GCT-91-16

November 5, 1991

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

SUBJECT: Quad Cities Nuclear Station Units 1 and 2
Monthly Performance Report
NRC Docket Nos. 50-254 and 50-265

Enclosed for your information is the Monthly Performance Report covering the operation of Quad-Cities Nuclear Power Station, Units One and Two, during the month of October 1991.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

G. C. Tietz
Technical Superintendent

GCT/CALS/dak

Enclosure

cc: A. B. Davis, Regional Administrator
T. Taylor, Senior Resident Inspector



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QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

OCTOBER 1991

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS & ELECTRIC COMPANY

NRC DOCKET NOS. 50-254 AND 50-265

LICENSE NOS. DPR-29 AND DPR-30

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# I. INTRODUCTION

Quad-Cities Nuclear Power Station is composed of two Boiling Water Reactors, each with a Maximum Dependable Capacity of 769 MWe Net, located in Cordova, Illinois. The Station is jointly owned by Commonwealth Edison Company and Iowa-Illinois Gas & Electric Company. The Nuclear Steam Supply Systems are General Electric Company Boiling Water Reactors. The Architect/Engineer was Sargent & Lundy, Incorporated, and the primary construction contractor was United Engineers & Constructors. The Mississippi River is the condenser cooling water source. The plant is subject to license numbers DPR-29 and DPR-30, issued October 1, 1971, and March 2i, 1972, respectively; pursuant to Docket Numbers 50-254 and 50-265. The date of initial Reactor criticalities for Units One and Two, respectively were October 18, 1971, and April 26, 1972. Commercial generation of power began on February 18, 1973 for Unit One and March 10, 1973 for unit Two.

This report was compiled by Cynthia A. Losek-Short and Debra Kelley, telephone number 309-654-2241, extensions 2938 and 2240.

## II. SUMMARY OF OPERATING EXPERIENCE

### A. Unit One

Unit One began the month of October operating at full power. Load drops occurred on the 9th and 11th as requested by Chicago Load Dispatch. Load drops occurring on the 1st and the 15th were for Weekly turbine testing. Other load drops occurring in the month of October were on the 4th, 12th, 22nd, 26th and the 29th. These load drops were for the 1C2 Extraction Steam Valve work, RCIC/HPCI Monthly Vent. Verification, Turbine Generator Monthly testing, ERV Surveillance, and for Main Turbine Thrust Wear Detector work, respectively.

### B. Unit Two

Unit Two continued to be shutdown due to a MSIV failure which occurred the previous month. The unit went critical on 10/8/91 at 0020 and the generator went back on line the same day at 1410 hours. Load drops that occurred on the 21st and the 28th were both for 2C3 Heater LCV work.

## III. PLANT OR PROCEDURE CHANGES, TESTS, EXPERIMENTS, AND SAFETY RELATED MAINTENANCE

### A. Amendments to Facility License or Technical Specifications

Technical Specification Amendments No. 132 and No. 127 were issued on September 25, 1991 to Facility Operating Licenses DPR-29 and DPR-30, respectively, for Quad Cities Nuclear Power Station. This amendment revises the Technical Specification to reflect the changes relative to pressure/temperature operating limits for both Quad-Cities units.

### B. Facility or Procedure Changes Requiring NRC Approval

There were no Facility or Procedure changes requiring NRC approval for the reporting period.

### C. Tests and Experiments Requiring NRC Approval

There were no Tests or Experiments requiring NRC approval for the reporting period.

### D. Corrective Maintenance of Safety Related Equipment

The following represents a tabular summary of the major safety related maintenance performed on Units One and Two during the reporting period. This summary includes the following: Work Request Numbers, Licensee Event Report Numbers, Components, Cause of Malfunctions, Results and Effects on Safe Operation, and Action Taken to Prevent Repetition.

