAILED TO CLOSE ON 1VY04C FAN START |
| AP | 960102291 | 1AP19E-103C | AB 480V MCC 1AP72E (135X-2) FEED | RACKING MECH PROBLEM, 135X 1AP19E-103C 135X-2 FEED |
| AP | 990095467 | 1AP20E-204B | RB 480V MCC 1AP76E (135Y-2) FEED | INSPECT BRKR REMOVED BY WR 950106870-01:INSTALL IN 135Y/204B |
| AP | 980032903 | 1AP71E-C2 | 1E12-F009 RHR SDC SUCT HDR INBD ISOL VALVE EMER POWER SUPPLY | PLASTIC BREAKER HANDLE IS CRACKED IN THE AREA OF THE PADLOCK |
| B13 | 960047934 | 1B13-D003 | VESSEL, REACTOR | WEDGES ON JP # 1 & 8 , INSTALLATION. |
| B21 | 960060078 | 1B21-F001 | VALVE, RX HEAD VENT | PT #4 ON 1E31-R612 READS 213 DEGREES, 1B21F001 AND F002 LEAK |
| B21 | 990115654 | 1B21-F013A | SRV A LIFT INDICATING SWITCH ASSEMBLY | GROUND TRACED TO LEADS OF 1B21-F013A LISA ASSMBY. REPAIR |
| B21 | 980135518 | 1B21-F013C-C | SRV C UMF-1 SOLENOID VALVE 'C' | REPLACE CONNECTOR ON "C" SRV |
| B21 | 990111406 | 1B21-F013J-C | SRV J IMF-2 SOLENOID VALVE 'C' | REPLACE C SOLENOID AIR VALVE |
| B21 | 990108668 | 1B21-F013M-C | SRV M IMF-2 SOLENOID VALVE 'C' | CONDUIT TO 'C' SOLENOID IS MISSING SUPPORT BRACKET |
| B21 | 980095087 | 1B21-F013N | C MAIN STEAM LINE SAFETY RELIEF VALVE | REPLACE SRV #1B21-F013N. |
| B21 | 980133196 | 1B21-F013S | B MAIN STEAM LINE SAFETY RELIEF VALVE | REPLACE SRV #1B21-F013S. |
| B21 | 990113631 | 1B21-F016 | VALVE, I/B MSIV DRN HEADER I/B STOP | VALVE FOUND TO HAVE SEAT LEAKAGE DURING LLRT |
| B21 | 990113241 | 1B21-F032A | SOLENOID VALVE | 3 OUT FOUR SOL VALVES CONNECTIONS LEAKING AIR, 4TH AT UNION |
| B21 | 990112504 | 1B21-F032B | FW CHECK VLV POS IND SWITCH | DUAL INDICATION AT 80% OPEN. |
| B21 | 990112504 | 1B21-F032B | FW CHECK VLV POS IND SWITCH | CLOSED INDICATION WITH CONTROL SWITCH IN OPEN |
| B21 | 990113507 | 1B21-F032B | B FEEDWATER LINE OTBD TESTABLE CHECK VALVE | 1B21F032B LEAKING AIR, MAY BE O-RINGS NOT SEATED RIGHT |
| B21 | 980052558 | 1B21-F067D | ACTUATOR, MSL O/B DRAIN VLV | SMB-000 / D/R, R/R, REFURB, EQ INSPECT, SPRINGPACK, VOTES |
| B21 | 980075042 | 1B21-F326C | VALVE, EX FLOW CHK | EXCESS FLOW CHECK VALVE DID NOT RESET |
| B21 | 980075813 | 1B21-F328A | VALVE, EX FLOW CHK | CHECK VALVE DID NOT RESET AUTOMATICALLY |
| B21 | 980075814 | 1B21-F328D | VALVE, EX FLOW CHK | CHECK VALVE DID NOT AUTOMATICALLY RESET |
| B21 | 990083471 | 1B21-F405B | B MSR 2ND STAGE MS SPLY PRESS XMTR 1B21-N545 ROOT VALVE | BAD PACKING LEAK - CAN'T TIGHTEN - BLOWING STEAM |
| B21 | 990083470 | 1B21-F408B | B MSR 1ST STG MS SPLY HDR D/P XMTR 1B21-N558 HI SIDE ROOT VLV | BAD PACKING LEAK - BLOWING STEAM |
| B21 | 960050196 | 1B21-MOVCA6 | VALVE, HP EXH LINES TO MSR 1B DRN | VALVE LEAKING BY SEAT |
| B21 | 970125356 | 1B21-N034G-LSV | RX CORE JET PUMP 4 FLOW LOW SIDE STOP VLV | LOW SIDE STOP VALVE ALLOWS FLOW WHEN CLOSED |
| B21 | 990111442 | 1B21-N048B-SV | DRYWELL HI PRESS ALARM/INTLK SW STOP VLV | STOP VALVE LEAKED BY DURING LIS-NB-116B, REPAIR/REPLACE |
| B21 | 990097538 | 1B21-N401B-VV | REACTOR VESSEL HIGH PRESS ARI AND ATWS TRANSMITTER VENT VLV | DURING LIS-NB-120B FOUND 1B21-N401B WOULD LEAK BY * |
| B21 | 960044363 | 1B21F022B | B MS INBD ISOL | VALVE PACKING LEAKING, REPACK. |
| B33 | 990114238 | 1B33-F019 | VALVE, CONTROL | AIR ACTUATOR DIAPHRAM DAMAGED/NEED REPAIRED/REPLACED |
| B33 | 980050034 | 1B33-F051B | C/U SUCT FROM 1B RECIRC LOOP UPSTRMDRN STOP VLV | VALVE LEAKS BY: REPLACE VALVE |
| B33 | 980050035 | 1B33-F052B | C/U SUCT FROM 1B RECIRC LOOP DWNST DRN STOP VLV | VALVE LEAKS BY: REPLACE VALVE |
| B33 | 980075812 | 1B33-F307B | VALVE, EX FLOW CHK | CHECK VALVE DID NOT RESET AUTOMATICALLY |
| B33 | 980075811 | 1B33-F313A | VALVE, EX FLOW CHK | CHECK VALVE DID NOT RESET AUTOMATICALLY |
| B33 | 980075809 | 1B33-F313D | VALVE, EX FLOW CHK | CHECK VALVE WOULD NOT RESET WITHOUT MANUAL PREPRESSURIZATION |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 1
REFUELING OUTAGE L1R08

| | | | | |
|-----|-----------|----------------|--|--|
| B33 | 990107703 | 1B33-F317B | VALVE, EX FLOW CHK | CHECK VALVE FAILED TO CHECK. DIS-ASSEMBLE AND CLEAN. |
| C11 | 990012997 | 1C11-D0619 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 06-19 | DOUBLE-NOTCHED 48 TO 44 DURING LOS-AA-W1(DRIVE WATER @ 275#) |
| C11 | 990111900 | 1C11-D0623 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 06-23 | WAS INAPPROPRIATELY DE-TORQUED. REPLACE O-RINGS IF REQUIRED |
| C11 | 990001332 | 1C11-D0639 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 06-39 | DOUBLE NOTCHES IN FROM 48 TO 44 WITH NORMAL DRIVE PRESS. |
| C11 | 980089092 | 1C11-D1011 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 10-11 | DOUBLE NOTCH DURING LOS-AA-W1 |
| C11 | 990004085 | 1C11-D1443 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 14-43 | DOUBLE NOTCHED TO POSITION 44 DURING LOS-AA-W1 |
| C11 | 990115981 | 1C11-D1819 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 18-19 | U1 HCU 18-19 ACCUM N2 CHARGING NIPPLE LEAKS AT INST. BLOCK |
| C11 | 990118368 | 1C11-D2643 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 26-43 | P6 BLOCK FITTING & N2 CAP IS LEAKING ON HCU 26-43, REPLACE |
| C11 | 980101916 | 1C11-D3427 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 34-27 | HIGH TEMP ALARM UP (266 DEG). ALARM WAS BYPASSED ON SEPT 23 |
| C11 | 990008339 | 1C11-D3851 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 38-51 | ROD DOUBLE NOTCHED FROM POS 48 TO POS 44 ON LOS-AA-W1 |
| C11 | 990116451 | 1C11-D4619-126 | CRD HCU SCRAM INLET VALVE | VALVE HAS PACKING LEAK. REPAIR PLEASE. |
| C11 | 990004089 | 1C11-D5043 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 50-43 | DOUBLE NOTCHED TO POS 44 DURING LOS-AA-W1 |
| C11 | 990012998 | 1C11-D5051 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 50-51 | DOUBLE-NOTCHED 48 TO 44 DURING LOS-AA-W1(DRIVE WATER @ 270#) |
| C34 | 990108257 | 1C34-N017 | REACTOR WATER LEVEL UPSET RANGE XMTR | LEAKY VENT VALVE |
| C51 | 990080603 | 1C51-K601D | IRM CHANNEL D MONITOR | IRM D FAILED SHIELD TO GRN TEST. BELIEVE UNDER VESSEL PROBL |
| C51 | 990112029 | 1C51-K605GS | AVERAGE PWR RANGE MONITOR CHNL E | APRM E INOP INHIBIT SWITCH ERATTIC. |
| C51 | 990118369 | 1C51-R603A | IRM A, C/APRM A,C CHANNELS | DIGITAL INDICATION FOR IRM "A" DOES NOT AGREE WITH RED PEN. |
| C51 | 990112903 | 1C51-000 | MISCELLANEOUS WORK REQUESTS | REDUCE DIAMETER OF NEW LPRM STRING TO FIT GUIDE TUBE |
| C71 | 990111444 | 1C71-N002B-SV | PRIMARY CNMT HI PRESS ALARM/INTLK SW STOP VLV | STOP VALVE LEAKED BY DURING LIS-NB-116B, REPAIR/REPLACE |
| C71 | 990118177 | 1C71A-K010C | RELAY, H13P609, TSV-3 NOT OPEN SCRAM | TROUBLESHOOT AND REPAIR PER NSP-WC-3010 |
| DC | 990107919 | 1DC06E | DIV I 250VDC MCC 121Y | T-SHOOT AND REPAIR PER NSP-WC-3010 AND SYS ENG DIRECTION |
| DC | 990115039 | 1DC06E-7C-C | RELAY, CONT 121Y 7C RI VAC PP DISCH VLV | 1DC06E-7C: REPLACE 74 RELAY |
| DC | 980069243 | 1DC14E | ASSY_-_BATTERY, 125 VDC DIV-2 | CELL 35 HAS A POST SEAL NUT THAT IS CRACKED. |
| DC | 990115654 | 1ER-DC015 | RECORDER, GROUND DETECTOR 111X | NEGATIVE 20V GROUND |
| D18 | 990118173 | 1D18-K615D | FUEL POOL VENTILATIOEXHAUST | TRIP CONTACTS QUESTIONABLE / OPEN |
| D18 | 990108179 | 1D18-K751C | CONTROL ROOM HVAC AIR INTAKE | MONITOR NOW DOWNSCALE |
| E12 | 990111761 | 1E12-F008 | VALVE, RHR SUCT CLNG O/B ISOL | VALVE FAILED LLRT DUE TO EXCESSIVE LEAKAGE PAST SEAT |
| E12 | 970102028 | 1E12-F024A | ACTUATOR, RHR TEST RETURN VLV | 1E12-F024A / ADJUST, REPAIR, REPLACE MDPI |
| E12 | 990109056 | 1E12-F042C | VALVE, RHR INJECT | EXCESSIVE SEAT LEAKAGE DURING LLRT, REPAIR/ELIMINATE LEAKAGE |
| E12 | 990050495 | 1E12-F072A | A RHR PUMP DSCH DRAIN VALVE | VALVE LEAKS BY PRESURIZING DOWNSTREAM PIPING |
| E12 | 980068348 | 1E12-F074B | VALVE, RHR HX VENT VLV | PACKING LEAK |
| E12 | 990028588 | 1E12-F098A | A RHR PUMP DSCH VALVE | PACKING LEAK 1-2 DPM |
| E12 | 970098034 | 1E12-F339A | A RHR HEAT EXCH SERVICE WTR HP VENT STOP | WATER LEAKS PAST THE VALVE SEAT WHEN IT IS CLOSED |
| E12 | 990108708 | 1E12-F360B | RHR SDC SUCT HDR D/P SW 1E31-N012BA/BB LO SIDE EXCESS FLOW CK VL | DISASSEMBLE, AND CLEAN EXCESS FLOW CHECK VALVE |
| E12 | 990069839 | 1E12-000 | MISC WORK REQS - SAF REL, CODE REL PKG REQD | BACKFILL C RHR INSTS. IN L1R08 |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 1
REFUELING OUTAGE L1R08

