



Commonwealth Edison

Quad Cities Nuclear Power Station
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GCT-92-43

November 2, 1992

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 1992.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

Alfred C. Tietz for
Gerald C. Tietz
Technical Superintendent

GCT/MB/dak

Enclosure

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

QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

October 1992

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 21, 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 Matt Benson and Debra Kelley, telephone number 309-554-2241, extensions 2995 and 2240.

II. SUMMARY OF OPERATING EXPERIENCE

A. Unit One

Quad Cities Unit One continued with refuel outage QIR12 for the entire month of October. The unit was taken off line September 20 and is scheduled to return to service on December 20.

B. Unit Two

Quad Cities Unit Two reduced power to 340 MWe on October 12 when the 2B reactor feed pump and 2B motor generator set tripped off line. The trip occurred while testing control power on bus 22. Two MSIV room entries were made on October 15 and 16 requiring power reductions to 200 MWe on both occasions. Power was also reduced on October 23, to 675 MWe, when a feed water heater transient occurred. Power was reduced further, to 315 MWe, for feed water heater work on October 24.

Chicago Load Dispatch requested the following load reductions for Unit Two for the month of October;

Date	Load
10-04-92	600 MWe
10-06-92	600 MWe
10-10-92	625 MWe
10-11-92	300 MWe
10-14-92	465 MWe
10-28-92	492 MWe
10-29-92	666 MWe

Seven load drops of less than 20% power also occurred for various reasons during the month of October for Unit Two.

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

A. Amendments to Facility License or Technical Specifications

Technical Specification Amendment No. 138 was issued on October 19, 1992 to Facility Operating License DPR-29 and Amendment No. 134 to Facility Operating License No. DPR-30 for Quad Cities Nuclear Power Station, Units 1 and 2, respectively. These amendments revise the Technical Specifications that will:

1. Revise the diesel generator operability requirements;
2. Revise the 125 volt DC battery availability and testing requirements;
3. Eliminate some redundant emergency core cooling testing requirements for Quad Cities;
4. Modify the electrical feedback requirements for Quad Cities; and
5. Incorporate various administrative changes primarily associated with the above changes.

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

<u>WORK REQUEST</u>	<u>SYSTEM</u>	<u>EID DESCRIPTION</u>	<u>WORK PERFORMED</u>
Q02998	1001	Repair Unit 1 isolation valve to PS 1-1001-89A	Replaced isolation valve and tubing form the switch to the valve.
Q88730	7800	Replace circuit breaker.	As Found: Breaker had cracks and chips with pieces missing. As Left: Removed damaged circuit breaker and installed a new one.
Q96486	263	Repair packing leaks on valves of reactor vessel level transmitter instrument isolation manifold. (1-263-57B)	Removed old valve and installed a new one.
Q90487	263	Repair packing leaks on valves of reactor vessel level transmitter instrument isolation manifold. (1-263-58B)	Installed new manifold valve. No leaks were found.
Q99598	261	Replace throttle steam shutoff valves 1-261-30A, 1-261-30B, 1-261-30C, and 1-261-30D.	Replaced isolation valves on all four pressure switches. No leaks were found after testing.

UNIT 2 MAINTENANCE SUMMARY

<u>WORK REQUEST</u>	<u>SYSTEM</u>	<u>EID DESCRIPTION</u>	<u>WORK PERFORMED</u>
Q01674	5700	Repair rocker switch for Unit 2-2A RHR room cooler controls.	Replaced Unit 2 switch with like switch from Unit 1.

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

<u>Licensee Event Report Number</u>	<u>Date</u>	<u>Title of Occurrence</u>
92-025	10-02-92	Control Room vent toxic gas analyzer INOP.
92-026	10-27-92	RCIC flow transmitter out of calibration.
92-027	10-9-92	U-1 HPCI room cooler failed.
92-028	10-16-92	SBGT outside of design basis (If Instrument Air is lost).