## UNIT 1 MAINTENANCE SUMMARY

| WORK REQUEST | SYSTEM | EID DESCRIPTION | WORK PERFORMED |
|---|---|---|---|
| Q96187 | 7502 | Replace the Pre-Hepa filter on the "A" Standby Gas Treatment train. | As Found: Hold down clamps were slightly loose and filters were dirty. As Left: Installed four filters, and tightened all hold down clamps. |
| Q95371 | 7541 | Repair "A" Standby Gas Treatment Heater doesn't trip off on low flow as it should. | As Found: Set point change was needed. As Left: Calibrated and adjusted set point. |
| Q95967 | 0590 | Received Channel 5 half scram due to LPRM spike on APRM #5. Relay 590-100D problem. | As Found: It appears to look like there was a voltage drop across a coil, caused by the contacts for discharge volume Hi Level. Found the 1-302-82H switch to be chattering excessively. As Left: Replaced chattering switch with new switch and performed QIS 25-1. |
| Q95964 | 0750 | Repair U1 IRM 12, which is broken and keeps blowing fuses. | As Found: Indication was downscale with no chassis light. As Left: Replaced test fuse with approved 3/4 amp slow blow and installed new pre regulator from stores and adjusted voltages. |
| Q73104 | 0756 | Repair LPRM which drifts high and cannot be calibrated. | Ran TDR traces, also cleaned connectors checked card ok. |
| Q95146 | 1053 | Replace test fitting on RHR Pressure Switches which stripped out. | As Found: Found the test fittings for pressure switches 1-1053E, 1-1053F and 1-1053J stripped out. As Left: Replaced the test fittings and caps for pressure switches 1-1053E, 1053F and 1053J while performing QIS 22-2. |
| Q92334 | 2402 | Replace PCV-2 pressure regulator on hydrogen analyzer reagent gas line. | As Found: Out of service Regulator #2 and Flow Indicator #2 to be replaced. As Left: Replaced Flow Indicator #2 and Regulator #2. |

## UNIT 2 MAINTENANCE SUMMARY

| WORK REQUEST | SYSTEM | EID DESCRIPTION | WORK PERFORMED |
|---|---|---|---|
| Q95324 | 0203 | Inspect and repair 2-0203-1B Main Steam Isolation valves. | As Found: Visual examination of internals following bonnet removal showed the following: the disc nuts and nut locks were located at the bottom of the disc; the stem had separated from the main disc. As Left: Installed limit switches and hardware 2B had a bent arm on switch. All valve internals were replaced and the valve was reassembled with new packing and gasket. |
| Q95773 | 0203 | Investigate and repair U2 1B MSIV limit switches which didn't give 1/2 scram signal when fuse was removed. | As Found: The 2B limit switch arm was bent. As Left: Replaced 2B limit switch arm with new and adjusted plate and limit switch arms for 10%, made sure 1A limit switch picked up before 2B did. |
| Q95685 | 0203 | Investigate problems with U2 2B Outboard MSIV actuator. | As Found: Actuator had worn parts, with dry and dirty o-rings. As Left: Parts were cleaned and lubricated then reassembled and installed. |
| Q95325 | 0203 | Inspect and repair U2 2B Main Steam Isolation valve. | As Found: Found outside of valve to be in good condition and #3 lock tap is loose approximately 1/8" of washer. All locking tabs were locked in place properly. As Left: Disassembled and reassembled valve for inspection. Also locked all eight new lock tabs down in the proper order to retain nut movement. |
| Q95684 | 0203 | Investigate problems with 2C outboard MSIV actuator. | As Found: Actuator had worn parts, with dry and dirty o-rings. As Left: Parts were cleaned and lubricated then reassembled and installed. |