| | | | | |
|-----|-----------|----------------|---|--|
| E12 | 950117307 | 1E12D300A | STRNR RHR SERVICE WTR | 1E12D300A - INSPECT STRAINER, COVER IS LEAKING |
| E31 | 980107374 | 1E31-N008A-LSV | A MS LINE HI FLOW LOW SIDE STOP VLV | 1E31-N008A 'A' MS LINE HI FLOW LOW SIDE STOP VLV LEAKS BY |
| E31 | 980135561 | 1E31A-K003D | RELAY, CONTROL | REPLACE DEFECTIVE RELAY DISCOVERED DURING LES-LD-101 |
| E51 | 990118452 | 1E51-C003 | RCIC WATER LEG PUMP | PUMP CASING IS LEAKING, REPAIR |
| E51 | 970129597 | 1E51-D303 | SPARGER, FAB ASSY DTLS PER M844-5 | PERFORM CHK VLV INSPECT 1E51-F040 & REMOVE HOSE FROM SPARGER |
| E51 | 990116142 | 1E51-F063 | VALVE, RI STM LINE I/B ISOL | MANUALLY BACKSEAT OPEN PER MOV GROUP TORQUE SHEET |
| E51 | 990083082 | 1E51-F064 | VALVE, RHR HX O/B ISOL | DETERM AND ROLL BACK CABLE |
| E51 | 990111504 | 1E51-F065 | POS IND SWITCH CLOSED | VALVE CONTROL ROOM INDICATION WAS INTERMITTENT |
| E51 | 990107769 | 1E51-F066 | VALVE, NOSLAM CHECK | SMALL AIR LEAK AT NIPPLE CONNECTION INTO SOLENOID VALVE |
| E51 | 960043268 | 1E51C002 | TURBINE, RI | REPLACE EGR S.I. 247A18 (PIF 96-1139) |
| FC | 990116482 | 1FC11MB | B FUEL POOL FILTER/DEMIN OUTLET STRAINER | HIGH DIFFERENTIAL PRESSURE ALARM RECIEVED ON STRAINER |
| F21 | 990110090 | 1F21-E003 | BRIDGE, REFUEL | MAST IS BINDING, REPLACE MAST |
| H13 | 990114469 | 1H13-P623 | OUTBOARD VALVE RELAY VERTICAL BOARD | REPLACE RELAY 1B21A-KX203 PER LEP-GM-163 |
| H22 | 990118577 | 1H22-P010 | JET PUMP INSTRUMENT PANEL A | VERIFYING IF DRAIN VALVES FOR 1B21-R005 ARE LEAKING BY. |
| MS | 970136693 | 1MS04-1017C | 1MS04BK-12.00-SUBSYS- 1MS02: CONSTANT | LOOKS LIKE ONE OF THE SUPPORT BOLTS IS MISSING JAMB NUT |
| MS | 990111359 | 1MS04-1245S | 1MS04BR-12.00-SUBSYS- 1MS03: SNUBBER | REMOVED WRONG SNUBBER / REINSTALL |
| NB | 990109838 | 1NB13-1001S | 1NB13A-04.00-SUBSYS- 1NB01: SNUBBER | 1NB13-1001S SHOWED DEGRADED WHEN TESTING. REPLACE |
| PC | 970107091 | 1PC000 | MISCELLANEOUS WORK REQUESTS | COATING IS BLISTERED AND PEELING IN LARGE SECTIONS |
| PC | 990114174 | 1PC001A-ZS | P/C VAC BREAKER VLV POS IND SWITCH | DIV 2 NO DUAL IND WHILE CLOSING & SLOW TO SHOW FULL CLOSED |
| PC | 990113655 | 1PC002A | VAC BKR 1PC001A DW ISOL STOP | 1PC002A HAS EXCESSIVE SEAT LEAKAGE/REPAIR TO ELIMINATE LEAK |
| RI | 990013946 | 1RI40A | PIPE, | REMOVE APPROX 1" OF PIPE TO ELIMINATE STRAIN ON 1E12-F036B |
| VP | 980050007 | 1VP053A | A DW COOLER OUTLET OTBD ISOL VALVE | VALVE PACKING PROTRUDING OUT OF FOLLOWER.CANNOT ADJUST |
| VP | 980050005 | 1VP063B | VALVE, GATE | VALVE PACKING FOLLOWER TO BODY HAS MATERIAL BUILDUP |
| VP | 990114229 | 1VP113B | VALVE, BUTTERFLY | VALVE FAILED LLRT, EXCESSIVE SEAT LEAKAGE, REPAIR AS REQD |
| VQ | 950049268 | 1VQ030 | VALVE, D/W VNT/PRG FROM RX | REPAIR INBOARD PIPE FLANGE FACE. REBUILD VALVE. |
| VQ | 990012561 | 1VQ33B | PIPE, | REPLACE PIPE NIPPLE OFF THE 1VQ067 VALVE |
| VT | 980065916 | 1VT79YB | DAMPER, VT CHECK | ADJUST DAMPER VALVE PLATE SPEED CONTROL |
| VT | 980065915 | 1VT79YC | DAMPER, VT CHECK | ADJUST DAMPER VALVE PLATE SPEED CONTROL |
| VX | 990109274 | 1TZ-VX019 | ACTUATOR, VLV | 1TZ-VX019: 1VX19YA DAMPER ACT.SPRING BROKEN, REPLACE ACT. |
| WR | 960026213 | 1WR158 | DW EQUIP DRN SUMP HEAT EXCH RBCCW VENT STOP | REQUIRES PIPE WRENCH TO OPERATE |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
REFUELING OUTAGE L2R07

| | | | | |
|----|-----------|-------------|--|--|
| AP | 970010885 | 2AP000 | MISCELLANEOUS WORK REQUESTS | ELECTRICAL CONDUIT PULLING TEE COVER MISSING |
| AP | 960114025 | 2AP02E | 6.9 KV SWGR 252 | REPAIR BENT/BROKEN LOUVERS AND STRAIGHTEN ONE DOOR AT 2AP02E |
| AP | 980011071 | 2AP04E-01 | RECIRC MG SET DRIVE MOTOR 2A BREAKER 1A | CLEAN AND LUBRICATE TSC SWITCH - A RR 1A BRKR |
| AP | 980011071 | 2AP04E-1 | TIE BREAKER TO UNIT 1 SWGR 141Y | CLEAN AND LUBRICATE TSC SWITCH - TIE TO U1 141Y |
| AP | 980011071 | 2AP04E-12 | SYSTEM AUXILIARY TRANSFORMER MAIN FEED | CLEAN AND LUBRICATE TSC SWITCH - SAT FD TO 241Y |
| AP | 980011071 | 2AP04E-2 | 480V SWGR 233 | CLEAN AND LUBRICATE TSC SWITCH - FD TO SWGR 233 |
| AP | 980011071 | 2AP04E-3 | BUS TIE BREAKER | CLEAN AND LUBRICATE TSC SWITCH - 241Y TIE TO 241X |
| AP | 980011071 | 2AP04E-4 | 480V SWGR 235X & 235Y | CLEAN AND LUBRICATE TSC SWITCH - FD TO 235X/Y |
| AP | 980011071 | 2AP04E-5 | PRIMARY CONTAINMENT WATER CHILLER 2A | CLEAN AND LUBRICATE TSC SWITCH - FD TO 2A VP CHILLER |
| AP | 980011071 | 2AP04E-6 | CONTROL ROD DRIVE FEED PUMP 2A | CLEAN AND LUBRICATE TSC SWITCH - FD TO 2A CRD PP |
| AP | 980011071 | 2AP04E-7 | RESIDUAL HEAT REMOVAL PUMP 2A | CLEAN AND LUBRICATE TSC SWITCH - FD TO 2A RHR PP |
| AP | 980011071 | 2AP04E-8 | SUPP POOL CLEANUP & TRANSFER PUMP 2B | CLEAN AND LUBRICATE TSC SWITCH - FD TO 2B SF PP |
| AP | 970050800 | 2AP06E | INSTR MEDIUM VOLTAGE SWITCHGEAR | UNIT TIE BUS DUCT FOR 142Y/242Y MISSING VENT SCREENS(SMALL |
| AP | 980001875 | 2AP06E-01 | B REACTOR RECIRC PUMP LFMG SET 2B33-S001B DRIVE MOTOR BREAKER 1B | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-11 | DIESEL GENERATOR 2A MAIN FEED | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-13 | SYSTEM AUXILIARY TRANSFORMER MAIN FEED | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-2 | TIE BREAKER TO UNIT 1 SWGR 142Y | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-3 | 480V SWGR 234X & 234Y | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-4 | BUS TIE BREAKER | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-5 | 480V SWGR 236X & 236Y | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-6 | PRIMARY CONTAINMENT WATER CHILLER 2B | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-7 | CONTROL ROD DRIVE FEED PUMP 2B | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-8 | RESIDUAL HEAT REMOVAL PUMP 2C | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 980001875 | 2AP06E-9 | SUPPR POOL CLEANUP & TRANSFER PUMP 2A | CLEAN AND LUBRICATE TSC SWITCH LINKAGE FOR 242Y BKR CUBICLES |
| AP | 960105074 | 2AP09E-2 | RX RECIRC PMP 2B33-C001B BKR 4B | REPLACE LOCAL C/S FOR 2B33-C001PB_PMP BKR 4B @_SWGR 252-1/C2 |
| AP | 980092157 | 2AP09E-2 | RX RECIRC PMP 2B33-C001B BKR 4B | RACKING DOOR PUSHED IN/REPAIR |
| AP | 990026477 | 2AP20E-202A | RWCU RECIRC PMP 2A 2G33-C001A | NEED TO REPLACE 74 RELAY FOR 2G33-C001A |
| AP | 990026853 | 2AP20E-203C | 2B RHR SERVICE WTR PMP 2E12-C300B | RIGHT HAND SIDE OF BREAKER DOES NOT MOVE WHEN RACKED. |
| AP | 970100029 | 2AP21E-302C | DG 2A COOLING WTR PMP 2DG01P | RACKING MECHANISM SLIGHTLY BENT 2DG01P |
| AP | 970050943 | 2AP22E-401A | H2 RECOMBINER POWER CABINET | TRIP LEVER HAS ZERO CLEARANCE. WHEN BKR IS CLOSED CLEARANCE |
| AP | 990005597 | 2AP75E-A1 | REACTOR RECIRC PUMP SUCTION VALVE | SMB 2 / TROUBLESHOOT / REPAIR. VALVE STOPS IN OPEN DIRECTION |
| AP | 990029884 | 2AP76E-C4 | 2E51-C003 RCIC WTR LEG PMP | COMPUTER POINT D092 IN ALARM (NO POWER) WHILE PUMP IS ON |
| AP | 980101407 | 2AP78E-D4 | RX PROT MG SET RM 1 BATT RM EXH FAN | BREAKER 2AP78E-D4 FAILED PMT IN TASK 01/ TROUBLESHOOT! |
| AP | 990014367 | 2AP79E-7C | HI PRESS CORE SPRAY PUMP DISCH VALVE | REPAIR/REPLACE BREAKER HANDLE |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
REFUELING OUTAGE L2R07

