



Commonwealth Edison

Dresden Nuclear Power Station
R.R. #1
Morris, Illinois 60450
Telephone 815/942-2920

August 7, 1990

EDE LTR: #90-529

Director, Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, DC 20555

Attention: Document Control Desk

Subject: Monthly Operating Data Report
Dresden Nuclear Power Station
Commonwealth Edison Company
Docket Nos. 50-010, 50-237, and 50-249

Gentlemen:

Enclosed is the Dresden Nuclear Power Station Monthly Operating Summary Report for July, 1990. This information is supplied to your office in accordance with the instructions set forth in Regulatory Guide 1.16. Please note that the report contains information which had been previously submitted to your attention on an annual basis in accordance with 10CFR50.59.

Sincerely,

E. D. Eenigenburg
E. D. Eenigenburg
Station Manager
Dresden Nuclear Power Station

EDE:GP:dam

Enclosure

cc: U.S. NRC Region III Office
Illinois Dept. of Nuclear Safety, State of Illinois
U.S. NRC, Document Management Branch
Nuclear Licensing Administrator
Vice Pres. - BWR Operations
General Manager - Nuclear Services
T. S. ENGR. (2)
NRC Senior Resident Inspector
Nuclear Quality Programs - Dresden
Nuclear Engineering Manager
Comptroller's Office
D. Eggett - Reliability Programs
INPO Records Center
File/NRC Op. Data
File/Numerical

Z16/10/1

9008170254 900731
FDR ADOCK 05000010
R PDC

IE24
11

**MONTHLY NRC
SUMMARY OF OPERATING EXPERIENCE,
CHANGES, TESTS, AND EXPERIMENTS
PER REGULATORY GUIDE 1.16 AND 10 CFR 50.59
FOR
DRESDEN NUCLEAR POWER STATION
COMMONWEALTH EDISON COMPANY
FOR JULY 1990**

| <u>UNIT</u> | <u>DOCKET</u> | <u>LICENSE</u> |
|-------------|---------------|----------------|
| 1 | 050-010 | DPR-2 |
| 2 | 050-237 | DPR-19 |
| 3 | 050-249 | DPR-25 |

TABLE OF CONTENTS

- 1.0 Introduction
- 2.0 Summary of Operating Experience
 - 2.1 Unit 2 Monthly Operating Experience Summary for July, 1990
 - 2.2 Unit 3 Monthly Operating Experience Summary for July, 1990
- 3.0 Operating Data Statistics
 - 3.1 Monthly Operating Data Report - Unit 2
 - 3.2 Monthly Operating Data Report - Unit 3
 - 3.3 Average Daily Power Level Data - Unit 2
 - 3.4 Average Daily Power Level Data - Unit 3
 - 3.5 Unit Shutdown and Power Reduction Data - Unit 2
 - 3.6 Unit Shutdown and Power Reduction Data - Unit 3
 - 3.7 Station Maximum Daily Load Data
- 4.0 Unique Reporting Requirements
 - 4.1 Main Steam Relief and/or Safety Valve Operations - Unit 2 and Unit 3
 - 4.2 Off-Site Dose Calculation Manual Changes
 - 4.3 Major changes to the Radioactive Waste Treatment
 - 4.4 Failed Fuel Element Indications
 - 4.4.1 Unit 2
 - 4.4.2 Unit 3
- 5.0 Plant or Procedure Changes, Tests, Experiments, and Safety Related Maintenance
 - 5.1 Amendments to Facility License or Technical Specifications
 - 5.1.1 Unit 2
 - 5.1.2 Unit 3
 - 5.2 Changes to Procedures Which are Described in the Final Safety Analysis Report (FSAR) (Units 2 and 3)
 - 5.3 Significant Tests and Experiments Not Described in the FSAR (Units 2 and 3)
 - 5.4 Safety Related Maintenance (Units 2 and 3)
 - 5.5 Completed Safety Related Modifications
 - 5.6 Temporary System Alterations
 - 5.6.1 Unit 2
 - 5.6.2 Unit 3

1.0 Introduction

Dresden Nuclear Power Station is a three reactor generating facility owned and operated by the Commonwealth Edison Company of Chicago, Illinois. Dresden Station is located at the confluence of the Kankakee and Des Plaines Rivers, in Grundy County, near Morris, Illinois.

Dresden Unit 1 is a General Electric Boiling Water Reactor with a design net electrical output rating of 200 megawatts electrical (MWe). The unit is retired in place with all nuclear fuel removed from the reactor vessel. Therefore, no Unit 1 operating data is provided in this report.

Dresden Units 2 and 3 are General Electric Boiling Water Reactors with design net electrical output ratings of 794 MWe each.