## UNIT 2 MAINTENANCE SUMMARY

| WORK REQUEST | SYSTEM | EID DESCRIPTION | WORK PERFORMED |
|---|---|---|---|
| Q95630 | 0203 | Replace Electromatic R.V. pilot valve 2-203-3C. | As Found: Found the pilot bushing to be hitting on the pilot bracket while trying to operate. This would make the pilot want to stick. As Left: Cleaned the valve body internals, also installed new flex gasket and new rebuilt pilot valve. Rotated bracket assembly 180 degrees from original location and the bracket went on easier. Operated the valve to see if any binding was present none was evident. |
| Q95774 | 0220 | Repair breaker for steam line drain valve. | As Found: The control power transformer was found burnt up. As Left: Installed new transformer and taped connectors. |
| Q95785 | 0312 | Investigate and repair U2 CRD HCV 46-55 has high water leakage and cannot be drained down. | As Found: Accumulator was leaking. As Left: Changed out accumulator with new one. |
| Q95771 | 0312 | Repair U2 Control Rod 18-39 which drifts in past 00, suspect leaking scram inlet valve. | As Found: Scram inlet valve was leaking by seat. As Left: Adjusted seating pressure for valve and checked spring tension which was ok. |
| Q94004 | 2252 | Investigate and repair O2 monitor which won't span to the 7 percent calibration gas. | As Found: O2 span was low and found leaky needle valve. As Left: Repaired needle valve and swapped Hydrogen 2 amplifier circuit board with one from 2A Drywell H2O2 Analyzer. |
| Q95981 | 2303 | Investigate and repair U2 HPCI gland seal hotwell pump which cycles on and off when in auto. | As Found: Found mercury bulb had fallen out of clip and was hanging by wires from terminal block. As Left: Put mercury bulb back into clip and glued into place with insulating varnish. Checked for operability pump passed. |
| Q95871 | 4641 | There was an air leak between receiver tank and pressure switch 2-4611-42A's isolation valve. Replace fitting. | As Found: There was air leaking by at fitting on line between receiver tank and pressure switch. As Left: Removed damaged tubing and fitting. Tubing was broken off in male connector due to repeated tightening on the stripped threads of the connector. Also replaced the connector when making up the new tubing. |

## IV. LICENSEE EVENT REPORTS

The following is a tabular summary of all licensee event reports for Quad-Cities Units One and Two occurring during the reporting period, pursuant to the reportable occurrence reporting requirements as set forth in sections 6.6.B.1 and 6.6.B.2 of the Technical Specifications.

### UNIT 1

| Licensee Event Report Number | Date | Title of Occurrence |
|---|---|---|
| 91-019 | 10/05/91 | Control Room HVAC Inop due to improper Equipment Configuration and partially fouled HEPA filters. |
| 91-020 | 09/19/91 | Missed Tech Spec Surveillance for Recombiner Outlet Temperature/Rx Power. |
| 91-021 | 10/25/91 | RCIC Inop from exceeding IST Max Flow Rate. |

### UNIT 2

| | | |
|---|---|---|
| 91-011* | 09/18/91 | 2A Core Spray & RCIC declared Inop because floor drain check valves failed test. This was cancelled this month. |
| 91-011 | 10/15/91 | HPCI Inop from Gland Hotwell Dump Cycling On and Off. |
| 91-012 | 10/07/91 | Manual (Full) Rx Scram from 3C Electromatic Relief Valve Opening. |

* 91-011 Report for the Month of September has been cancelled.

## V. DATA TABULATIONS

The following data tabulations are presented in this report:

A. Operating Data Report

B. Average Daily Unit Power Level

C. Unit Shutdowns and Power Reductions

## APPENDIX C

## OPERATING DATA REPORT

DOCKET NO. 50-254

UNIT One

DATE 11/4/91

COMPLETED BY Cynthia Losek-Short

TELEPHONE 309-654-2241

**OPERATING STATUS**

1. REPORTING PERIOD: 0000 100191 / 2400 103191 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2511 MAX. DEPEND. CAPACITY (MWe-Net): 769
   DESIGN ELECTRICAL RATING (MWe-Net): 789
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MWe-Net): N/A
4. REASONS FOR RESTRICTION (IF ANY):

