Commonwealth Edison
Quad Cities Nuclear Power Station
22710 206 Avenue North
Cordova, Illinois 61242-9740
Telephone 309/654-2241

RAR-90-55

July 2, 1990

Director of Nuclear Reactor Regulations
U. S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D. C. 20555

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, 1990.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

A D Bunbeck for

R. A. Robey
Technical Superintendent

RAR/LFD/nh

Enclosure

0027H/0061Z

IE01
1/1

QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

June, 1990

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS & ELECTRIC COMPANY

NRC DOCKET NOS. 50-254 AND 50-265

LICENSE NOS. DPR-29 AND DPR-30

0027H/0061Z

TABLE OF CONTENTS

0027H/0061Z

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 Lynne Deelsnyder and Verna Koselka, telephone number 309-654-2241, extensions 2185 and 2240.

II. SUMMARY OF OPERATING EXPERIENCE

A. Unit One

Unit One began the month of June operating at full power. Normal operational activities occurred and routine surveillances were performed throughout the month. The unit remained near full power or operated in Economic Generation Control (EGC) per the demands of the Chicago Load Dispatcher. Power levels were adjusted accordingly.

On June 15, during turbine weekly testing, the 'A' master trip solenoid valve light failed to extinguish when the NSO attempted to test the 'A' side. The 'B' side was not tested. Weekly testing was terminated, and generator load was reduced to less than 40% to bypass the turbine trip reactor scram while troubleshooting was performed. The 'A' main steam isolation valve was then retested and it worked properly. It was exercised several times without a malfunction. Power levels were increased to full load at 1040 hours.

On June 17, a load reduction to 350 MWe was taken to perform control rod drive hot scram timing. The surveillance was successfully completed and the unit was taken to full power.

B. Unit Two

Unit Two began the month of June operating at full power. Normal operational activities occurred and routine surveillances were performed.

On June 18, power levels were reduced to identify a minor leak which was discovered in the main steam isolation valve room on the safe shutdown makeup pump discharge line. A weekend outage was scheduled for the following weekend. Power levels were increased to full load.

On June 23, at 0103 hours, the main generator was taken off line and at 0108 hours, the reactor was scrammed. The previously identified leak on the safe shutdown makeup pump discharge line was repaired and a recirculation pump seal was replaced. On June 24, at 2328 hours, the reactor was made critical, and at 1006 hours, on June 25, the generator was synchronized to the grid.

On June 25, at 1649 hours, hydrogen [illegible]tion testing was begun. The testing continued throughout the remainder of the month. Normal operational activites continued through the end of June.

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

A. Amendments to Facility License or Technical Specifications

Technical Specification Amendment Nos. 124 and 121 were issued on May 23, 1990 to Facility Operating License DPR-29 and DPR-30. These amendments revise the Technical Specifications to modify the requirements for jet pump flow indication.

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: Work Request numbers, system component description, and work performed.

UNIT 1 MAINTENANCE SUMMARY

WORK REQUEST	SYSTEM	EID DESCRIPTION	WORK PERFORMED
Q85400	7510	Valve SBGT "A" Suction Damper to Fan	As found condition: nicks on seal cup. As left, condition: rebuilt operator, replaced softwear.
Q52049	5741	Damper Control Room AFU "A" Booster Fan	Readjust outlet damper to provide approximately 2,000 SCFM in order to clear alarm Replaced actuator for damper with exception of open travel stop actuator to be rebuilt in WR Q76621.
Q52027	5741	Damper Control Room AFU "B" Booster Fan	Cold tag 88-769. Rebuild under Q74754. Replaced operator with new contromatic operator.