Waste heat is rejected to a man-made cooling lake using the Kankakee River for make-up and the Illinois River for blowdown.

The Architect-Engineer for Dresden Units 2 and 3 was Sargent and Lundy of Chicago, Illinois.

This report was compiled by Donald C. Maxwell of the Dresden Technical Staff, telephone number (815)942-2920 extension 2489.

2.0 SUMMARY OF OPERATING EXPERIENCE FOR JULY, 1990

2.1 UNIT 2 MONTHLY OPERATING EXPERIENCE SUMMARY

07-01-90 to 07-31-90

Unit 2 entered the month on line and operating at approximately 815 MWe. The unit operated in Economic Generation Control or at loads requested by the System Load Dispatcher for the remainder of the month with an availability of 100% and a capacity factor of 84.4%.

SUMMARY OF OPERATING EXPERIENCE FOR JULY, 1990

2.2 UNIT 3 MONTHLY OPERATING EXPERIENCE SUMMARY

- 07-01-90 to 07-03-90 Unit 3 entered the month off line to replace the main turbine thrust bearing, replace Control Rod Drive H-10, replace the main power transformer 'C' phase bushing and completion of various activities pre-scheduled for the short outage.
- 07-04-90 to 07-31-90 The reactor was made critical at 1728 hours on 7-4-90 and the generator was synchronized at 1150 hours on 7-5-90. The unit steadily increased loads through 7-9-90 and operated the remainder of the month in Economic Generation Control or at loads requested by the System Load Dispatcher with an availability of 85.5% and a capacity factor of 76.7%.

3.0 OPERATING DATA REPORT

3.1 OPERATING DATA REPORT - UNIT TWO

DOCKET No. 050-237
 DATE August 1, 1990
 COMPLETED BY D. C. Maxwell
 TELEPHONE 815/942-2920

OPERATING STATUS

- | | |
|--|--|
| 1. REPORTING PERIOD: <u>JULY, 1990</u> | GROSS HOURS IN REPORTING PERIOD 744 |
| 2. CURRENTLY AUTHORIZED POWER LEVEL (MWe): 2,527 | MAX DEPEND CAPACITY (MWe-Net) 772 |
| | DESIGN ELECTRICAL RATING (MWe-Net) 794 |
| 3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MWe-Net): N/A | |
| 4. REASONS FOR RESTRICTIONS (IF ANY): N/A | |

REPORTING PERIOD DATA

| | This Month | Yr-to-Date | Cumulative |
|--|------------|------------|-------------|
| 5. TIME REACTOR CRITICAL (HOURS) | 744.0 | 4,814.7 | 135,594.9 |
| 6. TIME REACTOR RESERVE SHUTDOWN (HOURS) | 0.0 | 0.0 | 0.0 |
| 7. TIME GENERATOR ON-LINE (HOURS) | 744.0 | 4,790.7 | 129,842.2 |
| 8. TIME GENERATOR RESERVE SHUTDOWN (HOURS) | 0.0 | 0.0 | 0.0 |
| 9. THERMAL ENERGY GENERATED (MWht-GROSS) | 1,649,284 | 11,262,785 | 269,379,976 |
| 10. ELECTRICAL ENERGY GENERATED (MWhe GROSS) | 523,715 | 3,603,312 | 86,097,661 |
| 11. ELECTRICAL ENERGY GENERATED (MWhe-NET) | 496,779 | 3,432,016 | 81,420,180 |
| 12. REACTOR SERVICE FACTOR (%) | 100.0 | 94.6 | 76.5 |
| 13. REACTOR AVAILABILITY FACTOR (%) | 100.0 | 94.6 | 76.5 |
| 14. SERVICE FACTOR (%) | 100.0 | 94.2 | 73.3 |
| 15. AVAILABILITY FACTOR | 100.0 | 94.2 | 73.3 |
| 16. CAPACITY FACTOR (USING MDC) (%) | 86.5 | 87.4 | 59.5 |
| 17. CAPACITY FACTOR (USING DESIGN MWe) (%) | 84.1 | 85.0 | 57.9 |
| 18. FORCED OUTAGE FACTOR (%) | 0.0 | 5.8 | 10.7 |

19. SHUTDOWNS SCHEDULED OVER THE NEXT 6 MONTHS
 (TYPE DATE AND DURATION OF EACH)

REFUELING OUTAGE CURRENTLY SCHEDULED for 9-23-90 thru 12-04-90

20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP

N/A

3.0 OPERATING DATA REPORT

3.2 OPERATING DATA REPORT - UNIT THREE

DOCKET NO. 050-249
 DATE August 1, 1990
 COMPLETED BY D.C. Maxwell
 TELEPHONE 815/942-2920