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| AP | 990021910 | 2AP80E-A3-F | DG 2A SPACE HEATER | CONTACTOR AND FUSE FOUND ___ BAD NEED TO REPLACE BOTH |
| AP | 980133146 | 2AP80E-D5 | MAIN STEAM LINE DRAIN ISOLATION VALVE | REPLACE TERM BLOCK |
| AP | 990023747 | 2AP82E-F3 | 2A DG FUEL OIL TRANSFER PUMP | TROUBLESHOOT 2D001P @ MCC 236Y-1/F3 TRIPPING |
| AP | 960097388 | 2AP83E-B3 | SBLC STRG TNK OTLT VLV B | CLEAN CONTACTS / REPLACE DEFECTIVE 74 DEVICE FROM CUB. |
| B21 | 990025319 | 2B21-F013G-A | SRV G IMF-2 SOLENOID VALVE 'A' | REPLACE SRV PILOT SOLENOID VALVE |
| B21 | 990017219 | 2B21-F013N-A | SRV N IMF-2 SOLENOID VALVE 'A' | BAD CABLE WRAP TO THE SRV SOLENOID, REWRAP |
| B21 | 990019600 | 2B21-F019 | VALVE, O/B MSL DRN VLV | PACKING LEAK NOTED DURING LLRT/REPAIR AS REQUIRED |
| B21 | 990026651 | 2B21-F022C | VALVE, I/B MSL ISOLATION | PAINT / TOUCH-UP EQUIPMENT AS NECESSARY |
| B21 | 990026867 | 2B21-F022C | VALVE, SOLENOID, I/B MSIV | THE #2 SOLENOID ON MSIV C IS LEAKING AIR ON THE INLET |
| B21 | 990026868 | 2B21-F022D | D MS INBD ISOL VLV | MISSING SCREW IN THE SOLENOID JUCTION BOX |
| B21 | 950042834 | 2B21-F032A | VALVE, FEEDWATER CHECK | ADJUST/REPACK VALVE, FAILED PMT, PIF:L1999-01559 |
| B21 | 950042834 | 2B21-F032A | VALVE, FEEDWATER CHECK | PIF #L1999-01791 FAILED PMT - ADJUST PACKING |
| B21 | 950107712 | 2B21-F032A | SOLENOID VALVE | REPAIR LEAKS ON PIPING & REPLACE DEFECTIVE SOLENOID VALVE |
| B21 | 950107712 | 2B21-F032A | SOLENOID VALVE | FAILED PMT. REPAIR AIR LEAKS AND REPLACE SOLENOID VALVE(S). |
| B21 | 990019567 | 2B21-F032A | LIMIT SWITCH | REPLACE LIMIT SWITCH |
| B21 | 960092277 | 2B21-F032B | VALVE, FEEDWATER CHECK | PIF #L1999-01791 FAILED PMT - ADJUST PACKING |
| B21 | 960101253 | 2B21-F032B | SOLENOID VALVE | *2B21F032B * REPAIR LEAKS ON PIPING, FOUND BY OPERATIONS |
| B21 | 960101253 | 2B21-F032B | SOLENOID VALVE | FAILED PMT. REPAIR AIR LEAKS/REPLACE SOLENOID(S) AS REQUIRED |
| B21 | 990019567 | 2B21-F032B | LIMIT SWITCH | REPLACE LIMIT SWITCHES FOR 2B21-F032B W/EQ SWITCHES |
| B21 | 990025319 | 2B21-F036G | VALVE, NOSLAM CHECK | CHECK VALVE LEAKS BY. FOUND DURING LTS-500-19 ON 3/8/99. |
| B21 | 990025321 | 2B21-F036K | VALVE, NOSLAM CHECK | CHECK VALVE LEAKS BY. FOUND DURING LTS-500-19 ON 3/8/99. |
| B21 | 990025320 | 2B21-F036P | VALVE, NOSLAM CHECK | CHECK VALVE LEAKS BY. FOUND DURING LTS-500-19 ON 3/8/99. |
| B21 | 960079798 | 2B21-F065A | VALVE, FW ISOLATION | DISASSEMBLE/ASSEMBLE TO SUPPORT BONNET REPAIRS ON 2B21-F065A |
| B21 | 980098236 | 2B21-F065A | VALVE, FW ISOLATION | 2B21-F065A HAS A PACKING LEAK. |
| B21 | 990023671 | 2B21-F365 | VALVE, EX FLOW CHK | VALVE CHECKS BUT DOES NOT REOPEN ALL OF THE WAY |
| B21 | 960087621 | 2B21-F508A | RWCU RTN TO A FW LINE MAN STOP | RETORQUE PACKING TO STOP LEAK |
| B21 | 990029755 | 2B21-F529A | VALVE, CHECK | CHECK VALVE HAS EXCESSIVE SEAT LEAKAGE |
| B21 | 990029756 | 2B21-F529B | VALVE, CHECK | CHECK VALVE HAS EXCESSIVE SEAT LEAKAGE |
| B21 | 980128950 | 2B21-K100CX | RELAY, H13P609, | DURING LIS-MS-207A, THIS RELAY DIDN'T CYCLE EVERY TIME. |
| B21 | 990024638 | 2B21-N034A | JET PUMP 1 A FLOW XMITTER | REPLACE INSTRUMENTS AS NEEDED TO SUPPORT LIP-RR-604 |
| B21 | 990034484 | 2B21-N051A | RX PRESS | INDICATION ON 2B21-R884A IS READING DOWNSCALE DURING |
| B21 | 970004077 | 2B21-N400A | REACTOR VESSEL LEVEL (ARI/RPT) | COMPUTER POINT C558 INDICATES "LOW" WHEN RX LEVEL IS HIGH. |
| B21 | 990016763 | 2B21-N413A | LPCS/RHR A INJ VLVS REACTOR PRESS INTLK | STOP VALVE PLUGGED/REPLACE STOP VALVE |
| B21 | 970108613 | 2B21-N707A | MASTER TRIP UNIT | GAGE SCALE IN UNIT 2 2B21-N707A IS DIFFERENT THAN UNIT 1 |
| B21 | 970108614 | 2B21-N707B | REACTOR VESSEL WATER LEVEL 1 | GAGE SCALE IN UNIT 2 2B21-N707B IS DIFFERENT THAN UNIT 1 |
| B21 | 970108615 | 2B21-N707C | REACTOR VESSEL WATER LEVEL 1 | GAGE SCALE IN UNIT 2 2B21-N707C IS DIFFERENT THAN UNIT 1 |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
REFUELING OUTAGE L2R07

