Commonwealth Edison
Quad Cities Nuclear Power Station
22710 206 Avenue North
Cordova, Illinois 61242
Telephone 309/654-2241

AMS-94-09

April 6, 1994

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 March 1994.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

DCBucknell for
Anthony M. Scott
System Engineering Supervisor

AMS/dak

Enclosure

cc: J. Martin, Regional Administrator
T. Taylor, Senior Resident Inspector

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QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

March 1994

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS & ELECTRIC COMPANY

NRC DOCKET NOS. 50-254 AND 50-265

LICENSE NOS. DPR-29 AND DPR-30

TABLE OF CONTENTS

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 309-654-2241, extensions 2995 and 2240.

II. SUMMARY OF OPERATING EXPERIENCE

A. Unit One

Quad Cities Unit One began the month of March 1994 in coast down as it approached the refuel outage. On March 13, refuel outage Q1R13 was entered by tripping the turbine at 01:28 hours and manually scramming the reactor at 01:58 hours. The scheduled startup for Unit One is July 4, 1994.

Two load drops were performed on request from Bulk Power Operations (BPO) and one for administrative reasons but none caused the average daily unit power level to drop by 20% or greater.

B. Unit Two

Quad Cities Unit Two began the month of March 1994 at full load and remained on line through out the month.

Numerous load drops were performed for administrative reasons but none caused the average daily unit power level to drop by 20% or greater.

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

A. Amendments to Facility License or Technical Specifications

Technical Specification Amendment No. 145 was issued on March 11, 1994 to Facility Operating License DPR-29 and Amendment No. 141 to Facility Operating License DPR-30 for Quad Cities Nuclear Power Station.

The amendments consist of changes to the Quad Cities Technical Specifications (TS) that will update the leakage test requirements of the Drywell Airlock to the standards of 10 CFR 50, Appendix J, Section III.D.2. This is in response to an Unresolved Item listed in Inspection Report Nos. 50-237/91032 and 50-249/91035.

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, System Component Description and work performed.

UNIT 1 & 1/2 MAINTENANCE SUMMARY

NWR#	SYSTEM	EPN#	WORK REQUESTED	WORK PERFORMED
Q09662	2300	1-2301-14	Tighten fitting on HPCI min flow valve to fix oil leak.	Tightened fitting on grease pressure relief line on MOV.
Q10452	7500	1/2-7505A	Repair oil leak on plugs of SBGT reactor building inlet valve.	Removed plugs, cleaned, and reinstalled.
Q10911	1000	1-1001-65A	Investigate/repair 1A RHRSW pump failure to start.	Removed, disassembled, reassembled, and lubricated breaker.
Q11531	0030	1-0030	Repair damaged sealtite.	Replaced sealtite with stainless steel flexible conduit.
Q12419	2500	1-2599-5B	Troubleshoot/repair ACAD vent to SBGT valve. Valve would not open with control switch.	Replaced limit switch.
Q13611	8350	1-8350	Replace cracked caps on 250VDC flame arrestors.	Replaced 2 cracked caps.
Q13791	1700	1-1701	Investigate/repair drywell CAM heat tracing.	Adjusted thermostat on monitor.
Q14360	0300	1-0305-117 1-0305-118	Rebuild scram pilot valves due to leakby on a half scram.	Disassembled and rebuilt pilot valves.

NWR#	SYSTEM	EPN#	WORK REQUESTED	WORK PERFORMED
Q14601	5700	1-5748B	Investigate B core spray room cooler TIC giving high temperature alarm in auto.	Changed set point on temperature switches.
Q14768	2400	1-2419-D	Repair torus CAM. Monitor indicates failure downscale.	Found bad relays in chassis. Replaced chassis.
Q14980	6700	1/2-6700-073	Repair 1B RHRSW pump breaker.	Replaced release latch monitoring switch, cleaned and lubricated disconnects.
Q15014	7500	1/2-7500	Troubleshoot/repair B SBGT failure to start in standby mode after time delay.	Exercised flow switch and checked calibration. Moved wiring to a slightly different location to allow freedom of movement for the bourdon tube.
Q15223	6700	1/2-6700	Repair 4kV breaker auxiliary switch assemblies.	Repaired assemblies.
Q15497	6600	1/2-6601-OTLS	Repair overspeed trip limit switch. Arm has worked loose.	Replaced missing cotter pin in arm nut.
Q60908	6700	1-6706-10	Repair/reject diesel generator breaker. Breaker does not actuate aux switch from the test position.	Rejected test linkage. New linkages will be installed.