OPERATING STATUS

- | | | |
|---|------------------------------------|-----|
| 1. REPORTING PERIOD: <u>JULY, 1990</u> | GROSS HOURS IN REPORTING PERIOD | 744 |
| 2. CURRENTLY AUTHORIZED POWER LEVEL (MWe): <u>2,527</u> | MAX DEPEND CAPACITY (MWe-Net) | 773 |
| | DESIGN ELECTRICAL RATING (MWe-Net) | 794 |
| 3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MWe-Net): <u>N/A</u> | | |
| 4. REASONS FOR RESTRICTIONS (IF ANY): <u>N/A</u> | | |

REPORTING PERIOD DATA

| | This Month | Yr-to-Date | Cumulative |
|--|------------|------------|-------------|
| 5. TIME REACTOR CRITICAL (HOURS) | 654.5 | 3,817.9 | 124,052.3 |
| 6. TIME REACTOR RESERVE SHUTDOWN (HOURS) | 0.0 | 0.0 | 0.0 |
| 7. TIME GENERATOR ON-LINE (HOURS) | 636.2 | 3,662.3 | 116,024.5 |
| 8. TIME GENERATOR RESERVE SHUTDOWN (HOURS) | 0.0 | 0.0 | 0.0 |
| 9. THERMAL ENERGY GENERATED (MWh _t -GROSS) | 1,462,701 | 8,502,419 | 240,129,839 |
| 10. ELECTRICAL ENERGY GENERATED (MWh _e GROSS) | 475,098 | 2,749,349 | 77,461,594 |
| 11. ELECTRICAL ENERGY GENERATED (MWh _e -NET) | 451,213 | 2,613,912 | 73,469,282 |
| 12. REACTOR SERVICE FACTOR (%) | 88.0 | 75.1 | 74.4 |
| 13. REACTOR AVAILABILITY FACTOR (%) | 88.0 | 75.1 | 74.4 |
| 14. SERVICE FACTOR (%) | 85.5 | 72.0 | 69.6 |
| 15. AVAILABILITY FACTOR | 85.5 | 72.0 | 69.6 |
| 16. CAPACITY FACTOR (USING MDC) (%) | 78.5 | 66.5 | 57.0 |
| 17. CAPACITY FACTOR (USING DESIGN MWe) (%) | 76.4 | 64.7 | 55.5 |
| 18. FORCED OUTAGE FACTOR (%) | 0.0 | 7.6 | 12.0 |

19. SHUTDOWNS SCHEDULED OVER THE NEXT 6 MONTHS
 (TYPE DATE AND DURATION OF EACH)

NONE

20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP

N/A

3.3 AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-237

UNIT II

DATE August 1, 1990

COMPLETED BY D.C. Maxwell

TELEPHONE 815/942-2920

MONTH JULY, 1990

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

| | |
|----|-----|
| 1 | 692 |
| 2 | 745 |
| 3 | 725 |
| 4 | 667 |
| 5 | 572 |
| 6 | 593 |
| 7 | 565 |
| 8 | 589 |
| 9 | 528 |
| 10 | 670 |
| 11 | 720 |
| 12 | 730 |
| 13 | 728 |
| 14 | 727 |
| 15 | 719 |
| 16 | 724 |

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

| | |
|----|-----|
| 17 | 719 |
| 18 | 705 |
| 19 | 709 |
| 20 | 621 |
| 21 | 680 |
| 22 | 622 |
| 23 | 685 |
| 24 | 685 |
| 25 | 673 |
| 26 | 664 |
| 27 | 673 |
| 28 | 670 |
| 29 | 665 |
| 30 | 650 |
| 31 | 622 |

3.4 AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-249

UNIT III

DATE August 1, 1990

COMPLETED BY D.C. Maxwell

TELEPHONE 815/942-2920

MONTH JULY, 1990

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

| | |
|----|------------|
| 1 | <u>0</u> |
| 2 | <u>0</u> |
| 3 | <u>0</u> |
| 4 | <u>0</u> |
| 5 | <u>148</u> |
| 6 | <u>544</u> |
| 7 | <u>540</u> |
| 8 | <u>665</u> |
| 9 | <u>763</u> |
| 10 | <u>769</u> |
| 11 | <u>747</u> |
| 12 | <u>744</u> |
| 13 | <u>739</u> |
| 14 | <u>746</u> |
| 15 | <u>738</u> |
| 16 | <u>743</u> |