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| B21 | 970108616 | 2B21-N707D | REACTOR VESSEL WATER LEVEL 1 | GAGE SCALE IN UNIT 2 2B21-N707D IS DIFFERENT THAN UNIT 1 |
| B21 | 990022529 | 2B21-N709A | REACTOR VESSEL WATER LEVEL 8 | INDICATES DOWNSCALE, SHOULD BE UPSCALE |
| B21 | 980114370 | 2B21-R004A | RX VESSEL PRESSURE | GAGE HAS EXCESSIVE DEAD BAND/REPLACE INDICATOR |
| B21 | 990018099 | 2B21-R510 | PNL H22-P009 EXCESS FLOW ROTOMETER | FLOW INDICATOR, DOESN'T INDICATE FLOW AS REQUIRED |
| B21 | 960092806 | 2B21F010B | VALVE, TILTING DISC CHECK | CHECK VALVE FAILED LLRT / REPAIR AS NECESSARY |
| B21 | 960112574 | 2B21F032B | B FW INLT TESTABLE CK VLV | NO OPEN OR CLOSED INDICATION EXCEPT <85% OPEN LIGHT |
| B21 | 990017214 | 2B21H-K004C | RELAY, H13P609, MSL LO PRESS ISOL | REPLACE HFA RELAY 2B21H-K004C AT PANEL 2H13-P609 |
| B21 | 980041302 | 2B21H-K066X10 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X10 2PA14J |
| B21 | 980041302 | 2B21H-K066X11 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X11 2PA14J |
| B21 | 980041302 | 2B21H-K066X12 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X12 2PA14J |
| B21 | 980041246 | 2B21H-K066X17 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X17 IN 2PA14J |
| B21 | 980041302 | 2B21H-K066X3 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X3 2PA14J |
| B21 | 980041302 | 2B21H-K066X4 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X4 IN 2PA14J |
| B21 | 980041302 | 2B21H-K066X5 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X5 2PA14J |
| B21 | 980041302 | 2B21H-K066X6 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X6 2PA14J |
| B21 | 980041302 | 2B21H-K066X7 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X7 2PA14J |
| B21 | 980041302 | 2B21H-K066X8 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X8 2PA14J |
| B21 | 980041302 | 2B21H-K066X9 | RELAY, CONTROL | REPLACE RELAY 2B21H-K066X9 2PA14J |
| B21 | 960071880 | 2FT-B21N034G | JET PUMP 4 G FLOW XMITTER | INSTRUMENT STOP VALVE LEAKS BY REPLACE STOP VALVE |
| B21 | 960070526 | 2PS-B21N039V | RX PRESSURE INTLK FOR SRV 2B21-F013V | REPIPE INSTRUMENT VENT VALVE, VALVE IS POORLY POSITIONED |
| B21 | 960088431 | 2PT-B21N401B | REACTOR VESSEL LEVEL (ARI/RPT) | 2B21-N401B FOUND STOP VLV LEAKING |
| B33 | 970019803 | 2B33-C001B | PUMP, RX RECIRC | REPLACE PUMP SEAL |
| B33 | 990004095 | 2B33-F060A | ASSY_-_VALVE, RR FLOW CONTROL | ACTUATOR IS LEAKING DURING OIL FLUSH, REPAIR |
| B33 | 980093622 | 2B33-F067A | VALVE, RR PUMP DISCHARGE | VALVE PACKING LEAK/ADJUST OR REPLACE PACKING |
| B33 | 950091721 | 2B33-F345A | DIV I OUTBOARD HPU ISOLATION VALVE, GLOBE | FAILED PMT ON TASK 01 |
| B33 | 960095567 | 2B33F066A | 2A RX RECIRC PMP FLOW CONT VLV BELOW SEAT DRN DWNST STOP VLV | DRAIN LINE IS PLUGGED, WOULD NOT DRAIN. |
| B33 | 960002673 | 2B33F307B | VALVE, EX FLOW CHK | CRWR LOST POSITION INDICATION._(2B33F307B EXCESS FLOW CHECK) |
| B33 | 960088435 | 2B33F315B | VALVE, EX FLOW CHK | VALVE DOES NOT RESET ON ITS OWN, CLEAN AND INSPECT |
| CM | 990024549 | 2CM004 | VLV 3/4 IN EXCESS FLOW CK | LOW PRESSURE EXCESS FLOW CHECK VALVE FAILED TO RESET |
| CM | 990024050 | 2CM012 | VLV 3/4 IN EXCESS FLOW CK | CHECK VALVE STICKS AND WILL NOT OPEN FULLY/ REBUILD |
| CM | 950014546 | 2CM019B | DW HUMIDITY MONITOR "B" OTLT UPSTRM ISOL | EXCESSIVE LEAKAGE DURING LLRT LTS-100-31 |
| CM | 990009563 | 2CM019B | DW HUMIDITY MONITOR "B" OTLT UPSTRM ISOL | VALVE 2CM019B FAILED POSITION INDICATION TEST |
| CM | 990026054 | 2CM020A | DW HUMIDITY MONITOR "A" OTLT DWNST ISOL | VALVE HAS NO POSITION INDICATION |
| CM | 950014465 | 2CM020B | DW HUMIDITY MONITOR "B" OTLT DWNST ISOL | VALVE 2CM020B FAILED POSITION INDICATION TEST |
| CM | 990026199 | 2CM025A | PNL 2PL76J SMPL OTLT STOP | VALVE LIMIT SWITCHES NEED ADJUSTMENT & CLOSED LAMP BLOWS |
| CM | 990024551 | 2CM102 | EXCESS FLOW CK VLV DW PRESS LVL | DURING TESTING VALVE FAILED TO REOPEN ALL OF THE WAY |
| CM | 990026248 | 2HS-CM004 | TRITIUM GRAB SAMPLE STATION INBD ISOL VLVS | HANDSWITCH (SBM) STICKING WHEN GOING TO THE OPEN POSITION |

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REFUELING OUTAGE L2R07

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| CM | 990036182 | 2LI-CM030 | S-POOL WTR LVL | FAILED CHANNEL CHECK PER LOS-RX-M1.RECALIBRATE. |
| CM | 970136547 | 2PDS-CM094 | POST LOCA A H2 SAMPLE D/P | REPLACE SOR SWITCH 2PDS-CM094 |
| CM | 970136547 | 2PDS-CM095 | POST LOCA A O2 SAMPLE D/P | REPLACE SOR SWITCH 2PDS-CM095 |
| CM | 990016769 | 2PI-CM027 | D/W PRESS NARROW RANGE | REPAIR/REPLACE METER |
| CM | 990021985 | 2PT-CM032 | S-POOL PRESS XMITTER | L128 COM. POINT INDICATES HRL, PRESSURE IS NORMAL CURRENTLY |
| CM | 990036194 | 2PT-CM032 | S-POOL PRESS XMITTER | INDICATES NEGATIVE PRESSURE |
| CM | 990018110 | 2PT-CM055 | S-POOL PRESS XMITTER | 2PT-CM055 VENT CONNECTION THREADS ARE BAD. |
| CM | 960068534 | 2TE-CM057M | SUPP POOL WTR SRV# F013M&K (AZ1M 149) | ERRATIC INDICATION |
| CM | 990032277 | 2TE-CM057M | SUPP POOL WTR SRV# F013M&K (AZ1M 149) | 2TE-CM057M,ELEMENT #2 READS 6 DEG LOW,W/ 10 DEG OF ADJACENT |
| CM | 990011337 | 2TR-CM037B | DELETE, USE 2TR-CM037B, COMPONENT TYPE RP | CH.3 PEN DOES NOT MOVE SERVO BOARD |
| CM | 980072678 | 2TR-CM038A | SUPP POOL WATER BULK TEMPERATURE | PEN READS DOWNSCALE AND REPLACE DIGITAL DISPLAY |
| C11 | 990024729 | 2C11-D001078 | CONTROL UNIT CRD HYDRAULIC 30-11 | NO 06 POSITION |
| C11 | 950050251 | 2C11-D001115 | CONTROL UNIT CRD HYDRAULIC 58-43 | THE ACCUMULATOR BALL CHECK LEAKED BY DURING LTS-1100-17 |
| C11 | 990024743 | 2C11-D001127 | CONTROL UNIT CRD HYDRAULIC 42-39 | NO 06 POSITION |
| C11 | 990024735 | 2C11-D001136 | CONTROL UNIT CRD HYDRAULIC 38-35 | NO 06 POSITION |
| C11 | 990014803 | 2C11-D0219 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 02-19 | LOST POSITION INDICATION |
| C11 | 990026172 | 2C11-D0219 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 02-19 | INSTRUMENT BLOCK CHARGING CONNECTION LEAKING |
| C11 | 990018175 | 2C11-D0239-126 | CRD HCU SCRAM INLET VALVE | PACKING LEAK, APPROXIMATELY 10 DROPS PER MINUTE |
| C11 | 990035348 | 2C11-D0627-120 | CRD HCU WITHDRAWAL EXHAUST WTR DIRECTIONAL CONTROL VALVE | THE DCV STICKS OPEN AFTER SIGNAL CAUSING DOUBLE NOTCHING |
| C11 | 990036599 | 2C11-D0627-123 | CRD HCU INSERT DRIVE WATER DIRECTIONAL CONTROL VALVE | CONTROL ROD WAS WITHDRAWN TO POSITION 02 WITH NO PROBLEMS. |
| C11 | 990013468 | 2C11-D1035-120 | CRD HCU WITHDRAWAL EXHAUST WTR DIRECTIONAL CONTROL VALVE | 120 DIRECTIONAL CONTROL VALVE IS LEAKING WATER |
| C11 | 990013467 | 2C11-D1415-120 | CRD HCU WITHDRAWAL EXHAUST WTR DIRECTIONAL CONTROL VALVE | THE COIL AND SHELL ARE NOT INSTALLED CORRECTLY |
| C11 | 990028590 | 2C11-D1855 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 18-55 | 2C11-D1855/ HCU WILL NOT HOLD N2 CHARGE. |
| C11 | 990026955 | 2C11-D2215-107 | CRD HCU ACCUMULATOR WATER SIDE DRAIN VALVE | REPAIR SEAT LEAKAGE ON 2C11-D2215-107. |
| C11 | 970136092 | 2C11-D3003-120 | CRD HCU WITHDRAWAL EXHAUST WTR DIRECTIONAL CONTROL VALVE | WATER LEAKING FROM FITTING, REPAIR /REPLACE |
| C11 | 970136092 | 2C11-D3003-120 | CRD HCU WITHDRAWAL EXHAUST WTR DIRECTIONAL CONTROL VALVE | SOLENOID VALVE IS LEAKING AROUND CORE ASSEMBLY |
| C11 | 970134918 | 2C11-D3003-121 | CRD HCU INSERT EXHAUST WATER DIRECTIONAL CONTROL VALVE | SOLENOID COVER IS INSTALLED UPSIDE DOWN |
| C11 | 990031613 | 2C11-D3035 | CONTROL ROD DRIVE HYDRAULIC CONTROL UNIT 30-35 | HCU WILL NOT HOLD N2 CHARGE, N2 LOW PRESSURE ALARMS |
| C11 | 990022194 | 2C11-D4647-126 | CRD HCU SCRAM INLET VALVE | PACKING LEAK. 10 DROPS/MINUTE |
| C11 | 990001787 | 2C11-D4655-127 | CRD HCU SCRAM OUTLET VALVE | PACKING LEAK |
| C11 | 990001786 | 2C11-D5447-127 | CRD HCU SCRAM OUTLET VALVE | PACKING LEAK |
| C11 | 970134915 | 2C11-D5823-120 | CRD HCU WITHDRAWAL EXHAUST WTR DIRECTIONAL CONTROL VALVE | LEAKING WATER FROM FITTING,REPAIR/REPLACE |
| C11 | 990022011 | 2C11-D5843-111 | CRD HCU ACCUMULATOR INSTRUMENT BLOCK VALVE | CHARGING FITTING IS BAD AND WILL NOT SEAL TO CHARGING HOSE |
| C11 | 980062694 | 2C11-F380 | VALVE, AIR SCRAM DISH VOL VENT | REMOVE UNAPPROVED ANTI-ROTATION DEVICE. |
| C11 | 970081532 | 2C11-F381 | POS IND SWITCH | LIMIT SWITCH DID NOT PERFORM AS REQUIRED, NEEDS ADJUSTMENT |
| C11 | 970081532 | 2C11-F381 | POS IND SWITCH | 2C11-F381: FAILED PMT REPAIR/CORRECT LIMITS AS REQ'D |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
REFUELING OUTAGE L2R07