UNIT 2 MAINTENANCE SUMMARY

NWR#	SYSTEM	EPN#	WORK REQUESTED	WORK PERFORMED
Q01780	2400	2-2419-C	Investigate/repair downscale alarm on local torus rad monitor.	Repaired loose nut and bolt heater connector. Calibrated monitor.
Q08028	0300	2-0305-126-1847	Repair instrument air leak on scram inlet valve.	Replaced diaphragm.
Q08934	0756	2-0756-32-57	Troubleshoot/repair bypassed LPRM.	Ran I/V curve to correct problem.
Q10058	0750	2-0750-7A 2-0750-7B 2-0750-7E 2-0750-7F	Troubleshoot/repair IRM's drawing wide bands on recorder.	Ground cables were installed to eliminate inadequate grounding problem.
Q13610	8350	2-8350	Replace cracked caps on 250VDC flame arrestors.	Replaced flame arrestors on batteries 93 and 94.
Q13791		2-1702	Investigate/repair drywell CAM heat tracing.	Adjusted thermostat on monitor.
Q13976	0300	2-0305-125-3451 2-0305-126-3451	Repair leakby on scram inlet valve.	Replaced accumulator, valve packing, seat ring, and plug.

NWR#	SYSTEM	EPN#	WORK REQUESTED	WORK PERFORMED
Q14113	2200	2-2252-12	Replace broken cover over diesel generator exciter cabinet rectifiers.	Straightened sheet metal out and installed fasteners to secure cover.
Q14160	0300	2-0305-126-2639 2-0305-127-2639	Troubleshoot/repair cause of rod drifting past "00".	Adjusted seat pressure on scram inlet and outlet valve.
Q14662	0300	2-0305-125-3411	Repair HCU accumulator. Accumulator failed to hold a nitrogen charge.	Replaced accumulator, O-rings, and charging port connector.
Q14771	2400	2-2402A	Repair hydrogen meter. Meter will not span.	Replaced hydrogen analyzer cell, catalyst bed assembly, regulator diaphragm, and soft seat nozzle.
Q14893	2300	2-2301-3	Adjust limit switch on HPCI turbine steam supply isolation valve motor operator	Adjusted the open limit switch.
Q14955	1000	2-1001-65A	Repair 2A RHR inboard seal	Rebuilt inboard seal.
Q15221	0756	2-0756-1	Repair APRM #1. Reading unexpectedly increased from 97% to 99%.	Cleaned edge connector on both averaging cards.
Q15388	0756	2-0756-6	Troubleshoot/repair APRM #6 spiking high.	Cleaned connectors on both averaging cards.
Q15405	7500	2-7503	Repair SBGT reactor building inlet damper valve.	Found tripper finger assembly spring broken. Replaced motor.

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
94-004	02-01-94	RCIC INOP when Trip Throttle Valve is tripped. CANCELLED
94-004	01-03-94	Feedwater flow loops reading erroneously in the nonconservative direction due to possible erosion or damage to the feedwater nozzles or instrumentation inaccuracy and calibration.
94-005	03-14-94	1A MSIV failed LLRT testing.

UNIT 2

Licensee Event Report Number	Date	Title of occurrence

There were no Licensee Event Reports for Unit 2 for this reporting period.

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 April 6, 1994
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

OPERATING STATUS

1. REPORTING PERIOD: 0000 030194 2400 033194 GROSS HOURS IN REPORTING PERIOD: 744

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):

	THIS MONTH	YR TO DATE	CUMULATIVE
5. NUMBER OF HOURS REACTOR WAS CRITICAL	290.00	1706.00	151487.30
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	3421.90
7. HOURS GENERATOR ON LINE	289.50	1682.90	146979.20
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	909.20
9. GROSS THERMAL ENERGY GENERATED (MWH)	622185.60	3865794.10	317558981.30
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	202713.00	1265145.00	102963264.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)	190067.00	1206708.00	97124706.00
12. REACTOR SERVICE FACTOR	38.98	78.98	78.66
13. REACTOR AVAILABILITY FACTOR	38.98	78.98	80.44
14. UNIT SERVICE FACTOR	38.91	77.91	76.32
15. UNIT AVAILABILITY FACTOR	38.91	77.91	76.80
16. UNIT CAPACITY FACTOR (Using MDC)	33.22	72.65	65.58
17. UNIT CAPACITY FACTOR (Using Design MWe)	32.38	70.81	63.92
18. UNIT FORCED OUTAGE RATE	0.00	1.33	6.25