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

| | |
|----|------------|
| 17 | <u>764</u> |
| 18 | <u>758</u> |
| 19 | <u>715</u> |
| 20 | <u>726</u> |
| 21 | <u>701</u> |
| 22 | <u>635</u> |
| 23 | <u>750</u> |
| 24 | <u>782</u> |
| 25 | <u>781</u> |
| 26 | <u>775</u> |
| 27 | <u>746</u> |
| 28 | <u>756</u> |
| 29 | <u>740</u> |
| 30 | <u>736</u> |
| 31 | <u>617</u> |

3.5 UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 050-237
 UNIT NAME DRESDEN UNIT II
 DATE August 1, 1990
 COMPLETED BY D. C. Maxwell
 TELEPHONE (815)942-2920

REPORT MONTH JULY, 1990

| NO. | DATE | TYPE ¹ | DURATION (HOURS) | REASON ² | METHOD OF SHUTTING DOWN REACTOR ³ | LICENSEE EVENT REPORT # | SYSTEM CODE ⁴ | COMPONENT CODE ⁵ | CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE |
|-----|------|-------------------|---------------------|---------------------|--|-------------------------------|-----------------------------|--------------------------------|---|
| | NONE | | | | | | | | |

| | | | |
|---|---|---|---|
| <p>1 F: Forced S: Scheduled</p> | <p>2 Reason: A-Equipment Failure (Explain) B-Maintenance or Test C-Refueling D-Regulatory Restriction E-Operator Training & Licensee Examination F-Administrative G-Operational Error H-Other (Explain)</p> | <p>3 Method: 1-Manual 2-Manual Scram 3-Automatic Scram 4-Other (Explain) 5-Load Reduction</p> | <p>4 Exhibit G-Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)</p> <p>5 Exhibit I - Same Source</p> |
|---|---|---|---|

3.6 UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 050-249
 UNIT NAME DRESDEN UNIT III
 DATE August 1, 1990
 COMPLETED BY D. C. Maxwell
 TELEPHONE (815)942-2920

REPORT MONTH JULY, 1990

| NO. | DATE | TYPE ¹ | DURATION (HOURS) | REASON ² | METHOD OF SHUTTING DOWN REACTOR ³ | LICENSEE EVENT REPORT # | SYSTEM CODE ⁴ | COMPONENT CODE ⁵ | CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE |
|-----|----------|-------------------|---------------------|---------------------|--|-------------------------------|-----------------------------|--------------------------------|---|
| 4 | 06-30-90 | S | 107.8 (107:50) | B | 1 | N/A | N/A | N/A | Main Turbine thrust bearing replacement and main transformer bushing replacement. |

2
 F: Forced
 S: Scheduled
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance or Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & Licensee Examination
 F-Administrative
 G-Operational Error
 H-Other (Explain)

3
 Method:
 1-Manual
 2-Manual Scram
 3-Automatic Scram
 4-Other (Explain)
 5-Load Reduction

4
 Exhibit G-Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)
 5 Exhibit I - Same Source

3.7 COMMONWEALTH EDISON COMPANY - DRESDEN NUCLEAR POWER STATION

MAXIMUM DAILY ELECTRICAL LOAD FORM
FOR THE MONTH OF JULY, 1990

| DAY | HOUR ENDING | MAXIMUM DAILY LOAD KW |
|-----|----------------|--------------------------|
| 1 | 2000 | 791,100 |
| 2 | 0500 | 789,100 |
| 3 | 0800 | 770,000 |
| 4 | 0900 | 738,900 |
| 5 | 2300 | 1,047,700 |
| 6 | 1600 | 1,315,900 |
| 7 | 1700 | 1,282,300 |
| 8 | 2300 | 1,372,600 |
| 9 | 2400 | 1,450,200 |
| 10 | 1000 | 1,515,100 |
| 11 | 1400 | 1,591,500 |
| 12 | 0400 | 1,548,400 |
| 13 | 2400 | 1,541,600 |
| 14 | 1300 | 1,580,700 |
| 15 | 1400 | 1,545,900 |
| 16 | 0100 | 1,537,900 |
| 17 | 1100 | 1,565,900 |
| 18 | 1300 | 1,567,400 |
| 19 | 1600 | 1,549,600 |
| 20 | 1200 | 1,568,900 |
| 21 | 1300 | 1,528,900 |
| 22 | 1800 | 1,490,500 |
| 23 | 1400 | 1,535,700 |
| 24 | 1600 | 1,554,300 |
| 25 | 1400 | 1,538,500 |
| 26 | 0700 | 1,534,500 |
| 27 | 0600 | 1,490,500 |
| 28 | 1600 | 1,521,100 |
| 29 | 0100 | 1,520,800 |
| 30 | 0800 | 1,494,700 |
| 31 | 2300 | 1,454,900 |