| | | | | |
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| C11 | 980062695 | 2C11-F388 | VALVE, AIR SCRAM DISCH VOL VENT | REMOVE UNAPPROVED ANTI-ROTATION DEVICE. |
| C11 | 980062696 | 2C11-F389 | VALVE, AIR SCRAM DISCH VOL VENT | REMOVE UNAPPROVED ANTI-ROTATION DEVICE. |
| C11 | 990019210 | 2C11-F402A | ARI EXH TO SDV VENT VLV F388 (UP LADDER) | NO LIGHT INDICATION WHEN VALVE TAKEN TO OPEN POSITION |
| C11 | 990031612 | 2C11-N021 | HCU 18-55 ACCUMULATOR PRESS SWITCH | HCU WILL NOT HOLD N2 CHARGE, N2 LOW PRESSURE ALARMS |
| C11 | 990018997 | 2C11-N319 | HCU 42-43 ACCUMULATOR LIQUID LEVEL SWITCH | REPLACE LEVEL SWITCHES AS NEEDED TO SUPPORT LIP-RD-607 |
| C11 | 990021889 | 2C11-N616A | CRD CHARGING WATER HEADER PRESSURE | TROUBLE SHOOT REASON WHY GROSS FAILURE WILL NOT FUNCTION |
| C11 | 990018997 | 2C11-R025 | HCU 18-55 ACCUMULATOR PRESS INDICATOR | REPLACE PRESSURE GAGES AS NEEDED TO SUPPORT LIP-RD-607 |
| C11 | 990023635 | 2C11-000 | MISCELLANEOUS WORK REQUESTS | CONTINGENCY WR TO REPAIR FULL CORE HYDRO TESTING |
| C11 | 990026955 | 2C11-000 | MISCELLANEOUS WORK REQUESTS | ADJUST PACKING ON VARIOUS MANUAL VALVES |
| C11 | 990026955 | 2C11-000 | MISCELLANEOUS WORK REQUESTS | ADJUST PACKING ON INLET AND OUTLET SCRAM VALVES |
| C11 | 990011345 | 2C11A-Z005 | FOUR ROD DISPLAY P603 | UPPER RIGHT LENS IS CRACKED-REPAIR/REPLACE |
| C34 | 990025778 | 2C34-K624C | RX LVL C HI ALARM UNIT | UNABLE TO RESET RX WATER LVL HI C TRIP-LEVEL 8 TRIP |
| C41 | 970004730 | 2C41-D302 | SIGHTGLASS, SBLC TANK LVL | SIGHTGLASS PIPING CONNECTIONS ARE LEAKING SODIUM PENTABORATE |
| C41 | 990008084 | 2C41-F004A | A SBLC INJECTION SQUIB VALVE | CONTINUITY UNEXPECTEDLY RESTORED FOLLOWING FIRING |
| C41 | 990008085 | 2C41-F004B | B SBLC INJECTION SQUIB VALVE | CONTINUITY UNEXPECTEDLY RESTORED FOLLOWING SQUIB FIRING |
| C41 | 990010142 | 2C41-F029A | A SBLC PUMP DSCH RELIEF VALVE | RELIEF LIFTED WITH PUMP AT NORMAL PRESSURE DURING LOS-SC-Q1 |
| C41 | 970069823 | 2C41-M600A | STANDBY LIQUID CONT METER RELAY | A SQUIB VALVE CONT MONITOR METER RELAY MALFUNCTION SEE DET. |
| C41 | 990009725 | 2C41-M600A | STANDBY LIQUID CONT METER RELAY | NO CONTINUITY ALARM IS UP AND NO CONTINUITY LIGHT IS LIT |
| C51 | 990027305 | 2C51-J004D | ASSY - GUIDE TUBE VALVE, TIP BALL AND SHEAR VALVE | VALVE WILL NOT CYCLE WHEN ENERGIZED |
| C51 | 980027148 | 2C51-K601D | IRM CHANNEL D MONITOR | TRBLSHT SPIKING IRM CHANNEL |
| C51 | 990021559 | 2C51-K601G | IRM CHANNEL G MONITOR | CONNECTOR FELL OFF OF HV CABLE |
| C51 | 980010111 | 2C51-K605FM | LOCAL PWR RANGE MON DET 24-17 LEVEL B | DOWNSCALE LIGHT DOES NOT LIGHT |
| C51 | 990026937 | 2C51-K605FN | LOCAL PWR RANGE MON DET 24-17 LEVEL C | INTERMITTENT CONTACT BETWEEN LPRM CARD AND EDGE CONNECTOR |
| C51 | 990028946 | 2C51-K605FP | LOCAL PWR RANGE MON DET 24-17 LEVEL D | DOWNSCALE LAMPS ARE NOT LIGHTING. |
| C51 | 970069292 | 2C51-K605GJ | LOCAL PWR RANGE MON DET 48-09 LEVEL B | LPRM BECAME ERRATIC AND WENT UPSCALE |
| C51 | 980133032 | 2C51-K605GM | AVERAGE PWR RANGE MONITOR CHNL A | APRM A CIRCUIT BOARD Z31 HAS MISSING COMPONENT VR2 |
| C51 | 990028948 | 2C51-K605GN | AVERAGE PWR RANGE MONITOR CHNL B | DOWNSCALE LAMPS ARE NOT LIGHTING. |
| C51 | 990030479 | 2C51-K605GN | AVERAGE PWR RANGE MONITOR CHNL B | RIGHT POWER SUPPLY FOR APRM B + 20 VDC NEED TO BE REPLACED |
| C51 | 990028950 | 2C51-K605GR | AVERAGE PWR RANGE MONITOR CHNL D | S6 RESET SWITCH IS GOING BAD. |
| C51 | 970078492 | 2C51-000 | MISCELLANEOUS WORK REQUESTS | LPRM CABLE CLAMPS LOOSE IN 2H13-P608 |
| C61 | 970063653 | 2C61-P001 | ASSY_-_PANEL, REMOTE S/D INSTR | ALL 4 REAR DOORS DRAG ON BOTTOM, ADJUST |
| C61 | 990035822 | 2C61A-S007 | SWITCH AT 2C61P001 RI INST TRANS | 2C61-S7 RCIC INST XFER SW HAS DIRTY CONTACTS |
| C71 | 990022584 | 2C71-N005A | EHC OIL LINE PRESS | DURING CALIBRATION FOUND TUBING NOT EXTENDING PAST FERREL |
| C71 | 990007718 | 2C71-N006A | CONDUIT, ELECT SEAL ASSEMBLY | RESTORE SEAL ASSEMBLIES TO ORIGINAL DESIGN CONFIGURATION |
| C71 | 980132048 | 2C71-N006F | CONDUIT, ELECT SEAL ASSEMBLY | SKINNED CONDUCTOR AND BROKEN SEALTIGHT. |
| C71 | 980041258 | 2C71A-K004B1 | RELAY, H13P611, | REPLACE RELAY 2C71A-K004B1 IN 2H13-P611 |