UNIT 2 MAINTENANCE SUMMARY

WORK REQUEST	SYSTEM	EID DESCRIPTION	WORK PERFORMED
Q85424	0203	Valve Electromatic Relief	Replaced leaking electromatic.
Q85495	0203	Valve Electromatic Relief	Welded nipple into flange of electromatic.
Q84988	1001	Pump Residual Heat Removal Service Water	Replaced 1/4" close nipple and 1/4-3/8 bushing.
Q85321	1201	Limitorque Reactor Water Cleanup Recirc Pump Suction Valve	Found open set at 2 1/2, changed to 2 3/4. Found close set at 2 1/2, changed to 2 3/4.
Q84452	1600	Hatch North Torus	Replaced gaskets and lubricated.
Q85160	2301	Restricting Orifice HPCI Turbine Stop Valve	Disassembled flanges, cleaned and inspected mating surfaces on flanges and orifice plate, installed gaskets and bolting.

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
90-11	6/11/90	1/2 'A' Fire Diesel OOS Longer Than 7 Days
90-12	6/12/90	Control Room (CR) 'B' Train HVAC Inoperable
90-13	6/26/90	Lightning Strike Causing Valve 1-220-45 to Close

UNIT 2

90-08	6/2/90	HPCI Flow Controller Failure

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 July 3, 1990
Completed By Lynne Deelsnyder
Telephone 309-654-2241

OPERATING STATUS

1. Reporting Period 0000 060190 Gross Hours in Report 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): N/A

4. Reasons For Restriction (If any):

	THIS MONTH	YR TO DATE	CUMULATIVE
5. Number of Hours Reactor Was Critical	720.0	4228.6	128392.4
6. Reactor Reserve Shutdown Hours	0.0	0.0	3421.9
7. Hours Generator On Line	720.0	4204.1	124294.7
8. Unit Reserve Shutdown Hours	0.0	0.0	909.2
9. Gross Thermal Energy Generated (MWh)	1665540.0	9919219.0	265601580.0
10. Gross Electrical Energy Generated (MWh)	535140.0	3241709.0	86093266.0
11. Net Electrical Energy Generated (MWh)	515237.0	3111131.0	80951517.0
12. Reactor Service Factor	100.0	97.4	80.4
13. Reactor Availability Factor	100.0	97.4	82.5
14. Unit Service Factor	100.0	96.8	77.8
15. Unit Availability Factor	100.0	96.8	78.4
16. Unit Capacity Factor (Using MDC)	93.1	93.2	65.9
17. Unit Capacity Factor (Using Design MWe)	90.7	90.8	64.2
18. Unit Forced Outage Rate	0.0	1.9	5.3

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 July 3, 1990
Completed By Lynne Deelsnyder
Telephone 309-654-2241

OPERATING STATUS

1. Reporting Period 0000 060190 / 2400 063090 Gross Hours in Report 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): N/A

4. Reasons For Restriction (If any):

	THIS MONTH	YR TO DATE	CUMULATIVE
5. Number of Hours Reactor Was Critical	673.7	2063.2	121447.8
6. Reactor Reserve Shutdown Hours	0.0	0.0	2985.8
7. Hours Generator On Line	663.0	2015.4	118113.9
8. Unit Reserve Shutdown Hours	0.0	0.0	702.9
9. Gross Thermal Energy Generated (MWh)	1533276.0	4304798.0	253701415.0
10. Gross Electrical Energy Generated (MWh)	499804.0	1404211.0	81343295.0
11. Net Electrical Energy Generated (MWh)	480500.0	1327162.0	76806811.0
12. Reactor Service Factor	93.6	47.5	76.8
13. Reactor Availability Factor	93.6	47.5	78.7
14. Unit Service Factor	92.1	46.4	74.7
15. Unit Availability Factor	92.1	46.4	75.1
16. Unit Capacity Factor (Using MDC)	86.8	39.7	63.2
17. Unit Capacity Factor (Using Design MWe)	84.6	38.7	61.6
18. Unit Forced Outage Rate	0.0	0.0	8.0

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 July 3, 1990
Completed By Lynne Deelsnyder
Telephone 309-654-2241