ZR16/10/13

4.0 UNIQUE REPORTING REQUIREMENTS

4.1 MAIN STEAM RELIEF VALVE OPERATIONS

Relief valve operations during the reporting period, July, 1990, are summarized in the following table. The table includes information as to which relief valve was actuated, how it was actuated, and the circumstances resulting in its actuation.

| Unit | Date | Valves Actuated | No. and Type of Actuations | Plant Conditions | Description of Events |
|------|------|-----------------|----------------------------|------------------|---|
| 2 | | | | | No Unit 2 Main Steam Relief and/or safety valve actuations occurred during this reporting period. |
| 3 | | | | | No Unit 3 Main Steam Relief and/or safety valve actuations occurred during this reporting period. |

4.2 OFF-SITE DOSE CALCULATION MANUAL (ODCM) CHANGES

No ODCM changes were reported for the month of July, 1990.

4.3 MAJOR CHANGES TO THE RADIOACTIVE WASTE TREATMENT SYSTEMS

The significant upgrade to the Dresden Radioactive Waste System is continuing and further details will be reported as they occur.

4.4 FAILED FUEL ELEMENT INDICATIONS

4.4.1 Unit 2

Dresden Unit 2 fuel performance during July, 1990 continued to show no indications of leaking fuel. This is based on the sum of the activities of the six noble gases as measured at the recombiner. Based on the reported data, Unit 2 had acceptable fuel performance.

4.4.2 Unit 3

Dresden Unit 3 fuel performance during July, 1990 continued to show no indications of leaking fuel. This is based on the sum of the activities of the six noble gases as measured at the recombiner. Based on the reported data, Unit 3 had acceptable fuel performance.

5.0 PLANT OR PROCEDURE CHANGES, TESTS, EXPERIMENTS, AND SAFETY RELATED MAINTENANCE

5.1 Amendments to Facility License or Technical Specifications

5.1.1. Unit 2 Amendment 111, Dated July 27, 1990

The NRC has approved Technical Specification Amendment #111 for Unit 2. This amendment revises the functional test surveillance interval for RPS Electrical Protection Assemblies. The current interval for functional testing is every six (6) months; the revised interval is every cold shutdown which extends for twenty-four (24) hours or longer, if not performed in the previous six (6) months.

5.1.2. Unit 3 Amendment 106, Dated July 18, 1990

The NRC has approved Technical Specification Amendment #106 for Unit 3. This amendment extends the plant license to January 12, 2011, which is ten (10) years longer than had been previously approved.

5.1.3. Unit 3 Amendment 107, Dated July 27, 1990

The NRC has approved Technical Specification Amendment #107 for Unit 3. This amendment revises the functional test surveillance interval for RPS Electrical Protection Assemblies. The current interval for functional testing is every six (6) months; the revised interval is every cold shutdown which extends for twenty-four (24) hours or longer, if not performed in the previous six (6) months.

5.2 Changes to Procedures Which are Described in the FSAR (Units 2 and 3)

Table 5.2.1, attached, summarizes the revisions to procedures described in the FSAR which were approved during the July, 1990 reporting period.

TABLE 5.2.1

CHANGES TO PROCEDURES WHICH ARE DESCRIBED IN THE FSAR (UNITS 2 AND 3) FOR JULY, 1990

| PROCEDURE TYPE | PROCEDURE NO. | PROCEDURE TITLE/DESCRIPTION | SUMMARY OF CHANGES |
|--------------------------------|---------------|--|--------------------|
| Dresden Operating Surveillance | DOS 1500-06 | LPCI System Pump Operability Test with Torus Available | 2 |

- NOTES:
1. Administrative change; intent of procedure unchanged.
 2. Changed for clarification, intent of procedure unchanged.
 3. Changed to incorporate requirements for new equipment; intent of procedure unchanged
 4. Changed to implement improved testing/calibration methodology; intent of procedure unchanged.

5.3 Significant tests and experiments not described in the FSAR (Units 2 & 3)

Significant special procedures involving tests not described in the FSAR which were approved during the month of July, 1990 are listed below.

| <u>Procedure No.</u> | <u>Procedure Title/Description</u> |
|----------------------|---|
| SP 90-06-91 | Drain Fuel Pool Filter Inlet Piping to Waste Collector Tank The purpose of this procedure was to detail the steps necessary to drain the Fuel Pool Filter Inlet Piping to the Waste Collector Tank. This procedure will remain in effect until Unit 2 & Unit 3 Fuel Pool Piping has been replaced as part of the Radwaste Upgrade Project. |

5.4 Safety Related Maintenance (Unit 2 and 3)

Safety related maintenance activities for July, 1990 are summarized in the attached tables.