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|-----|-----------|--------------|--|--|
| C71 | 980041254 | 2C71A-K004C1 | RELAY, H13P609, MSL ISOL | REPLACE RELAY 2C71A-K004C1 IN 2H13-P609 |
| C71 | 980020496 | 2C71A-K006A | RELAY, H13P609, RX VSSL LVL 3 SCRAM/ISOL | RELAY MAKING UNUSUAL NOISE |
| C71 | 980052565 | 2C71A-K016B | TIME DELAY RELAY | LOUD BUZZING NOISE |
| DC | 960096176 | 2DC06E | 2DC06E - 250 VDC MCC | REAR BUS BARRIER IS CRACKED AND NEEDS TO BE REPLACED |
| DC | 990029728 | 2DC06E-4B | RCIC STM TO TURB VLV 2E51-F045 | CONTACTS ON RELAY ARE STICKING CLOSED WHEN DE-ENERGIZED. |
| DC | 990029660 | 2DC06E-4C | RCIC PMP SUCT. FROM COND STRG TNK 2E51-F010 | CONTACTS ON THE 74 RELAY ARE STICKING CLOSED. |
| DC | 990029727 | 2DC06E-5B | RCIC TEST BYP TO CNDSR STRG TNK VLV 2E51-F022 | CONTACTS ON 74 RELAY STICKING CLOSED WHEN DE-ENERGIZED. |
| DC | 990029883 | 2DC06E-7B | RCIC TURB EXH. TO SUP POOL 2E51-F068 | 74 RELAY STICKS INTERMITTENTLY-REPLACE 74 RELAY |
| DC | 970028591 | 2DC11E | DIV I 125VDC DISTRIBUTION PANEL 211Y | SCREW MISSING/LOOSE ON PROT COVERS FOR CB-19/CB-23 |
| DC | 970033023 | 2DC11E | DIV I 125VDC DISTRIBUTION PANEL 211Y | SAFETY PANEL NOT COVERING BUS WORK IN DIST. CABINET 211Y |
| DC | 980122818 | 2DC18E | ASSY_-_BATTERY,DIV 3 125V | REPLACE CELL #1 TAKEN FOR UNIT 1 DIV III BATTERY BANK |
| DC | 990033686 | 2II-DC005 | BATTERY CHARGER 2DC03E DC AMMETER | AMPS "ZERO" SHOULD INDICATE 2 OR 3 AMPS..REPLACE OR REPAIR. |
| DC | 980032563 | 2II-DC052 | AMMETER, 2PM01J CHARGER 1A 125VDC | INDICATES 40 AMPS WHILE LOCAL (2II-DC011) INDICATES 28 AMPS. |
| DC | 980032564 | 2II-DC054 | AMMETER, 2PM01J CHARGER 1B 125VDC DIV-2 | INDICATES 39 AMPS WHILE LOCAL (2II-DC061) INDICATES 30 AMPS. |
| DG | 960118449 | 2DG01K | PUMP, AC LUBE OIL CIRC (B7) | OIL LEAKING FROM THREADED DISCHARGE PIPE OF PUMP |
| DG | 970031401 | 2DG01K | 2A DIESEL GENERATOR | 2A D/G EXP.TANK LOWER SIGHTGLASS STOP VLV. MISSING HANDWHEEL |
| DG | 970046249 | 2DG01K | 2A DIESEL GENERATOR | 4160 VOLT BUS DUCT MISSING VENT SCREEN . DANGER HIGH VOLT |
| DG | 980003911 | 2DG01K | 2A DIESEL GENERATOR | CYLINDER TEST VALVE FOR CYLINDER #17 BINDS UPON REMOVAL |
| DG | 990001397 | 2DG01K | ENGINE, DIESEL GENERATOR | GOVERNOR BOOSTER WAS OBSERVED LEAKING;REPLACE BOOSTER |
| DG | 990001405 | 2DG01K | ENGINE, DIESEL GENERATOR | '2A' DG FAILED A-BANK START, TROUBLESHOOT PROBLEM |
| DG | 990001406 | 2DG01K | 2A DIESEL GENERATOR | CHANGE OUT AIR START SOLENOID VALVES |
| DG | 990022556 | 2DG01K | ENGINE, DIESEL GENERATOR | ENGINE EXHAUST PYROMETER SENSOR SEALTITE CONNECTORS LOOSE |
| DG | 980049276 | 2DG01P | MOTOR, DG A COOLING WTR PUMP | MOTOR WINDING SCREENS ARE FALLING APART.REPLACE. |
| DG | 990008868 | 2DG024 | NE CUBICLE AREA COOLER OTLT STOP | SUSPECT VALVE DISK SEPARATION (TESTING PER LTS 200-27) |
| DG | 990002314 | 2DG038 | 2A DG COOLER OUTLET HI POINT VENT VALVE | VALVE HAD TO BE OPERATED USING A 12" PIPE WRENCH TO OPEN IT. |
| DG | 990009207 | 2DG076 | 2A DG ENGINE LUBE OIL DRAIN VALVE | REPAIR OIL LEAK BETWEEN PIPE AND ELBOW ON DG OIL DRAIN PIPE |
| DG | 990001403 | 2DG08KA | 2A DG A STARTING AIR MOTOR | REPLACE "A" BANK AIR START MOTORS |
| DG | 990017301 | 2DG086 | 2A DG LUBE OIL SOAK BACK AND CIRC PUMPS SUCT VALVE | VALVE LEAKS AT GASKET, APP. 1 DROP PER MINUTE WITH SYS. SD |
| DG | 970031290 | 2HS-DGS036 | 2A DIESEL GENERATOR ENGINE MAINT. KEY LOCKOUT SW. | CONTROL SW. FACE PLATE IS CRACKED. OLD FACE PLATE IS |
| DG | 970111164 | 2PDS-DG049 | 2A DG LUBE OIL FILTER RESTRICTED (S17) | SWITCH IS ACTIVATING ALARM WITH NO PRESSURE ON SYSTEM. |
| DO | 980024529 | 2DO003 | 2A DG FUEL OIL XFR PMP DSCH STOP | BONNET LEAKS |
| DO | 970086579 | 2DO01P | 2A DG FUEL TRANSFER PUMP | REPLACE PUMP BEARINGS. |
| DO | 970071225 | 2DO02P | 2B DG FUEL TRANSFER PUMP | 2DO02P HAS A SMALL SEAL PACKING LEAK. LEAKS TO PMP LEAK SUMP |
| DO | 970071224 | 2DO02T | 2B DG FUEL STORAGE TANK | 2DO02T MANWAY LEAK IDENTIFIED ON AT TAG 277519 DRIPS T FLOOR |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
REFUELING OUTAGE L2R07

| | | | | |
|-----|-----------|-------------|--|--|
| DO | 910042505 | 2DO024 | ASSY_-_VALVE, GLOBE | OPEN INDICATION DOES NOT LIGHT; CLOSED INDICATION STAYS LIT |
| DO | 980044041 | 2DO03P | DIESEL FIRE PUMP FUEL TRANSFER PUMP | 2DO03P SUCTION STRAINER BLOWDOWN LINE IS LEAKING #2 FO T FLR |
| DO | 990011489 | 2DO04T | 2B DG DAY TANK | THE GASKET IS LEAKING. THE LEAKAGE IS MONITORED, BUT WE WILL |
| D18 | 990001402 | 2D18-K751A | CONTROL ROOM HVAC AIR INTAKE | CRWR DETECTOR FAILED DOWNSCALE |
| D18 | 990003566 | 2D18-K751A | CONTROL ROOM HVAC AIR INTAKE | FAILED DOWNSCALE AND TRIPPED OUT OF OPERATE 3 TIMES |
| D18 | 980123597 | 2D18-K751B | CONTROL ROOM HVAC AIR INTAKE | 2D18-K751B FAILED DOWNSCALE |
| D18 | 990008230 | 2D18-K751B | CONTROL ROOM HVAC AIR INTAKE | FAILED DOWNSCALE |
| D18 | 990029659 | 2D18-K751C | CONTROL ROOM HVAC AIR INTAKE | FAILED DOWNSCALE |
| D18 | 990017773 | 2D18-N009D | REACTOR BLDG VENT DETECTOR | SCREW MISSING FROM DETECTOR HOUSING, REPLACE SCREW |
| E12 | 980096273 | 2E12-C002A | MOTOR, RHR PP | REPLACE MISSING MOTOR AIR DISCHARGE SCREEN |
| E12 | 970031291 | 2E12-C300C | SWITCH, 236X 303-A LOCAL TRANSFER | CONTROL SW. FACE PLATE IS CRACKED. REPLACE FACE PLATE |
| E12 | 980126269 | 2E12-D300B | B RHR SERVICE WATER STRAINER | REPAIR / COAT INTERIOR SURFACES OF STRAINER AS NECESSARY |
| E12 | 940059014 | 2E12-F027B | VALVE, RHR P/C SPRAY | REPACK 2E12-F027B |
| E12 | 990018506 | 2E12-F050A | VALVE, RHR TESTABLE NOSLAM CHECK | CONTINGENCY TO REMOVE/REINSTALL INTERFERENCES |
| E12 | 980098214 | 2E12-F090A | A RHR S/D COOLING DSCH HDR STOP - 150' | PACKING LEAK |
| E12 | 980098215 | 2E12-F092B | B RHR LPCI INJECTION LINE MAN STOP - 330' | 2E12-F092B HAS A PACKING LEAK |
| E12 | 980098215 | 2E12-F092B | B RHR LPCI INJECTION LINE MAN STOP - 330' | DISASSEMBLE AND REPAIR THE BEVEL GEAR OPERATOR |
| E12 | 990018731 | 2E12-F099A | VALVE, RHR TEST CHECK BYP VLV | REPAIR VALVE #2E12-F099A |
| E12 | 990022618 | 2E12-F311B | VALVE, RHR HX SHL/SD RELIEF | RELIEF VALVE CAP WEEPING AT GASKET DURING VT-2 EXAM. |
| E12 | 990006660 | 2E12-F328B | B RHR HEAT EXCH OTLT PROCESS RAD.MONITOR INLT STOP | VALVE BINDING. CAN NOT VERIFY VALVE POSITION |
| E12 | 980091814 | 2E12-F337C | C RHR PMP SEAL COOLER INLT DRN VLV | MISSING ONE GLAND NUT/CHECK PACKING |
| E12 | 980091856 | 2E12-F338B | B RHR PMP SEAL COOLER OTLT DRN VLV | MISSING ONE GLAND NUT/CHECK PACKING |
| E12 | 980091813 | 2E12-F338C | C RHR PMP SEAL COOLER OTLT DRN VLV | MISSING ONE GLAND NUT/CHECK PACKING |
| E12 | 970044746 | 2E12-N010AB | RHR FLOW 2A PRESS DIFF | INSTRUMENT HAS LOOSE CONDUIT FITTING/TIGHTEN L2R07 |
| E12 | 990020008 | 2E12-N010CB | RHR FLOW 2C PRESS DIFF | SWITCH HAS A DIAPHRAM LEAK OR THE EQUALIZER IS LEAKING BY |
| E12 | 990018177 | 2E12-N413A | RHR A INJECTION VLV REACTOR PRESS INTLK | STOP VALVE HAS EXTERNAL LEAKAGE |
| E12 | 990020972 | 2E12-N413A | RHR A INJECTION VLV REACTOR PRESS INTLK | AFTER CONSOLIDATION PACKING STILL LEAKS |
| E21 | 980126978 | 2E21-C001 | LPCS PUMP MOTOR COOLER | LOCATE & REPAIR OIL LEAK @ LPCS PUMP MOTOR COOLER 2E21-C001 |
| E21 | 990012101 | 2E21-F005 | ACTUATOR, LPCS INJECTION VLV | STEMNUT LOCKNUT ROTATED SLIGHTLY OFF STAKEMARKS |
| E21 | 990027084 | 2E21-F012 | LPCS PMP FULL FLOW TEST VLV | VALVE DID NOT RESPOND AS EXPECTED DURING RESPONSE TIME TEST |
| E21 | 990013380 | 2E21-F018 | VALVE, LPCS PP DISCH TO S-POOL RELIEF | SAFETY WIRE IS MISSING FROM VALVE. |
| E21 | 980109232 | 2E21-F051 | LIMIT SWITCH | VALVE INDICATES DUAL WHEN CLOSED |
| E21 | 990011545 | 2E21-N009 | LPCS PP DISCH PRESS | SWITCH FAILED TO RESET WHILE PERFORMING LIS-LP-204 |
| E22 | 970101958 | 2E22-C001 | MOTOR, HPCS PUMP | BOLT MISSING FROM LOWER S/W MOTOR VENT ASSEMBLY, FIX! |
| E22 | 980085029 | 2E22-C001 | MOTOR, HPCS PUMP | MOTOR INSTRUMENT BOX LOOSE/TIGHTEN |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
REFUELING OUTAGE L2R07