| | THIS MONTH | YR TO DATE | CUMULATIVE |
|---|---|---|---|
| 5. NUMBER OF HOURS REACTOR WAS CRITICAL | 744.0 | 3731.0 | 135212.9 |
| 6. REACTOR RESERVE SHUTDOWN HOURS | 0.0 | 0.0 | 3421.9 |
| 7. HOURS GENERATOR ON LINE | 744.0 | 3604.3 | 130973.6 |
| 8. UNIT RESERVE SHUTDOWN HOURS | 0.0 | 0.0 | 909.2 |
| 9. GROSS THERMAL ENERGY GENERATED (MWH) | 1799093.0 | 8386140.0 | 281117580.0 |
| 10. GROSS ELECTRICAL ENERGY GENERATED (MWH) | 590626.0 | 2717923.0 | 91111777.0 |
| 11. NET ELECTRICAL ENERGY GENERATED (MWH) | 570519.0 | 2606408.0 | 85780649.0 |
| 12. REACTOR SERVICE FACTOR | 100.0 | 51.1 | 78.9 |
| 13. REACTOR AVAILABILITY FACTOR | 100.0 | 51.1 | 80.9 |
| 14. UNIT SERVICE FACTOR | 100.0 | 49.4 | 76.4 |
| 15. UNIT AVAILABILITY FACTOR | 100.0 | 49.4 | 76.9 |
| 16. UNIT CAPACITY FACTOR (Using MDC) | 98.1 | 46.5 | 65.1 |
| 17. UNIT CAPACITY FACTOR (Using Design MWe) | 95.6 | 45.3 | 63.4 |
| 18. UNIT FORCED OUTAGE RATE | 0.0 | 18.7 | 5.6 |

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

20. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):

| | FORECAST | ACHIEVED |
|---|---|---|
| INITIAL CRITICALITY | | |
| INITIAL ELECTRICITY | | |
| COMMERCIAL OPERATION | | |

## APPENDIX C

## OPERATING DATA REPORT

DOCKET NO. 50-265

UNIT Two

DATE 11/4/91

COMPLETED BY Cynthia Losek-Short

TELEPHONE 309-654-2241

**OPERATING STATUS**

1. REPORTING PERIOD: 0000 2400 100191 103191 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2511 MAX. DEPEND. CAPACITY (MWe-Net): 769
   DESIGN ELECTRICAL RATING (MWe-Net): 789
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MWe-Net): N/A
4. REASONS FOR RESTRICTION (IF ANY):

| | THIS MONTH | YR TO DATE | CUMULATIVE |
|---|---|---|---|
| 5. NUMBER OF HOURS REACTOR WAS CRITICAL | 575.7 | 6329.5 | 132018.7 |
| 6. REACTOR RESERVE SHUTDOWN HOURS | 0.0 | 0.0 | 2985.8 |
| 7. HOURS GENERATOR ON LINE | 561.9 | 6267.9 | 128554.9 |
| 8. UNIT RESERVE SHUTDOWN HOURS | 0.0 | 0.0 | 702.9 |
| 9. GROSS THERMAL ENERGY GENERATED (MWH) | 1135637.0 | 14325186.0 | 277556507.0 |
| 10. GROSS ELECTRICAL ENERGY GENERATED (MWH) | 371425.0 | 4641787.0 | 89102994.0 |
| 11. NET ELECTRICAL ENERGY GENERATED (MWH) | 358528.0 | 4487596.0 | 84318148.0 |
| 12. REACTOR SERVICE FACTOR | 77.4 | 86.8 | 77.7 |
| 13. REACTOR AVAILABILITY FACTOR | 77.4 | 86.8 | 79.5 |
| 14. UNIT SERVICE FACTOR | 75.5 | 85.9 | 75.7 |
| 15. UNIT AVAILABILITY FACTOR | 75.5 | 85.9 | 76.1 |
| 16. UNIT CAPACITY FACTOR (Using MDC) | 52.3 | 80.0 | 64.6 |
| 17. UNIT CAPACITY FACTOR (Using Design MWe) | 51.3 | 78.0 | 62.9 |
| 18. UNIT FORCED OUTAGE RATE | 23.0 | 11.8 | 8.1 |

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

20. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: _____

21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):

| | FORECAST | ACHIEVED |
|---|---|---|
| INITIAL CRITICALITY | _____ | _____ |
| INITIAL ELECTRICITY | _____ | _____ |
| COMMERCIAL OPERATION | _____ | _____ |