5.4

RESIDUAL IT 2
SAFETY RELATED MAINTENANCE

EQUIPMENT NATURE OF MAINTENANCE NUMBER CORRECTIVE ACTION

PREVENTIVE MR 076586 N/A REPAIR LFRM

1001-22A CORRECTIVE MR 083706 REPLACED AUX CONTACTS, GREASED PLASTIC SLIDES WITH AEROSHELL

2-05-01-38-43 PREVENTIVE MR 085113 REINSTALLED NEW SS ACCUM, LUB ON THREAD CLEANED AREA

2-305-38-59 CORRECTIVE MR 085606 REPLACED ACCUM, NEW O-RINGS AND LUBED BOLTS

2-305-38-59 CORRECTIVE MR 085676 REPLACED DISC

ACCUMULATOR N-11 (50-43) PREVENTIVE MR 085905 INSTALLED NEW ACCUMULATION WITH CARTRIDGE TOOL - APPLIED THIN FILM OF APPROVED O-RING LUBRICANT TO NEW O-RINGS

0750-10 CORRECTIVE MR 085906 CLEANED CONNECTORS

2-230-28 CORRECTIVE MR 086072 INSTALLED EXTERNAL AIR SUPPLY TO STROKE VALVE

2-2301-31 PREVENTIVE MR 087964 LOOSENED STEM LOCKNUT AND ADJUSTED STROKE OF VALVE ONE FULL TURN TO EXTEND STROKE. RETIGHTENED STEM LOCKNUT

2-2301-31 CORRECTIVE MR 087980 PERFORMED DIS-700-3

UNITS UNIT 2
 SAFETY RELAY MAINTENANCE
 MALFUNCTION
 CAUSE

ADJUSTED LIMITS AND TESTED FOR PROPER LIGHT INDICATION

N/A

CORRECTIVE MR D88781

2-2499-1A
 D/W H2/O2 MONITOR INLET VALVE

ION CHAMBER POWER SUPPLY WAS REPLACED

N/A

CORRECTIVE MR D89578

2-2500-2
 UNIT 2 50 VLEC CHARGER

INSTALLED RAYCHEM SPLICES IN JUNCTION BOXES

N/A

CORRECTIVE MR D89781

2-2500-5
 TOPUS MAIN RANGE LEVEL IND

REPLACED CHIPPED SECONDARY DISCONNECT ON BREAKER, BOTH SIDES.

N/A

PREVENTIVE MR D90308

2-2500-5
 UNIT 2 50 VLEC CHARGER

REPLACED ION CHAMBER POWER SUPPLY

N/A

CORRECTIVE MR D91013

2-2500-5
 UNIT 2 50 VLEC CHARGER

REPLACED METER WITH NEW METER

N/A

CORRECTIVE MR D91503

2-2500-5
 UNIT 2 50 VLEC CHARGER

REPLACED THE POTENTIOMETER FOR THE FLOAT ADJUSTMENT ON THE UNIT 2 250 U BATTERY CHARGER

N/A

CORRECTIVE MR D91719

2-2500-5
 UNIT 2 50 VLEC CHARGER

ADJUSTED BREAKER CONTROL HANDLES

N/A

CORRECTIVE MR D91778

2-2500-5
 UNIT 2 50 VLEC CHARGER

RAN PLATEAUS ON DETECTORS

N/A

PREVENTIVE MR D93509

2-700-24-25A
 KMIL LPRM DETECTORS

ADJUSTED PACKING TO OBTAIN PROPER SHAFT LEAKAGE.