UNIT 2

<u>Licensee Event Report Number</u>	<u>Date</u>	<u>Title of Occurrence</u>
92-022	09-25-92	2B RHRSW Pump INOP due to plug leaking. (Description should be) Locked hi rad area not controlled U-1 & U-2 RBEDT.
92-023	10-01-92	ECCS Pump Room check valve failures.
92-024	08-23-92	HPCI Fire Protection OOS > 14 days.

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 November 5, 1992
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

OPERATING STATUS

0000 100192
1. REPORTING PERIOD: 24J0 103192 GROSS HOURS IN REPORTING PERIOD: 745
2. CURRENTLY AUTHORIZED POWER LEVEL (Mwt): 2511 MAX. DEPEND. CAPACITY: 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):
5. NUMBER OF HOURS REACTOR WAS CRITICAL THIS MONTH YR TO DATE CUMULATIVE
6. REACTOR RESERVE SHUTDOWN HOURS 0.0 5839.00 142350.10
7. HOURS GENERATOR ON LINE 0.0 5786.20 138017.30
8. UNIT RESERVE SHUTDOWN HOURS 0.0 0.0 909.2
9. GROSS THERMAL ENERGY GENERATED (MWH)..... 0.0 12816609.6 296883632.60
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)..... 0.0 4121111.0 96195447.0
11. NET ELECTRICAL ENERGY GENERATED (MWH)..... 0.0 3955444.0 90664812.0
12. REACTOR SERVICE FACTOR..... 0.0 79.77 79.00
13. REACTOR AVAILABILITY FACTOR..... 0.2 79.77 80.90
14. UNIT SERVICE FACTOR 0.0 79.05 76.60
15. UNIT AVAILABILITY FACTOR 0.0 79.05 77.10
16. UNIT CAPACITY FACTOR (Using MDC) 0.0 70.27 65.43
17. UNIT CAPACITY FACTOR (Using Design MWe) 0.0 68.49 63.77
18. UNIT FORCED OUTAGE RATE 0.00 8.34 5.83
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
20. IF SHUTDOWN 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 November 5, 1992
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

OPERATING STATUS

0000 100192
1. REPORTING PERIOD: 2400 103192 GROSS HOURS IN REPORTING PERIOD: 745
2. CURRENTLY AUTHORIZED POWER LEVEL (Mwt): 2511 MAX. DEPEND. CAPACITY: 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):
5. NUMBER OF HOURS REACTOR WAS CRITICAL THIS MONTH YR TO DATE CUMULATIVE
6. REACTOR RESERVE SHUTDOWN HOURS 0.0 0.0 2985.80
7. HOURS GENERATOR ON LINE 745.00 4157.55 134177.45
8. UNIT RESERVE SHUTDOWN HOURS 0.0 0.0 702.90
9. GROSS THERMAL ENERGY GENERATED (MWH)..... 1610964.00 9052816.80 289136702.80
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)..... 524483.00 2936765.00 92866955.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)..... 50550.00 2327468.00 87461643.00
12. REACTOR SERVICE FACTOR..... 100.00 57.77 77.09
13. REACTOR AVAILABILITY FACTOR..... 100.00 57.77 78.76
14. UNIT SERVICE FACTOR 100.00 56.80 75.12
15. UNIT AVAILABILITY FACTOR 100.00 56.80 75.51
16. UNIT CAPACITY FACTOR (Using MDC) 8.82 41.35 63.67
17. UNIT CAPACITY FACTOR (Using Design Mwe) 8.60 40.30 62.06
18. UNIT FORCED OUTAGE RATE 0.0 0.0 7.86
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
20. IF SHUTDOWN 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 November 5, 1992
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

MONTH October 1992

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1.	-8
2.	-8
3.	-8
4.	-8
5.	-8
6.	-8
7.	-8
8.	-8
9.	-8
10.	-8
11.	-8
12.	-8
13.	-8
14.	-8
15.	-8
16.	-8

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17.	-8
18.	-8
19.	-8
20.	-8
21.	-8
22.	-8
23.	-8
24.	-8
25.	-7
26.	-8
27.	-8
28.	-8
29.	-8
30.	-8
31.	-8