* CORRECTION FOR AUGUST 1991

# APPENDIX C

## OPERATING DATA REPORT

DOCKET NO. 50-265

UNIT Two

DATE 9/3/91

COMPLETED BY Cynthia Losek-Short

TELEPHONE 309-654-2241

OPERATING STATUS

1. REPORTING PERIOD: 50000 080191 / 52400 083191 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2511 MAX. DEPEND. CAPACITY (MWe-Net): 769
   DESIGN ELECTRICAL RATING (MWe-Net): 789
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MWe-Net): N/A
4. REASONS FOR RESTRICTION (IF ANY):

| | THIS MONTH | YR TO DATE | CUMULATIVE |
|---|---|---|---|
| 5. NUMBER OF HOURS REACTOR WAS CRITICAL | 744.0 | 5316.6 | 131005.8 |
| 6. REACTOR RESERVE SHUTDOWN HOURS | 0.0 | 0.0 | 2985.8 |
| 7. HOURS GENERATOR ON LINE | 744.0 | 5268.8 | 127555.8 |
| 8. UNIT RESERVE SHUTDOWN HOURS | 0.0 | 0.0 | 702.9 |
| 9. GROSS THERMAL ENERGY GENERATED (MWH) | 1728727.0 | 12235885.0 | 275467206.0 |
| * 10. GROSS ELECTRICAL ENERGY GENERATED (MWH) | 558938.0 | 3960947.0 | 88422154.0 |
| 11. NET ELECTRICAL ENERGY GENERATED (MWH) | 540179.0 | 3831940.0 | 83662492.0 |
| 12. REACTOR SERVICE FACTOR | 100.0 | 91.2 | 77.8 |
| 13. REACTOR AVAILABILITY FACTOR | 100.0 | 91.2 | 79.6 |
| 14. UNIT SERVICE FACTOR | 100.0 | 90.3 | 75.8 |
| 15. UNIT AVAILABILITY FACTOR | 100.0 | 90.3 | 76.2 |
| 16. UNIT CAPACITY FACTOR (Using MDC) | 94.5 | 85.4 | 64.6 |
| 17. UNIT CAPACITY FACTOR (Using Design MWe) | 92.1 | 83.3 | 63.0 |
| 18. UNIT FORCED OUTAGE RATE | 0.0 | 9.2 | 7.9 |

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

20. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: _____

21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):

| | FORECAST | ACHIEVED |
|---|---|---|
| INITIAL CRITICALITY | _____ | _____ |
| INITIAL ELECTRICITY | _____ | _____ |
| COMMERCIAL OPERATION | _____ | _____ |

# APPENDIX B
## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-254
UNIT One
DATE 11/4/91
COMPLETED BY Cynthia Losek-Sho
TELEPHONE 309-654-2241

MONTH October 1991

| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) | DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) |
|---|---|---|---|
| 1 | 803 | 17 | 800 |
| 2 | 769 | 18 | 800 |
| 3 | 804 | 19 | 801 |
| 4 | 799 | 20 | 799 |
| 5 | 517 | 21 | 796 |
| 6 | 804 | 22 | 752 |
| 7 | 805 | 23 | 671 |
| 8 | 800 | 24 | 798 |
| 9 | 758 | 25 | 798 |
| 10 | 800 | 26 | 798 |
| 11 | 760 | 27 | 702 |
| 12 | 615 | 28 | 787 |
| 13 | 798 | 29 | 759 |
| 14 | 798 | 30 | 696 |
| 15 | 792 | 31 | 787 |
| 16 | 785 | | |

### INSTRUCTIONS

On this form, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

These figures will be used to plot a graph for each reporting month. Note that when maximum dependable capacity is used for the net electrical rating of the unit, there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases, the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

# APPENDIX B
## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-265
UNIT Two
DATE 11-4-91
COMPLETED BY Cynthia Losek-Shor
TELEPHONE 309-654-2241

