QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

JUNE 1983

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 condenser cooling method is a closed cycle spray canal, and 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 1 and 2 respectively were October 18, 1971, and April 26, 1972. Commercial generation of power began on February 18, 1973 for Unit 1 and March 10, 1973 for Unit 2.

This report was compiled by Becky Brown and Alex Misak, telephone number 309-654-2241, extensions 127 and 194.

II. SUMMARY OF OPERATING EXPERIENCE

A. UNIT ONE

June 1-19: Unit One began the month derated to 770 MWe as a result of the 1D1 Feedwater Heater being out of service due to tube leaks. The unit maintained this load throughout this period except on three occasions when the unit dropped load to 700 MWe for weekly Turbine tests. In addition, on June 19, the unit dropped load additionally to 650 MWe for half an hour as requested by the Load Dispatcher due to low system demand.

June 20-30: The unit continued operating at a load of 770 MWe throughout the remainder of the month except for two occasions. On June 26 the unit dropped load to 700 MWe for weekly Turbine tests. Also, on June 30, the unit dropped load to 670 MWe for half an hour due to a Main Condenser Loop Seal problem.

B. UNIT TWO

June 1-19: Unit Two continued to be derated throughout the month due to End of Cycle Fuel Depletion. In addition, the unit dropped load six times during this period as requested by the Load Dispatcher due to low system demand.

June 20-30: The unit dropped load twice during the remainder of the month. The unit dropped load to minimum recirculation flow, approximately 310 MWe, on June 25, as requested by the Load Dispatcher. Then, on June 28, the unit dropped load to 330 MWe in preparation for a Drywell entry to investigate apparent increased Drywell sump pump discharge. After the investigation was completed, and no unusual leakage was identified, load increased back to full power of 530 MWe.

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

A. Amendments to Facility License or Technical Specifications

There were no Amendments to the Facility License or Technical Specifications for the reporting period.

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 Unit One and Unit Two during the reporting period. This summary includes the following headings: Work Request Numbers, LER Numbers, Components, Cause of Malfunctions, Results and Effects on Safe Operation, and Action Taken to Prevent Repetition.

UNIT ONE MAINTENANCE SUMMARY

W.R. NUMBER	LER NUMBER	COMPONENT	CAUSE OF MALFUNCTION	RESULTS & EFFECTS ON SAFE OPERATION	ACTION TAKEN TO PREVENT REPETITION
Q24708		#15 IRM	The IRM DC amplifier failed.	The IRM went down-scale. All other IRMs were operable.	The amplifier was replaced.
Q26658		Off Gas Radiation Monitor #2	The low calibration potentiometer, R-40, was not operating properly.	The low calibration could not be performed. This did not affect the operability of the monitor.	The R-40 resistor was replaced.
Q26708		RHR Minimum Flow Bypass Valve MO-1-1001-18A	Pressure switches 1-1001-81A & B were out of calibration; and a wire was found loose.	The 1-1001-18A valve would not open on low flow, but could have been opened from the Control Room. Thus, HPCI operability was not affected.	The pressure switches were calibrated and a terminal lug replaced.
Q26807		Recirc MG Vent Fan Breaker 1A	A current fault resulting from failure of a motor starter coil caused the main breaker at Bus 19 to trip. Breaker 1A on Bus 19-2 was consequently removed to determine why it did not trip.	The trip of the main breaker on Bus 19 caused a half scram due to the loss of one of the RPS MG Sets.	The breaker and motor starter coil were replaced. The balance of the plant is being investigated for other problems of coordination between main and local breakers.

UNIT TWO MAINTENANCE SUMMARY

W.R. NUMBER	LER NUMBER	COMPONENT	CAUSE OF MALFUNCTION	RESULTS & EFFECTS ON SAFE OPERATION	ACTION TAKEN TO PREVENT REPETITION
Q17125		Unit 2 Drywell Radiation Monitor 2-2419A	Operational amplifier #1 failed.	The monitor went up-scale. It was replaced with a spare.	The original monitor was repaired, tested, and placed in the panel.
Q23659		2A 125 VDC Battery Charger	A letter was received concerning a problem at other plants concerning 200 amp fuses installed in 250 amp chargers.	At other plants the fuses were continually blowing.	The fuses were replaced with 300 amp fuses.
Q26482		APRM #1	The calibration potentiometer was bad.	The failed calibration potentiometer made it impossible to test the Hi-Hi trip, but the APRM was still operable. and calibrated.	The potentiometer was replaced.
Q26683		APRM #5	DC amplifier failure	The APRM read 60% while all others read 72%. The other two APRMs on the 'B' RPS were operable and thus would have performed the intended function.	Components of the DC amplifier were replaced, and the APRM was returned to service.