| | | | | |
|-----|-----------|-------------|---|--|
| E22 | 980014022 | 2E22-C002 | HPCS DIESEL COOL WATER PUMP | REMOVE STRUT & CONTINGENCY TO REMOVE/REINST WELD TO ALIGN PP |
| E22 | 980014022 | 2E22-C002 | HPCS DIESEL COOL WATER PUMP | PUMP FAILED TEST/REALIGN AS NECESSARY |
| E22 | 990017236 | 2E22-C002 | HPCS DIESEL COOL WATER PUMP | DISASSEMBLE/ REMOVE/ SHIP TO UNION PUMP FOR REPAIRS. |
| E22 | 970106677 | 2E22-F024 | HPCS PUMP DSCH CHECK VALVE | 2E22-F024/ FAILED PMT/ REWORK |
| E22 | 990022655 | 2E22-F341 | SUP POOL LEVEL SW 2E22-N002A/B UPPER LEG EXCESS CHECK VALVE | VALVE CHECKS BUT DOES NOT REOPEN ALL OF THE WAY |
| E22 | 990022656 | 2E22-F342 | SUP POOL LEVEL SW 2E22-N002A/B LOWER LEG EXCESS CHECK VALVE | VALVE CHECKS BUT DOES NOT REOPEN ALL OF THE WAY |
| E22 | 990013970 | 2E22-P301B | 2B DG AUXILIARY CONTROL PANEL | AGASTAT RELAY HAS CROSS THREADED SCREW |
| E22 | 970019440 | 2E22-R549 | 125 VOLT BATTERY CHARGER 2C (2DC19E) AMP | REPLACE DC AMMETER ON DIV 3 BATT CHARGER |
| E22 | 970019440 | 2E22-R550 | 125 VOLT BATTERY CHARGER 2C (2DC19E) VOL | REPLACE DC VOLTMETER ON DIV 3 BATT CHARGER |
| E22 | 980032577 | 2E22-S001 | ENGINE, HPCS DG | INSTALL THE BOTTOM 2 MOUNTING BOLTS IN ENGINE JUNCTION BOX |
| E22 | 980111175 | 2E22-S001 | 2B DIESEL GENERATOR | FUEL OIL LEAK (1 DPM) |
| E22 | 990016363 | 2E22B-S027 | HPCS DG VOLTAGE REG RAISE/LOWER | TROUBLESHOOT ERRATIC INDICATION OF VAR METER |
| E31 | 990032292 | 2E31-N007AA | RHR/RCIC STM SUPPLY HI FLOW DETECTION | POSSIBLE DIAPHRAM FAILURE |
| E31 | 980121556 | 2E31-N008A | MS LINE A HI FLOW DETECTION | NEED TO IDENTIFY SCOPE_FOR IMD |
| E31 | 980090378 | 2E31-N012AA | RHR WTR SUPPLY HI FLOW DETECTION | BLEEDER SCREW IS LEAKING.REMOVE AND SEAL WITH PIPE SEALANT |
| E31 | 990032970 | 2E31-R620 | RWCU DIFF FLOW | GE-180 IS NOT REPEATABLE REPLACE FOUND DURING RT201 |
| E51 | 980089655 | 2E51-F028 | VLV 1-1/4 IN CK | CLEAN,FLUSH, & INSPECT PER LAP-300-30. |
| E51 | 980128207 | 2E51-F063 | VALVE, RI STM LNNE I/B ISOL | DISASSEMBLE, INSPECT, REPAIR AND REASSEMBLE VALVE. |
| E51 | 980092161 | 2E51-F064 | ACTUATOR, RHR HX O/B ISOL VLV | STEM PROTECTOR MISSING |
| E51 | 990028147 | 2E51-F065 | VALVE, AIR RI TESTABLE CHK VLV | CAM WHICH ACTUATES POSITION INDICATION SWITCH IS LOOSE |
| E51 | 960092759 | 2E51-F066 | VALVE, NOSLAM CHECK | WILL NOT GIVE FULL CLOSED INDICATION, 2E51-F066 |
| E51 | 950079883 | 2E51-F086 | VALVE, RI VAC BRKR ISOL VLV | REPACK, REPAIR VALVE |
| E51 | 990035596 | 2E51-F086 | ACTUATOR, RI VAC BRKR ISOL VLV | 00 / TROUBLESHOOT AND REPAIR PER LAP-1300-1T2 |
| E51 | 960092552 | 2E51-F329 | RCIC WTR LEG PMP RECIRC STOP | LEAKS BY |
| E51 | 990036274 | 2E51-N010LS | LEVEL SWITCH / ADDED PER DCP 9400312 DCN 000398E00 | LEVEL SWITCH DID NOT PICK UP TO OPEN 2E51-F054 |
| E51 | 990029780 | 2E51A-S026 | RCIC TURB TRIP AND THROTTLE VLV | C/S DOES NOT RETURN TO NORMAL AFTER RELEASING. STICKS. |
| E51 | 960038217 | 2E51F005 | RCIC BARO CNDSR COND PMP DSCH TO RBEDT DWNST STOP | REPAIR ACTUATOR/VALVE, POTENTIAL SEAT LEAKAGE |
| FC | 970111871 | 2FC03PA | MOTOR, FUEL POOL EMERG M/U PUMP | MOTOR VENT SCREEN IS DAMAGED.REPLACE |
| F21 | 950101209 | 2F21-E003 | BRIDGE, REFUEL | MAIN HOIST CABLE REQ REPLACEMENT |
| G33 | 990027882 | 2G33-C001A | MOTOR, RWCU RECIRC PUMP | PUMP FAILED TO START, BREAKER TRIPPED WITHIN 0.05 SECONDS |
| HG | 980021329 | 2HG005A | VALVE, GLOBE | IMPROPER THREAD ENGAGEMENT ON 2 BODY TO BONNET BOLTS |
| HG | 980054080 | 2HG005A | VALVE, GLOBE | OUTER RING OF PACKING IS PARTWAY OUT FROM UNDER THE FOLLOWER |
| HT | 990026009 | 2TS-HT012A | H2/02 MON HT TEMP CONT. DIV. 2 | ERRATIC OPERATION WILL NOT READ TEMPERATURE |
| H13 | 980113311 | 2H13-P602 | ASSY_- PANEL, RWCU/RX RECIRC CONTROL | LIGHT DOES NOT ILLUMINATE WHEN REQUIRED |
| H13 | 970074489 | 2H13-P608 | ASSY_- CABINET, POWER RANGE NEUTRON MONITOR | MISSING VARIOUS HARDWARE, THIS AR FOR ALL APRMS,LPRMS,RBMS |
| H13 | 990003286 | 2H13-P631 | ASSY_- PANEL, AUTOMATIC DEPRESSION SYST B RELAY | BLOWING BULBS DS13B AND DS14B AT PANEL 2H13-P631 |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
REFUELING OUTAGE L2R07

| | | | | |
|-----|-----------|-------------|--|--|
| H13 | 980092044 | 2H13-P636 | ASSY_-_CABINET, DIV-2 RAD MONITOR | WIRE AT DD-2 NOT FULLY INSERTED IN LUG BARREL & LUG IS LOOSE |
| H22 | 980097169 | 2H22-P026 | ASSY_-_PANEL, D RX LEVEL/PRESSURE LOCAL | MULTIPLE LOOSE CABLES/CONDUITS AT JBOXES AND IND UNITS |
| H22 | 970044750 | 2H22-P029 | ASSY_-_PANEL, B RI LOCAL INSTR | REPLACE MISSING JUNCTION BOX COVERS ON BACK OF RACK. |
| H22 | 980097167 | 2H22-P075 | ASSY_-_PANEL, LLS/SRV DIV-2 INSTR RACK | MULTIPLE LOOSE CABLES/CONDUITS ON PS AT PANEL |
| H22 | 980097168 | 2H22-P076 | ASSY_-_PANEL, LLS/SRV DIV-2 INSTR RACK | MULTIPLE LOOSE CABLES/CONDUITS ON PS AT PANEL |
| MS | 990024067 | 2MS00-2026S | 2MS10RA-00.75-SUBSYS- 2MSD2: RIGID RESTRAINT | SNUBBER PIN IS MISSING WASHER EXCESSIVE GAP |
| NB | 990024078 | 2NB12-2001C | SUBSYS- 2NBA3: CONSTANT | CONDENSING POT TENSIONER ROD BENT. |
| NB | 950115308 | 2NB15A | PIPE, RX LVL REFERENCE LEG | MALE TONGUE ON TONGUE AND GROOVE FLANGE DAMAGED/REPLACE |
| PC | 990031974 | 2PC000 | MISCELLANEOUS WORK REQUESTS | TENDON V 229B LEAKS GREASE |
| PC | 990028525 | 2PC001B-ZS | P/C VAC BREAKER VLV POS IND SWITCH | NO OPEN OR DUAL INDICATION FOR DIV ONE |
| PC | 950092068 | 2PC002C | VAC BKR 2PC001C DW ISOL STOP | REBUILD VALVE |
| PL | 960062476 | 2PL77J | ASSY_-_PANEL, B P/C HYDROGEN/OXYGEN MONITORING | PIF96-1725/OP EVAL DETERMINED THAT PUMP SHOULD BE REPLACED |
| PL | 970137551 | 2PL77J | ASSY_-_PANEL, B P/C HYDROGEN/OXYGEN MONITORING | REPLACE SOR SWITCHES INSTALLED IN 2PL77J |
| RE | 970063676 | 2LTS-RE046 | SW RX BLDG SUMP 2RE04 DIVERSE LEVEL | PEGGED LOW DOES NOT INDICATE PROPER LEVEL |
| RH | 950079735 | 2RHA6-2801X | 2RHA6A-14.00-SUBSYS- 2RH24: RIGID SEISMIC RESTRAINT | REALIGN SPHERICAL BEARINGS ON STRUTS |
| RH | 990034591 | 2RH04-2869C | 2RH04B-20.00-SUBSYS- 2RH01: CONSTANT | REMOVE TRAVEL STOPS PER PIF #L1999-01786. |
| RH | 990015389 | 2RH90-2001X | 2RH90AA-04.00-SUBSYS- 2CS15: RIGID SEISMIC RESTRAINT | REPLACE MISSING NUT ON SUPPORT 2RH90-2001X PIF INITIATED |
| RR | 990033181 | 2RRC3-2003X | 2RR08EA-00.75-SUBSYS- 2RRC3: RIGID SEISMIC RESTRAINT | 1/2" SS PIPE CLAMP MISSING FASTENER ON OUTSIDE OF CLAMPSHELL |
| RR | 990024065 | 2RR00-2008S | 2RR02AA-24.00-SUBSYS- 2RH01: SNUBBER | PULL PIN ON SNUBBER AND THREAD IN EXTENTION TUBE |
| RR | 990013002 | 2RR17-2998S | 2RR17AB-01.50-SUBSYS- 2RR01: SNUBBER | THE AUXILLARY TUBE STEEL FOR THIS SUPPORT HAS A LOOSE BOLT. |
| RT | 990024068 | 2RT01-2873S | 2RT01AB-04.00-SUBSYS- 2RR01: SNUBBER | LOAD PIN IS MISSING A WASHER |
| VC | 980102414 | 2VC000 | MISCELLANEOUS WORK REQUESTS | REPLACE "B" VC DUCT INSULATION. |
| VD | 970001434 | 2TCU-VD008 | DG01K ROOM DMPR 09YA/YB, 10YA/YB | TEMPERATURE CONTROL UNIT READING INCORRECTLY, CAUSING |
| VD | 970052643 | 2TCU-VD013 | DG01K ROOM DMPR 2VD17Y/18Y | VERIFY THAT A 1/10 AMP FUSE IS IN THE CONTROLLER |
| VQ | 990017593 | 2VQ026 | VALVE, S-POOL VNT/PRG FROM RX | EXCESSIVE SEAT LEAKAGE DURING LLRT, REPAIR AS REQUIRED. |
| VQ | 990022750 | 2VQ029 | VALVE, DW VNT/PRG FROM RX VLV | CLEAN SEAT AND LAMINATED SEAL WITH SCOTCHBRITE |
| VQ | 950048630 | 2VQ030 | VALVE, DW VNT/PRG FROM RX | REBUILD VALVE ACTUATOR |
| VQ | 950048630 | 2VQ030 | VALVE, DW VNT/PRG FROM RX | REWORK ACTUATOR SUPPORT TO ALLEVIATE BINDING/MISS ALIGNMENT |
| VQ | 990017700 | 2VQ030 | SOLENOID, D/W VNT/PRG FROM RX VLV | AIR CONTINUOUSLY LEAKING FROM EXHAUST PORT OF SOLENOID |
| VQ | 950048631 | 2VQ031 | ACTUATOR, S-POOL VNT/PRG OUTLET VLV | INSTRUMENT AIR LINES WERE DAMAGED DURING REMOVAL REPLACE |
| VQ | 990024554 | 2VQ061 | VALVE, EX FLOW CHK, VQ N2 TO DW | DURING TESTING VALVE FAILED TO REOPEN ALL OF THE WAY |
| VT | 990006202 | 2VT000 | MISCELLANEOUS WORK REQUESTS; SAFETY RELATED PACKAGE REQUIRED | STIFFENER BROKE INSIDE ZONE 1 DUCT UPSTRM 2VT04YA DAMPER |
| VT | 990006202 | 2VT000 | MISCELLANEOUS WORK REQUESTS; SAFETY RELATED PACKAGE REQUIRED | STIFFENER IN ZONE 1 DUCT IS BROKEN AND OTHER WELDS ARE CRACK |
| VT | 990026862 | 2VT79YA | DAMPER, VT ISOL CHECK | SOLENOID VALVE LEAKS/REPAIR |
| VT | 990026866 | 2VT79YA | DAMPER, VT ISOL CHECK | DAMPER SHOWS DUEL INDICATION WITH DAMPER CLOSED/REPAIR |