MONTH October 1991

| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) | DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) |
|---|---|---|---|
| 1 | -7 | 17 | 646 |
| 2 | -7 | 18 | 644 |
| 3 | -7 | 19 | 641 |
| 4 | -7 | 20 | 642 |
| 5 | -7 | 21 | 650 |
| 6 | -7 | 22 | 633 |
| 7 | -7 | 23 | 662 |
| 8 | 59 | 24 | 554 |
| 9 | 544 | 25 | 613 |
| 10 | 745 | 26 | 601 |
| 11 | 707 | 27 | 616 |
| 12 | 654 | 28 | 621 |
| 13 | 656 | 29 | 616 |
| 14 | 703 | 30 | 652 |
| 15 | 687 | 31 | 642 |
| 16 | 654 | | |

### INSTRUCTIONS

On this form, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

These figures will be used to plot a graph for each reporting month. Note that when maximum dependable capacity is used for the net electrical rating of the unit, there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases, the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-254

UNIT NAME One

DATE November 4, 1991

REPORT MONTH October, 1991

COMPLETED BY Cynthia A. Losek-Short

TELEPHONE 309-654-2241

| NO. | DATE | TYPE F OR S | DURATION (HOURS) | REASON | METHOD OF SHUTTING DOWN REACTOR | LICENSEE EVENT REPORT NO. | SYSTEM CODE | COMPONENT CODE | CORRECTIVE ACTIONS/COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 91-10 | 100291 | S | 4.9 | B | 5 | - - - - | - - | - - - - | Load Reduction for Weekly Turbine Test |
| 91-11 | 100491 | F | 11.9 | A | 5 | - - - - | - - | - - - - | Load Reduction for JC2 Extraction Steam Valve Work |
| 91-12 | 101191 | S | 5.0 | B | 5 | - - - - | - - | - - - - | HPCI/RCIC Monthly Vent Verificaiton |
| 91-13 | 101591 | S | 2.8 | B | 5 | - - - - | - - | - - - - | Load Reduction for Weekly Turbine Test |
| 91-14 | 102291 | S | 6.1 | B | 5 | - - - - | - - | - - - - | Load Reduction for Montly Turbine Generator Test |
| 91-15 | 102691 | S | 5.3 | B | 5 | - - - - | - - | - - - - | Load Reduction for ERV Surveillance |
| 91-16 | 102991 | S | 6.2 | B | 5 | - - - - | - - | - - - - | Load Reduction for Main Turbine Thrust Wear Detector Work |

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-265

UNIT NAME Two

COMPLETED BY Cynthia A. Losek-Short

DATE November 4, 1991

REPORT MONTH October 1991

TELEPHONE 309-654-2241

| NO. | DATE | TYPE F OR S | DURATION (HOURS) | REASON | METHOD OF SHUTTING DOWN REACTOR | LICENSEE EVENT REPORT NO. | SYSTEM CODE | COMPONENT CODE | CORRECTIVE ACTIONS/COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 91-29 | 102191 | S | 8.8 | B | 5 | - - - - - | - - | - - - - | Load Drop for 2C3 Heater LCV Work |
| 91-30 | 102891 | S | 8.7 | B | 5 | - - - - - | - - | - - - - | Load Drop for 2C3 Heater LCV Work |

CORRECTION FOR SEPTEMBER 1991

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-265

UNIT NAME Two

COMPLETED BY Cynthia A. Losek-Short

DATE October 3, 1991

REPORT MONTH September 1991

TELEPHONE 309-654-2241

| NO. | DATE | TYPE F OR S | DURATION (HOURS) | REASON | METHOD OF SHUTTING DOWN REACTOR | LICENSEE EVENT REPORT NO. | SYSTEM CODE | COMPONENT CODE | CORRECTIVE ACTIONS COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 91-28 | 910919 | F | 282.8 | A | 2 | - - - | - - | - - - - - | Unit Shutdown Due to Inboard MSIV Failing Closed |

## VI. UNIQUE REPORTING REQUIREMENTS

The following items are included in this report based on prior commitments to the commission:

A. Main Steam Relief Valve Operations

Relief valve operations during the reporting period 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: One

Date: October 27, 1991

| Valves Actuated | No. & Type of Actuation |
|---|---|
| 1-203-3A | 1 Marual |
| 1-203-3B | 1 Manual |
| 1-203-3C | 1 Manual |
| 1-203-3D | 1 Manual |
| 1-203-3E | 1 Manual |

Plant Conditions: Reactor Pressure - 955.5 PSIG

Description of Events: Operating Surveillance, QCOS-203-3, Main Steam Relief Valve Operability Test. Valve 1-203-3B did not open, that valve will be retested at a later date.