N/A

CORRECTIVE MR D94074

2-700-24-25A
 KMIL LPRM DETECTORS

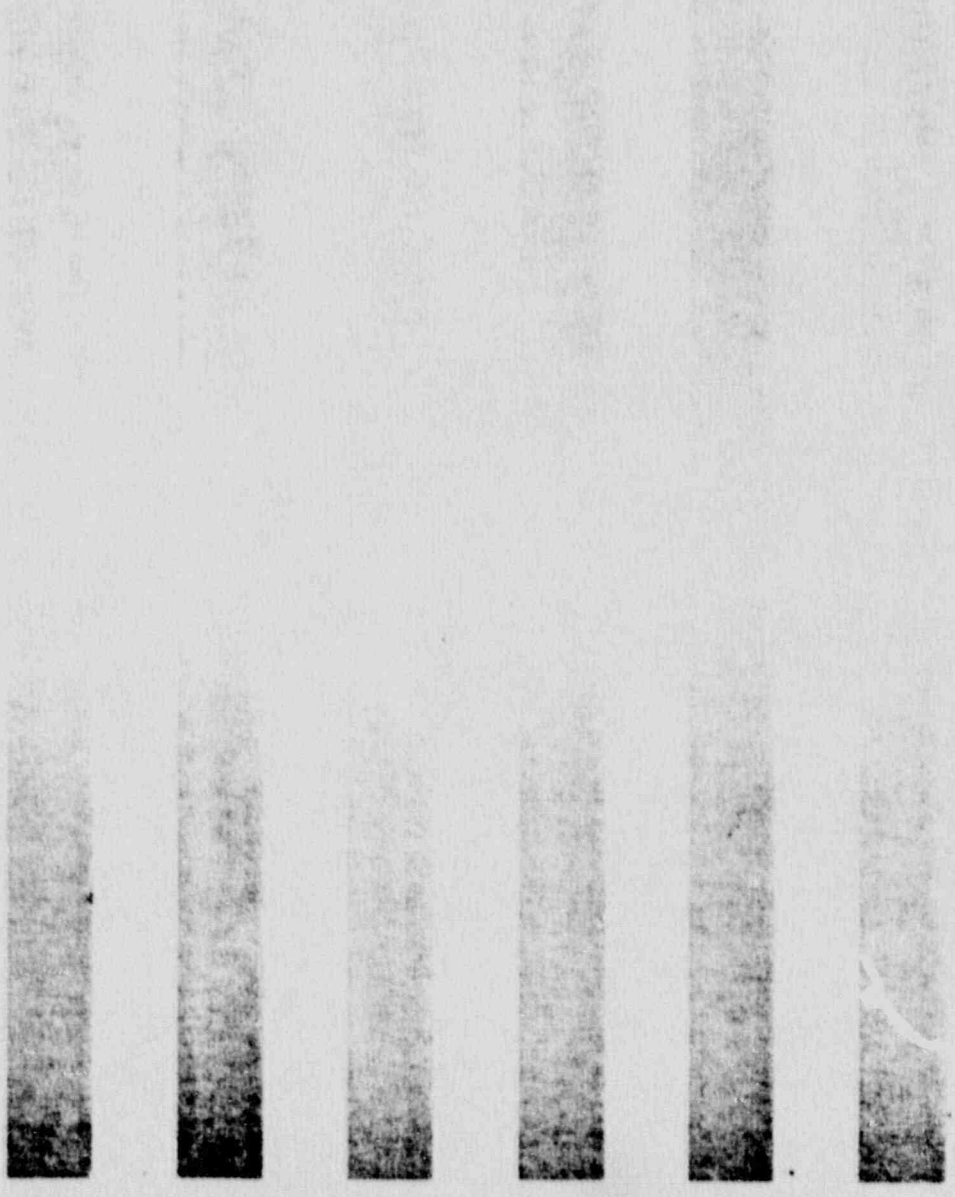
SAFETY RELATED WORK SHEET

| EQ. CAT | NATURE OF MAINTENANCE | LER OR BRIDGE NUMBER | F | TRIP RESULT | CORRECTIVE ACTION |
|--|-------------------------|----------------------|-----|-------------|---|
| 3-1016 CONTROL ROD DRIVE | CORRECTIVE MR D74897 | N/A | --- | --- | REPLACED CRD AND RESULT |
| LI3-1626 TURBOS-N.R. LEVEL TRANSMITTER TESTS | CORRECTIVE MR D84768 | N/A | --- | --- | REPLACED AMPLIFIER AND CALIBRATIONS BRARDS AND RECALIBRATED TRANSMITTER |
| 3-5741-3B REACTOR BUILDING VENT INLET DAMPER | CORRECTIVE MR D87366 | N/A | --- | --- | REBUILT VERSA VALVE AND CYLINDER |
| 3-11020 3-11020 PUMP OIL SIGHT GLASS | CORRECTIVE MR D90044 | N/A | --- | --- | INSTALLED NEW SIGHT GAUGE |
| VALVE MD3-1001-2B | CORRECTIVE MR D90256 | N/A | --- | --- | ADJUSTED PACKING, STROKED VALVE AND LUBED STEM |
| 3-1001-44C C.P. Pump | CORRECTIVE MR D90410 | N/A | --- | --- | ADJUSTED PACKING, STROKED VALVE AND LUBED STEM |
| 2/3-03 ACC H.C.U. EAST BANK ANCHOR BOLTS | PREVENTIVE MR D92031 | N/A | --- | --- | REFPACKED AND ADJUSTED PUMP |
| 2/3-03ACC HCU WEST BANK ANCHOR BOLTS | PREVENTIVE MR D92032 | N/A | --- | --- | TORQUED ALL ANCHOR BOLTS |
| 3-252-394D 480V BREAKER ON BUS 39 RESERVE FEED TO MCC 26-4 | PREVENTIVE MR D92785 | N/A | --- | --- | TESTED OVERCURRENT TRIP DEVICES, FOUND TO BE OK |