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: 7-4-94

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 April 6, 1994
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

OPERATING STATUS

1. REPORTING PERIOD: 0000 030194 2400 033194 GROSS HOURS IN REPORTING PERIOD: 744
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):

	THIS MONTH	YR TO DATE	CUMULATIVE
5. NUMBER OF HOURS REACTOR WAS CRITICAL	744.00	1575.40	145476.45
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	2985.80
7. HOURS GENERATOR ON LINE	744.00	1547.20	141730.35
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	702.90
9. GROSS THERMAL ENERGY GENERATED (MWH)	1801868.00	3583788.90	306364750.80
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	586628.00	1164929.00	98474699.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)	563177.00	1111539.00	93254099.00
12. REACTOR SERVICE FACTOR	100.00	72.94	76.16
13. REACTOR AVAILABILITY FACTOR	100.00	72.94	77.72
14. UNIT SERVICE FACTOR	100.00	71.63	74.20
15. UNIT AVAILABILITY FACTOR	100.00	71.63	74.57
16. UNIT CAPACITY FACTOR (Using MDC)	98.43	66.92	63.49
17. UNIT CAPACITY FACTOR (Using Design MWe)	95.94	65.22	61.88
18. UNIT FORCED OUTAGE RATE	0.00	28.37	8.81

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 April 6, 1994
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

MONTH March 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1.	695	17.	- 8
2.	692	18.	- 8
3.	689	19.	- 8
4.	685	20.	- 8
5.	682	21.	- 8
6.	674	22.	- 8
7.	674	23.	- 8
8.	673	24.	- 8
9.	665	25.	- 8
10.	669	26.	- 8
11.	665	27.	- 8
12.	598	28.	- 8
13.	- 1	29.	- 8
14.	- 8	30.	- 8
15.	- 8	31.	- 8
16.	- 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 50-265
UNIT Two
DATE April 6, 1994
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

MONTH March 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1.	756	17.	756
2.	757	18.	757
3.	757	19.	758
4.	756	20.	752
5.	757	21.	740
6.	755	22.	756
7.	757	23.	757
8.	759	24.	767
9.	739	25.	768
10.	755	26.	746
11.	755	27.	761
12.	757	28.	760
13.	756	29.	763
14.	756	30.	762
15.	757	31.	762
16.	758		

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 COMPLETED BY Matt Benson

DATE April 6, 1994 REPORT MONTH March TELEPHONE 309-654-2241

NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
94-04	3-13-94	S	454.5	C	2	----------	---	----	Began Refuel Outage Q1R13

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-265

UNIT NAME Two COMPLETED BY Matt Benson

DATE April 6, 1994 REPORT MONTH March 1994 TELEPHONE 309-654-2241

NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
									None for the month of March.

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.

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

QTP 300-S32
Revision 2
October 1989

QUAD CITIES REFUELING INFORMATION REQUEST

1. Unit: Q1 Reload: 12 Cycle: 13

2. Scheduled date for next refueling shutdown: 3-13-94

3. Scheduled date for restart following refueling: 7-2-94

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

   YES. Safety Limit MCPR to be changed from 1.06 to 1.07 due to GE10 Fuel.

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

   11-19-93

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:

   144 GE10 Fuel Bundles will be loaded during Q1R13.

7. The number of fuel assemblies.

   a. Number of assemblies in core: 724

   b. Number of assemblies in spent fuel pool: 1557

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: 2006

APPROVED
OCT 30 1989
Q.C.O.S.R.

QTP 300-S32
Revision 2
October 1989

QUAD CITIES REFUELING INFORMATION REQUEST

1. Unit: Q2 Reload: 12 Cycle: 13

2. Scheduled date for next refueling shutdown: 1-29-95

3. Scheduled date for restart following refueling: 5-21-95

4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment:
   YES - Safety limit MCPR to be changed from 1.06 to 1.07 due to GE10 Fuel.

5. Scheduled date(s) for submitting proposed licensing action and supporting information:
   7-28-94

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:
   GE10 Fuel will be loaded during Q2R13.

7. The number of fuel assemblies.
   a. Number of assemblies in core: 724
   b. Number of assemblies in spent fuel pool: 2583

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 torage: 0

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: 2006

APPROVED
OCT 3.0 1989
Q.C.O.S.R.