MONTH JUNE

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	725	17	586
2	725	18	777
3	693	19	767
4	643	20	701
5	656	21	696
6	727	22	728
7	732	23	741
8	735	24	646
9	724	25	738
10	639	26	765
11	692	27	769
12	760	28	695
13	765	29	753
14	773	30	760
15	584		
16	775		

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 July 3, 1990
Completed By Lynne Deelsnyder
Telephone 309-654-2241

MONTH JUNE

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	789	17	789
2	788	18	678
3	778	19	646
4	786	20	789
5	789	21	689
6	790	22	633
7	789	23	-1
8	789	24	-8
9	789	25	99
10	755	26	231
11	764	27	623
12	785	28	787
13	781	29	766
14	792	30	776
15	766		
16	790		

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 Unit One

COMPLETED BY Lynne F. Deelsnyder

DATE July 3, 1990

REPORT MONTH June, 1990

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
90-5	900615	F	0.0	B	5	------			Power Reduction Taken to Bypass Turbine Trip Reactor Scram to Troubleshoot 'A' MTSV Light
90-6	900617	F	0.0	B	5	------		CRDRVE	Power Reduction Taken to Perform Control Rod Drive Hot Scram Timing

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-265

UNIT NAME Unit Two

COMPLETED BY Lynne F. Deelsnyder

DATE July 3, 1990

REPORT MONTH June, 1990

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
90-6	900623	S	57.0	B	2	------		PUMP	Reactor Scrammed To Repair Leak on Safe Shutdown Makeup Pump Discharge Line and Replace Seal on Recirculation Pump

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: Two

Date: June 25, 1990

Valves Actuated	No. & Type of Actuation
2-203-3B	1 Manual
2-203-3D	1 Manual

Plant Conditions: Reactor Pressure - 930.7

Description of Events: Post Maintenance Testing, Manual Operation of Electromatic Relief Valves (QOS 201-S1), Tech Spec: Ref. 3.5/4.5.D.1.a

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 1-1-90 TO 12-31-90

DATE	NUMBER OF RODS	AVERAGE TIME IN SECONDS AT % INSERTED FROM FULLY WITHDRAWN				MAX. TIME FOR 90% INSERTION	DESCRIPTION
		5	20	50	90		
		0.375	0.900	2.00	3.5	7 sec.	Technical Specification 3.3.C.1 & 3.3.C.2 (Average Scram Insertion Time)
1-22-90	1	0.27	0.65	1.42	2.52	N-10 (2.52)	Unit 1, Hot Scram Timing for test due to 127 Valve Diaphragm Replacement
1-31-90	1	0.29	0.64	1.34	2.36	R-7 (2.36)	Unit 1, Hot Scram Timing for test due to 127 Valve Diaphragm Replacement
5-09-90	177	0.30	0.68	1.45	2.54	H-11 (3.29)	Unit 2, Hot Scram Timing during Start Up Sequence A&B, Cycle 11
6-21-90	88	0.29	0.66	1.40	2.46	M-11 (2.70)	Unit 1, Hot Scram Timing for Sequence B Cycle 11, 1st Sequence of Cycle

0027H/0061Z

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 2
October 1989

QUAD CITIES REFUELING INFORMATION REQUEST

1. Unit: Q1 Reload: 10 Cycle: 11

2. Scheduled date for next refueling shutdown: 10-27-90

3. Scheduled date for restart following refueling: 1-4-91

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

   NONE AS YET DETERMINED.

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

   JULY 6, 1990

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: 1537

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: 2008

APPROVED
OCT 3 0 1989
O.C.O.S.R.

QTP 300-S32
Revision 2
October 1989

QUAD CITIES REFUELING INFORMATION REQUEST

1. Unit: Q2 Reload: 10 Cycle: 11

2. Scheduled date for next refueling shutdown: 9-7-91

3. Scheduled date for restart following refueling: 12-9-91

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: 2011

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: 2008

APPROVED
OCT 30 1989
O.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