Safety Related Worksheet

| EQ. ENT | NATURE OF MAINTENANCE | LER OR OUTAGE NUMBER | CAUSE | INITIAL RESULT | CORRECTIVE ACTION |
|---------------------------------------|-------------------------|----------------------|-------|----------------|--|
| 3-21-21 HIGH FLOW ISOLATION SWITCH | CORRECTIVE MR D93135 | N/A | | | REPLACED INDICATING SWITCH MOVEMENT AND CALIBRATED |

| | | | | | |
|-----------------------|-------------------------|-----|--|--|---|
| FI3-2358 HCCI FLOW | CORRECTIVE MR D93448 | N/A | | | REPLACED AMPLIFIER BOARD AND CALIBRATED TRANSMITTER AND SQUARE WAVE CONVERTER |
|-----------------------|-------------------------|-----|--|--|---|



5.5 Completed Safety Related Modifications (Units 2 and 3)

Unit 2 and Unit 3 safety related modification packages closed during the month of July, 1990 are listed below. Only modifications which have been completely closed are listed; modifications which are authorized for use but not completely closed will be reported based on the date of their final closure. For ease of reference, the changes have been identified by their design change control modification number.

| <u>Modification No.</u> | <u>Description</u> |
|-------------------------|---|
| M12-3-85-83 | <p>Replace Existing 250V Batteries & Battery Rack</p> <p>This modification was performed to replace the existing 250V DC batteries with 116 cell lead calcium batteries and replace the existing rack with a specifically designed, seismic qualified battery rack. This was accomplished to provide sufficient DC power for the worst case accident profile, and to provide the required seismic qualification, thus assuring operability of the batteries. The safety evaluation concluded that the margin of safety remains unchanged.</p> |
| M12-2/3-86-07 | <p>Extend Existing Sewage Lift Station's Discharge Piping</p> <p>This modification was performed to add a short extension to the existing sewage Lift Station discharge piping and the installation of valve with indicator posts on this extension and in the existing piping. This was accomplished to enable operators to direct raw sewage to either the upgraded unit or to the existing unit.</p> <p>The safety evaluation concluded that safety as defined in the Technical Specification basis is not affected.</p> |

5.6 Temporary System Alterations (Unit 2 and Unit 3) installed during July, 1990

A "Temporary System Alteration" refers to electrical jumpers, lifted leads, removed fuses, fuses turned to non-conducting position, fuses moved from normal to reserve holder, temporary power supplies, test switches in alternate positions, temporary blank flanges, and spool pieces. Alterations controlled and documented as part of a routine out-of-service or other procedure, alterations which are a normal feature of system design, and hoses installed as part of a venting or draining process are not included.

5.6.1 Unit 2

| Temporary System Alteration No. | Description | Installation Date | Removal Date |
|---------------------------------|---|-------------------|--------------|
| II-15-90 | The purpose of this alteration was to disable the 4 (four) smoke detectors located in the intake plenum of east turbine building ventilation system. The four detectors were disabled by lifting the common lead from the detectors to the relay pending completion of repairs. | 7/3/90 | ---- |
| II-17-90 | This alteration involves using a service air hose to supply Radwaste from the Unit 3 Turbine Building. Normal service air supply pipe 4610-4" is isolated for replacement. The air station hose is strung overhead to prevent damage from area work activity. | 7/11/90 | ---- |

5.6.2 Unit 3

| Temporary System Alteration No. | Description | Installation Date | Removal Date |
|---------------------------------|---|-------------------|--------------|
| III-16-90 | This alteration allows for the addition of a supplemental sample pump which allows taking the Tech. Spec. daily required containment samples. The sample pump is connected beyond the primary containment isolation valve boundary. | 7/3/90 | ---- |

5.6.2

Unit 3

| <u>Temporary System Alteration No.</u> | <u>Description</u> | <u>Installation Date</u> | <u>Removal Date</u> |
|--|---|------------------------------|-------------------------|
| III-17-90 | This alteration permits the operation of the SDC System with a failed thermocouple in the A recirculation loop. The failed thermocouple provides a spurious isolation signal to SDC. The isolation is intended to prevent damage to the SDC Heat Exchanger if the recirculation loop temp. exceeds 350 degrees F. The B recirculation loop thermocouple is operable and capable of isolating SDC. | 7/3/90 | 10/1/90 |