APPENDIX B
II.A SAFETY-RELATED MAINTENANCE COMPLETED – UNIT 2
REFUELING OUTAGE L2R07

| | | | | |
|----|-----------|------------|--|--|
| VT | 990026863 | 2VT79YB | DAMPER, VT ISOL CHECK | SOLENOID VALVE LEAKS/REPAIR |
| VT | 990026864 | 2VT79YC | DAMPER, VT ISOL CHECK | SOLENOID VALVE LEAKS/REPAIR |
| VX | 980067045 | 2FZ-VX028 | SWGR HT REMOVAL SYS MIXED AIR TEMP CONT | UPGRADE EXISTING ACTUATOR FROM 1000 LB TO 1500 LB UNIT |
| VX | 980067045 | 2FZ-VX028 | SWGR HT REMOVAL SYS MIXED AIR TEMP CONT | REPAIR/REPLACE SEALTITE FOR ACTUATOR '2FZ-VX028' |
| VX | 980129738 | 2PDS-VX044 | SWGR DIV-2 BATT ROOM 05C D/P | ALARM UP FOR "LOW D/P ON EXHAUST FAN" FOR DIV 2 BATT. ROOM. |
| VX | 990024864 | 2PDS-VX046 | SWGR BATT ROOM M6 SET FAN 08C D/P | ALARMS WITH FAN RUNNING. TROUBLESHOOT AND REPAIR |
| VX | 990020133 | 2TZ-VX009A | SWGR HT REMVL DIV 1 AREA RET AIR TEMP | DAMPER IS LEAKING OIL AND DOES NOT SOUND RIGHT |
| VY | 960082610 | 2VY01A | ASSY_-_COIL, EQUIP COOL | 2VY01A\COOLER DP IS HIGH, NEEDS TO BE CHEMICALLY CLEANED |
| VY | 960082613 | 2VY04A | ASSY_-_COIL, EQUIP COOL | 2VY04A\COOLER DP IS HIGH, NEEDS TO BE CHEMICALLY CLEANED |
| WR | 970084496 | 2WR225 | VALVE | 2WR225/ FAILED PMT/ REWORK |

APPENDIX C

LASALLE STATION RADIATION EXPOSURE

APPENDIX C

II.C LASALLE STATION RADIATION EXPOSURE

NUMBER OF PERSONNEL AND PERSON-REM BY WORK AND JOB FUNCTION FOR 1999

--NUMBER OF PERSONNEL (> 100 MR)--

---QUANTITY OF PERSON-REM---

| | STATION EMPLOYEES | UTILITY EMPLOYEES | CONTRACTORS/ OTHERS | TOTAL PERSONS | STATION EMPLOYEES | UTILITY EMPLOYEES | CONTRACTORS/ OTHERS | TOTAL PERSON REM |
|--|----------------------|----------------------|------------------------|------------------|----------------------|----------------------|------------------------|---------------------|
| <u>REACTOR OPERATIONS AND SURVEILLANCE</u> | | | | | | | | |
| MAINTENANCE | 173 | 31 | 122 | | 6.844 | 2.948 | 3.931 | |
| OPERATIONS | 62 | 0 | 0 | | 9.024 | 0.000 | 0.000 | |
| HEALTH PHYSICS | 53 | 0 | 4 | | 2.998 | 0.000 | 0.014 | |
| SUPERVISORY | 38 | 0 | 23 | | 2.601 | 0.000 | 2.466 | |
| ENGINEERING | 20 | 0 | 1 | | 1.567 | 0.000 | 0.114 | |
| | 346 | 31 | 150 | 527 | 23.034 | 2.948 | 6.525 | 32.507 |
| <u>ROUTINE MAINTENANCE</u> | | | | | | | | |
| MAINTENANCE | 190 | 64 | 749 | | 110.903 | 13.433 | 205.754 | |
| OPERATIONS | 76 | 0 | 2 | | 22.922 | 0.000 | 0.022 | |
| HEALTH PHYSICS | 58 | 0 | 51 | | 20.800 | 0.000 | 17.091 | |
| SUPERVISORY | 55 | 0 | 47 | | 14.479 | 0.000 | 9.910 | |
| ENGINEERING | 26 | 0 | 55 | | 3.685 | 0.000 | 13.137 | |
| | 405 | 64 | 904 | 1373 | 172.789 | 13.433 | 245.914 | 432.136 |
| <u>INSERVICE INSPECTION</u> | | | | | | | | |
| MAINTENANCE | 140 | 9 | 223 | | 0.934 | 0.149 | 15.448 | |
| OPERATIONS | 4 | 0 | 0 | | 0.045 | 0.000 | 0.000 | |
| HEALTH PHYSICS | 3 | 0 | 4 | | 0.008 | 0.000 | 0.899 | |
| SUPERVISORY | 31 | 0 | 24 | | 0.491 | 0.000 | 1.055 | |
| ENGINEERING | 24 | 0 | 28 | | 0.850 | 0.000 | 5.825 | |
| | 202 | 9 | 279 | 490 | 2.328 | 0.149 | 23.227 | 25.704 |
| <u>SPECIAL MAINTENANCE</u> | | | | | | | | |
| MAINTENANCE | 3 | 2 | 72 | | 0.068 | 0.087 | 6.197 | |
| OPERATIONS | 0 | 0 | 0 | | 0.000 | 0.000 | 0.000 | |
| HEALTH PHYSICS | 0 | 0 | 5 | | 0.000 | 0.000 | 0.351 | |
| SUPERVISORY | 2 | 0 | 4 | | 0.002 | 0.000 | 0.115 | |
| ENGINEERING | 0 | 0 | 5 | | 0.000 | 0.000 | 0.411 | |
| | 5 | 2 | 86 | 93 | 0.070 | 0.087 | 7.074 | 7.231 |
| <u>WASTE PROCESSING</u> | | | | | | | | |
| MAINTENANCE | 10 | 1 | 37 | | 0.024 | 0.000 | 1.430 | |
| OPERATIONS | 48 | 0 | 5 | | 0.630 | 0.000 | 4.058 | |
| HEALTH PHYSICS | 28 | 0 | 0 | | 0.339 | 0.000 | 0.000 | |
| SUPERVISORY | 3 | 0 | 0 | | 0.018 | 0.000 | 0.000 | |
| ENGINEERING | 0 | 0 | 0 | | 0.000 | 0.000 | 0.000 | |
| | 89 | 1 | 42 | 132 | 1.011 | 0.000 | 5.488 | 6.499 |
| <u>REFUELING</u> | | | | | | | | |
| MAINTENANCE | 42 | 13 | 271 | | 0.456 | 0.611 | 19.302 | |
| OPERATIONS | 9 | 0 | 0 | | 1.185 | 0.000 | 0.000 | |
| HEALTH PHYSICS | 17 | 0 | 6 | | 1.456 | 0.000 | 0.281 | |
| SUPERVISORY | 19 | 0 | 6 | | 1.002 | 0.000 | 0.071 | |
| ENGINEERING | 1 | 0 | 19 | | 0.015 | 0.000 | 2.647 | |
| | 88 | 13 | 302 | 403 | 4.114 | 0.611 | 22.301 | 27.026 |
| <u>TOTAL BY JOB FUNCTION</u> | | | | | | | | |
| MAINTENANCE | 190 | 62 | 748 | 1000 | 119.229 | 17.228 | 252.062 | 388.519 |
| OPERATIONS | 72 | 0 | 5 | 77 | 33.806 | 0.000 | 4.080 | 37.886 |
| HEALTH PHYSICS | 56 | 0 | 50 | 106 | 25.601 | 0.000 | 18.636 | 44.237 |
| SUPERVISORY | 52 | 0 | 45 | 97 | 18.593 | 0.000 | 13.617 | 32.210 |
| ENGINEERING | 25 | 0 | 57 | 82 | 6.117 | 0.000 | 22.134 | 28.251 |
| *****GRAND TOTAL***** | 395 | 62 | 905 | 1362 | 203.346 | 17.228 | 310.529 | 531.103 |