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 ONE

Licensee Event Report Number	Date	Title of Occurrence
83-24/03L	6-10-83	Torus/Drywell Vacuum Breaker Not Closed
83-25/03L	6-21-83	Bent stem on MO-1-1001-34B Valve

UNIT TWO

83-9/01T	6-30-83	Core Spray Pump Pressure Switches "valved-out"
83-10/03L	6-23-83	'A' Standby Gas Treatment Heater Tripped

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

OPERATING DATA REPORT

DOCKET NO. 50-254

UNIT ONE

DATE 07/05/83

COMPLETED BY Alex Misak

TELEPHONE 309-654-2241x194

OPERATING STATUS

0000 060183

1. Reporting period: 2400 063083 Gross hours in reporting period: 720

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): NA

4. Reasons for restriction (if any):

	This Month	Yr.to Date	Cumulative
5. Number of hours reactor was critical	720.0	4135.6	79306.8
6. Reactor reserve shutdown hours	0.0	0.0	3421.9
7. Hours generator on line	720.0	4095.5	76182.2
8. Unit reserve shutdown hours.	0.0	0.0	909.2
9. Gross thermal energy generated(MWH)	1721052	9841093	156054084
10. Gross electrical energy generated(MWH)	550694	3221230	50343111
11. Net electrical energy generated(MWH)	518663	3033793	46862701
12. Reactor service factor	100.0	95.2	81.2
13. Reactor availability factor	100.0	95.2	84.7
14. Unit service factor	100.0	94.3	78.0
15. Unit availability factor	100.0	94.3	79.0
16. Unit capacity factor (Using MDC)	93.7	90.8	62.4
17. Unit capacity factor (Using Des.MWe)	91.3	88.5	60.8
18. Unit forced outage rate	0.0	1.8	6.5

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 NA

*The MDC may be lower than 769 MWe during periods of high ambient temperature due to the thermal performance of the spray canal.

*UNOFFICIAL COMPANY NUMBERS ARE USED IN THIS REPORT

OPERATING DATA REPORT

DOCKET NO. 50-265

UNIT TWO

DATE 07/05/83

COMPLETED BY Alex Misak

TELEPHONE 309-654-2241x194

OPERATING STATUS

0000 060183

1. Reporting period: 2400 063083 Gross hours in reporting period: 720

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): NA

4. Reasons for restriction (if any):

	This Month	Yr.to Date	Cumulative
5. Number of hours reactor was critical	720.0	4079.0	76342.4
6. Reactor reserve shutdown hours	0.0	0.0	2985.8
7. Hours generator on line	720.0	4049.7	73637.8
8. Unit reserve shutdown hours.	0.0	0.0	702.9
9. Gross thermal energy generated(MWH)	1275663	8587158	153178652
10. Gross electrical energy generated(MWH)	395978	2739414	48776949
11. Net electrical energy generated(MWH)	366991	2562607	45746174
12. Reactor service factor	100.0	93.9	78.9
13. Reactor availability factor	100.0	93.9	82.0
14. Unit service factor	100.0	93.2	76.1
15. Unit availability factor	100.0	93.2	76.9
16. Unit capacity factor (Using MDC)	66.3	76.7	61.5
17. Unit capacity factor (Using Des.MWe)	64.6	74.8	59.9
18. Unit forced outage rate	0.0	2.5	8.8

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 NA

*The MDC may be lower than 769 MWe during periods of high ambient temperature due to the thermal performance of the spray canal.

*UNOFFICIAL COMPANY NUMBERS ARE USED IN THIS REPORT

APPENDIX B
AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-254

UNIT ONE

DATE 07/05/83

COMPLETED BY Alex Misak

TELEPHONE 309-654-2241x194

MONTH June 1983

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1.	727.4	17.	715.0
2.	722.4	18.	731.0
3.	724.8	19.	679.2
4.	719.2	20.	717.6
5.	725.2	21.	718.7
6.	722.2	22.	722.2
7.	715.0	23.	723.1
8.	730.6	24.	721.0
9.	638.3	25.	720.2
10.	805.6	26.	733.5
11.	720.1	27.	704.1
12.	714.5	28.	715.6
13.	723.5	29.	730.2
14.	723.0	30.	715.5
15.	722.7		
16.	729.7		

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 07/05/83

COMPLETED BY Alex Misak

TELEPHONE 309-654-2241x194

MONTH June 1983

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1.	539.4	17.	496.8
2.	561.2	18.	519.3
3.	556.7	19.	448.9
4.	556.1	20.	480.4
5.	453.5	21.	502.7
6.	551.0	22.	497.1
7.	544.4	23.	493.8
8.	539.1	24.	489.4
9.	534.9	25.	467.4
10.	535.4	26.	490.6
11.	529.0	27.	478.8
12.	527.2	28.	467.6
13.	523.8	29.	490.8
14.	520.8	30.	482.4
15.	518.8		
16.	494.1		