Unit: Two

Date: October 7, 1991

Valve Actuated: 2-203-3C

No. & Type of Actuation: 1 Automatic

Plant Conditions: Reactor Pressure - 63 psig, Start Up Mode

Description of Events: While starting up Unit Two, per QGP 1-1, the 3C ERV came open inadvertently.

Unit: Two

Date: October 8, 1991

| Valves Actuated: | No. & Type of Actuation: |
|---|---|
| 2-203-3A | 1 Manual |
| 2-203-3B | 1 Manual |
| 2-203-3C | 1 Manual |
| 2-203-3D | 1 Manual |
| 2-203-3E | 1 Manual |

Plant Conditions: Reactor Pressure - about 900 psig

Description of Events: Operating Surveillance, QCOS-203-3, Main Steam Relief Valve Operability Test

B. Control Rod Drive Scram Timing Data for Units One and Two

The basis for reporting this data to the Nuclear Regulatory Commission are specified in the surveillance requirements of Technical Specifications 4.3.C.1 and 4.3.C.2.

The following table is a complete summary of Units One and Two Control Rod Drive Scram Timing for the reporting period. All scram timing was performed with reactor pressure greater than 800 PSIG.

RESULTS OF SCRAM TIMING MEASUREMENTS
PERFORMED ON UNIT 1 & 2 CONTROL
ROD DRIVES, FROM 1-1-91 TO 12/31/91

| DATE | NUMBER OF RODS | AVERAGE TIME IN SECONDS AT % INSERTED FROM FULLY WITHDRAWN | | | | MAX. TIME FOR 90% INSERTION | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| | | 5 | 20 | 50 | 90 | | Technical Specification 3.3.C.1 & 3.3.C.2 (Average Scram Insertion Time) |
| | | 0.375 | 0.900 | 2.00 | 3.5 | 7 sec. | |
| 1-30-91 | 1 | 0.28 | 0.63 | 1.37 | 2.45 | H-7 (2.45) | U2 scram timing for accumulator replacement on H-7 |
| 1-30-91 | 1 | 0.30 | 0.72 | 1.53 | 2.67 | F-6 (2.67) | U2 scram timing for accumulator replacement on F-6 |
| 4-30-91 | 22/177 | 0.29 | 0.67 | 1.46 | 2.57 | H-11 (3.0) | U1, Hot Scram Timing during Start Up Sequence A&B, Cycle 12 (Paritial) |
| 5-2-91 | 177 | 0.29 | 0.67 | 1.44 | 2.55 | R-10 (3.27) | U1 Start Up Scram Timing Begin Cycle 12 |
| 5-5-91 | 89 | 0.31 | 0.68 | 1.43 | 2.51 | B-4 (2.84) | U2 Scram Timing For Sequence A |
| 5-6-91 | 1 | 0.26 | 0.62 | 1.40 | 2.52 | E-12 (2.52) | U1 Scram Timing for WR on Scram Light |
| 7-12-91 | 4 | 0.27 | 0.62 | 1.35 | 2.38 | N-12 (2.42) | U1 Work Requests for Accumulator Replacement |
| 7-17-91 | 1 | 0.28 | 0.62 | 1.32 | 2.32 | R-6 (2.32) | U2 Scram Outlet Failure |
| 10-8-91 | 2 | 0.32 | 0.70 | 1.5 | 2.72 | E-10 (2.89) | U2 for WR Accumulator/Scram Valve |

scrmtim

## VII. REFUELING INFORMATION

The following information about future reloads at Quad-Cities Station was requested in a January 26, 1978, licensing memorandum (78-24) from D. E. O'Brien to C. Reed, et al., titled "Dresden, Quad-Cities and Zion Station--NRC Request for Refueling Information", dated January 18, 1978.