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 -265
UNIT 1WQ
DATE November 5, 1992
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

MONTH October 1992

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1.	<u>767</u>
2.	<u>769</u>
3.	<u>784</u>
4.	<u>720</u>
5.	<u>783</u>
6.	<u>727</u>
7.	<u>779</u>
8.	<u>761</u>
9.	<u>778</u>
10.	<u>732</u>
11.	<u>503</u>
12.	<u>699</u>
13.	<u>783</u>
14.	<u>645</u>
15.	<u>525</u>
16.	<u>475</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17.	<u>128</u>
18.	<u>336</u>
19.	<u>711</u>
20.	<u>762</u>
21.	<u>788</u>
22.	<u>793</u>
23.	<u>684</u>
24.	<u>341</u>
25.	<u>503</u>
26.	<u>782</u>
27.	<u>781</u>
28.	<u>721</u>
29.	<u>775</u>
30.	<u>792</u>
31.	<u>790</u>

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.

DOCKET NO. 050-265

050-265

UNIT NAME Unit One

Unit One

DATE November 5, 1992

November 5, 1992

REPORT MONTH October 1992

October 1992

COMPLETED BY Mathew Benson

Mathew Benson

TELEPHONE 309-654-2241

309-654-2241

Continued Refuel Outage QIR12

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 050-265

UNIT NAME Unit Two

DATE November 5, 1992

REPORT MONTH October 1992

COMPLETED BY Mathew Benson

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
92-74	10-03-92	S	9.1	F	5	- - - -	- -	- - - -	Load Drop Per Chicago Load Dispatcher
92-75	10-05-92	S	6.5	F	5	- - - -	- -	- - - -	" " "
92-76	10-10-92	S	7.0	F	5	- - - -	- -	- - - -	" " "
92-77	10-10-92	S	19.3	F	5	- - - -	- -	- - - -	" " "
92-78	10-12-92	F	2.1	A	5	- - - -	- -	- - - -	2B MG/SET (RECRIC) and 2B RFP TRIPPED During Control Power Test on Bus 22
92-79	10-13-92	S	6.1	F	5	- - - -	- -	- - - -	Load Drop Per Chicago Load Dispatcher
92-80	10-14-92	S	12.3	F	5	- - - -	- -	- - - -	" " "
92-81	10-16-92	F	67.4	A	5	- - - -	- -	- - - -	MSIV Room Entry For HPCI & RICI Repairs
92-82	10-23-92	F	62.9	A	5	- - - -	- -	- - - -	Dropped For FW Heaters Transient and Repairs
92-83	10-28-92	S	5.5	F	5	- - - -	- -	- - - -	Load Drop Per Chicago Load Dispatcher
92-84	10-29-92	S	2.8	F	5	- - - -	- -	- - - -	" " "

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

There were no Main Steam Relief Valve Operations for the reporting period.

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

There was no Control Rod Drive scram timing data for Units One and Two for the reporting period.

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.

QUAD CITIES REFUELING
INFORMATION REQUEST

QTP 300-S32
Revision 2
October 1989

1. Unit: Q1 Reload: 12 Cycle: 12
2. Scheduled date for next refueling shutdown: 9-20-92*
*Actual Shutdown at 0104 hrs.
3. Scheduled date for restart following refueling: 12-14-92
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment:
 1. Modification to HPCI turbine exhaust steam line.
5. Scheduled date(s) for submitting proposed licensing action and supporting information:
 1. 06/30/92
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: 0
 - b. Number of assemblies in spent fuel pool: 2281
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:

QUAD CITIES REFUELING
INFORMATION REQUEST

QTP 300-S32
Revision 2
October 1989

1. Unit: Q2 Reload: 11 Cycle: 12
2. Scheduled date for next refueling shutdown: 03/06/93
3. Scheduled date for restart following refueling: 06/05/93
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment:
NOT AS YET DETERMINED.
5. Scheduled date 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: 2439
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

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