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

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APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

QTP 300-S13
Revision 6
August 1982

DOCKET NO. 050-254

UNIT NAME Quad-Cities Unit 1

COMPLETED BY Alex Misak

DATE July 1, 1983

REPORT MONTH June 1983

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
83-35	830604	S	0.0	B	5		HA	XXXXXX	Reduced load to perform weekly Turbine tests
83-36	830612	S	0.0	B	5		HA	XXXXXX	Reduced load to perform weekly Turbine tests
83-37	830618	S	0.0	B	5		HA	XXXXXX	Reduced load to perform weekly Turbine tests
83-38	830626	S	0.0	B	5		HA	XXXXXX	Reduced load to perform weekly Turbine tests
83-39	830630	F	0.0	A	5		HC	XXXXXX	Reduced load due to high backpressure due to loop seal problems

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APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

QTP 300-S13
Revision 6
August 1982

DOCKET NO. 050-265

UNIT NAME Quad-Cities Unit 2

COMPLETED BY Alex Misak

DATE July 1, 1983

REPORT MONTH June 1983

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
83-36	830601	S	0.0	F	5		EA	ZZZZZZ	Load reduction requested by Load Dispatcher due to low system demand
83-37	830605	S	0.0	F	5		EA	ZZZZZZ	Load reduction requested by Load Dispatcher due to low system demand
83-38	830606	S	0.0	F	5		EA	ZZZZZZ	Load reduction requested by Load Dispatcher due to low system demand
83-39	830616	S	0.0	F	5		EA	ZZZZZZ	Load reduction requested by Load Dispatcher due to low system demand
83-40	830617	S	0.0	F	5		EA	ZZZZZZ	Load reduction requested by Load Dispatcher due to low system demand
83-41	830619	S	0.0	F	5		EA	ZZZZZZ	Load reduction requested by Load Dispatcher due to low system demand
83-42	830619	S	0.0	F	5		EA	ZZZZZZ	Load reduction requested by Load Dispatcher due to low system demand
83-43	830625	S	0.0	F	5		EA	ZZZZZZ	Load reduction requested by Load Dispatcher due to low syste demand

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APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

QTP 300-S13
Revision 6
August 1982

DOCKET NO. 050-265

UNIT NAME Quad-Cities Unit 2

COMPLETED BY Alex Misak

DATE July 1, 1983

REPORT MONTH June 1983

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
83-44	830629	F	0.0	H	5		ZZ	ZZZZZZ	Reduced load for Drywell entry to investigate increased Drywell sump discharge

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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 were no Control Rod Drive Scram timing data 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.

QTP 300-S32
Revision 1
March 1978

QUAD-CITIES REFUELING INFORMATION REQUEST

*

1. Unit: Q1 Reload: 6 Cycle: 7

2. Scheduled date for next refueling shutdown: 9-6-82

3. Scheduled date for restart following refueling: 12-18-82

4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment: Yes

5. Scheduled date(s) for submitting proposed licensing action and supporting information: 8-19-82: Tech. Spec. changes submitted to the NRC.

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:
   a) All 7x7 fuel assemblies will be removed from the core.
   b) MAPLHGR curves for fuel types in the core are being extended to 40,000 MWD/ST.
   c) MCPR limits will be determined by GE's ODYN computer code.
   d) The vessel pressure safety limit is being modified to accommodate the potential for higher reactor pressures as calculated by ODYN.

7. The number of fuel assemblies.
   a. Number of assemblies in core: 724
   b. Number of assemblies in spent fuel pool: 800

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: 2003

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APR 20 1978
Q.C.O.S.R.

QTP 300-S32
Revision 1
March 1978

QUAD-CITIES REFUELING INFORMATION REQUEST

*

1. Unit: Q2 Reload: 6 Cycle: 7

2. Scheduled date for next refueling shutdown: 9-5-83

3. Scheduled date for restart following refueling: 11-12-83

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

   No, however, a change to the Technical Specifications is being submitted (see below).

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

   June 14, 1983 (Scheduled)

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:

   a) All new fuel assemblies will be of barrier design; MAPLHGR curves will be re-labeled to include the barrier designation.

   b) The use of improved assumptions in the load reject without bypass analysis resulted in a much improved MCPR operating limit. Technical Specifications are being changed to provide this additional operating margin.

7. The number of fuel assemblies.

   a. Number of assemblies in core: 724

   b. Number of assemblies in spent fuel pool: 204

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: 2003

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Q.C.O.S.R.

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

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

NJK-83-234

July 1, 1983

Director, Office of Inspection & Enforcement
United States Nuclear Regulatory Commission
Washington, D. C. 20555
Attention: Document Control Desk

Gentlemen:

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 June 1983.

Very truly yours,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

N. J. Kalivianakis
Station Superintendent

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Enclosure

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