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# QUAD CITIES REFUELING INFORMATION REQUEST

1. Unit: Q1 Reload: 11 Cycle: 12

2. Scheduled date for next refueling shutdown: 9-5-92

3. Scheduled date for restart following refueling: 12-5-92

4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment:

   NOT AS YET DETERMINED.

5. Scheduled date(s) for submitting proposed licensing action and supporting information:

   NOT AS YET DETERMINED.

6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:

   NONE AT PRESENT TIME.

7. The number of fuel assemblies.

   a. Number of assemblies in core: 724

   b. Number of assemblies in spent fuel pool: 1405

8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned in number of fuel assemblies:

   a. Licensed storage capacity for spent fuel: 3657

   b. Planned increase in licensed storage: 0

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: 2009

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# QUAD CITIES REFUELING INFORMATION REQUEST

1. Unit: Q2 Reload: 10 Cycle: 11

2. Scheduled date for next refueling shutdown: 12-28-91

3. Scheduled date for restart following refueling: 3-7-92

4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment:

   NOT AS YET DETERMINED.

5. Scheduled date(s) for submitting proposed licensing action and supporting information:

   NOT AS YET DETERMINED.

6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:

   NONE AT PRESENT TIME.

7. The number of fuel assemblies.

   a. Number of assemblies in core: 724

   b. Number of assemblies in spent fuel pool: 2237 *

8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned in number of fuel assemblies:

   a. Licensed storage capacity for spent fuel: 3897

   b. Planned increase in licensed storage: 0

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: 2009

* In addition, 78 new fuel assemblies are presently stored in the new fuel storage (dry) vault.

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## VIII. GLOSSARY

The following abbreviations which may have been used in the Monthly Report, are defined below:

| | |
|---|---|
| ACAD/CAM | - Atmospheric Containment Atmospheric Dilution/Containment Atmospheric Monitoring |
| ANSI | - American National Standards Institute |
| APRM | - Average Power Range Monitor |
| ATWS | - Anticipated Transient Without Scram |
| BWR | - Boiling Water Reactor |
| CRD | - Control Rod Drive |
| EHC | - Electro-Hydraulic Control System |
| EOF | - Emergency Operations Facility |
| GSEP | - Generating Stations Emergency Plan |
| HEPA | - High-Efficiency Particulate Filter |
| HPCI | - High Pressure Coolant Injection System |
| HRSS | - High Radiation Sampling System |
| IPCLRT | - Integrated Primary Containment Leak Rate Test |
| IRM | - Intermediate Range Monitor |
| ISI | - Inservice Inspection |
| LER | - Licensee Event Report |
| LLRT | - Local Leak Rate Test |
| LPCI | - Low Pressure Coolant Injection Mode of RHRs |
| LPRM | - Local Power Range Monitor |
| MAPLHGR | - Maximum Average Planar Linear Heat Generation Rate |
| MCPR | - Minimum Critical Power Ratio |
| MFLCPR | - Maximum Fraction Limiting Critical Power Ratio |
| MPC | - Maximum Permissible Concentration |
| MSIV | - Main Steam Isolation Valve |
| NIOSH | - National Institute for Occupational Safety and Health |
| PCI | - Primary Containment Isolation |
| PCIOMR | - Preconditioning Interim Operating Management Recommendations |
| RBCCW | - Reactor Building Closed Cooling Water System |
| RBM | - Rod Block Monitor |
| RCIC | - Reactor Core Isolation Cooling System |
| RHRS | - Residual Heat Removal System |
| RPS | - Reactor Protection System |
| RWM | - Rod Worth Minimizer |
| SBGTS | - Standby Gas Treatment System |
| SBLC | - Standby Liquid Control |
| SDC | - Shutdown Cooling Mode of RHRS |
| SDV | - Scram Discharge Volume |
| SRM | - Source Range Monitor |
| TBCCW | - Turbine Building Closed Cooling Water System |
| TIP | - Traversing Incore Probe |
| TSC | - Technical Support Center |