

GCT-92-29

July 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 June 1992.

Respectfully,

COMMONWEALTH EDISON COMPANY **OUAD-CITIES NUCLEAR POWER STATION** 

Gerald C. Tietz

Technical Superintendent

Gerald C. Test

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

JUNE 1992

COMMONWEALTH EDISON COMPANY

AND

10WA-ILLINOIS GAS & ELECTRIC COMPANY

NRC DOCKET NOS. SO-254 AND 50-265

LICENSE NOS. DPR-29 AND DPR-30

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#### 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 Swam 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 June in a maintenance outage for tube repair on the main condenser. The unit was brought back on line on the 2nd of June. Another maintenance outage, occurred from June 13 through June 15, for additional condenser tube repair.

Full power for the Unit One declined over the month due to the unit being in coast down for the upcoming refuel outage.

The significant load reductions ordered by Chicago Load Dispatch occurred on; June 5 to 630 MWe, June 7 to 600 MWe, June 8 to 700 MWe, and June 9 to 500 MWe.

#### B. Unit Two

Quad Cities Unit Two performed a load drop per Chicago Load Dispatch on June 4 to 500 MWe. On June 6, Unit Two reduced power to 450 MWe and held due to increased off gas flow. Power, on June 6, was returned to full and reduced a second time to 450 MWe due to increasing condenser back pressure. Unit Two's power remained between 450 MWe to as low as 180 MWe, due to low condenser back pressure and high off gas flow, until condenser leak repairs were complete on June 14.

Chicago Load Dispatch requested the following additional load drops for Unit Two for the month of June;

Date	Load
06-18-92 06-19-92 06-20-92 06-21-92 06-23-92 06-25-92 06-28-92 06-29-92	468 MWe 550 MWe 700 MWe 250 MWe 650 MWe 700 MWe 550 MWe 700 MWe

On June 27 Unit Two generate Comput was reduced to 700 MMe for a turbine surveillance.

## 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 tatular 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 Maifunctions, Results and Effects on Safe Operation, and Action Taken to Prevent Repetition.

#### UNIT 1 MAINTENANCE SUMMARY

WORK REQUEST	SYSTEM	EID DESCRIPTION	WORK PERFORMED
Q01006	2406	Repair Oxygen-Hydrogen recorder failed up-scale.	As Found: Recorder pegged high when turned on. As Left: The recorder read in normal range after being turned on for 1 1/2 hours. Solution was sufficient time to stabilize after energizing record panel.
Q01180	1705	MSL rad monitor down scale reactor building fuel pool vent rad monitor calibration bypass switch trouble.	As Found: Bypassed the 1 Rx Bldg vent monitor and MSL downscale alarm came up with no indication on monitors. As Left: Suspected short between leads required lifting and jumping various leads to isolate. No short found. Problem disappeared with no MSL down scale alarm w/process rad monitor in bypass.
Q01274	0312	SCRAM inlet valve leaking water, repair/repack.	As Found: Valve packing was leaking. As Left: Installed new packing and set seating pressure and spring tension.

## UNIT 2 MAINTENANCE SUMMARY

WORK REQUEST	SYSTEM	EID DESCRIPTION	HORK PERFORMED
Q01292	2499	which failed LIPT	As Found: Valve cover appeared to not be on all the way. As Left: Gasket had been installed wrong. New gasket installed and cover tightened.

#### 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 6.6.8.1 and 6.6.8.2 of the Technical Specifications.

#### UNIT 1

Licensee Event Report Number	Date	Title of Occurrenc≎
92-013	06-09-92	Logic deficiency in the SBGT Logic.
92-016	06-26-92	Missed Tech Spec Surveillance on Fire Valve.
		UNIT 2
92-018	05-29-92	Manual Isolation of HPCI System.
92 19	06-06-92	Hi Rad Area door lock malfunction (Hotwell Door).
92-020	06-12-92	"R" Gate Found Open.
92-021	06-23-92	Offgas Isolation.

#### 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

UN.: One

DATE July 2. 1992

COMPLETED BY Matt Benson

TELEPHONE (309) 654-2241

PER	ATING STATES 0000 060192			
1.	REPORTING PERIOD: 2400 063092 GROSS HOURS IN	REPORTING PER	IOD: 720	
	CURRENTLY AUTHORIZED POWER LEVEL (MNt): 2511 DESIGN ELECTRICAL RATING (MWe-Net): 789	MAX. DEPEN	D. CAPACITY: Z	69
3.	POWER LEVEL TO WHICH RESTRICTED (TT MY) (MWe-Net	N/A		
4.	PFASONS FOR RESTRICTION (IF ANY):			
5.	NUMBER OF HOURS REACTOR WAS CRITICAL	THIS MONTH 644.10	YR TO DATE 3971.60	140482.70
6.	REACTOR RESERVE SHUTDOWN TOURS	0.0	0.0	3421.9
7.	HOURS GENERATOR ON LINE	622.10	3931.20	136162.30
8.	UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	909.2
9.	GROSS THERMAL ENERGY GENERATED (MWH)	1421217.60	9437121.66	293504144.60
10.	GROSS ELECTRICAL ENERGY GENERATED (MMH)	450504.0	.3062333.0	95136669.0
11.	MET ELECTRICAL ENERGY GENERATED (***H)	428921.0	2954096.0	89664264.0
12.	REACTOR SERVICE FACTOR	89.45	90.95	79.26
13.	REACTOR AVAILABILITY FACTOR	89,46	90.95	81.19
14.	UNIT SERVICE FACTOR	86.40	90.02	76.82
15.	UNIT AVAILABILITY FACTOR	86.40	90.02	77.34
16.	UNIT CAPACITY FACTOR (Using MDC)	77.47	87.99	65.79
17.	UNIT CAPACITY FACTOR (Using Design MWe)	75.50	85.76	64.12
18.	UNIT FORCED OUTAGE RATE	13.60	10.00	5.85
20.	SHUTDOWNS SCHEDULED OVER NEXT 6 MGNTHS (TYPE, DATE, IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE UNITS IN TEST STATUS (PRIUR TO COMMERCIAL OPERATION	OF STARTUP:		
	INITIAL CRITICALITY	FORECAST	ACHIEVED	
	INITIAL ELECTRICITY			
	COMMERCIAL OPERATION	MARKET AND A		

#### APPENDIX C OPERATING DATA REPORT

DOCKET NO 50-265

UNIT Two
DATE July 2, 1992

COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

			ELEPHONE (309	) 654-2241
	RATING STATUS 0000 060192			
1.	REPORTING PERIOD: 2400 063092 GROSS HOURS	IN REPORTING PE	RIOD: 720	
2.	CURRENTLY AUTHORIZED POWER LEVEL (Mwt): 2512 DESIGN ELECTRICAL RATING (Mr'e-Net): 789		ND. CAPACITY:	769
3	FOWER 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 1275.55	
6.	REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	2985.8
7.	HOURS GENERATOR ON LINE	720.00	1204.55	131224.45
8.	UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	702.9
9.	GROSS THERMAL ENERGY GENERATED (MWH)	1373172.0	2381116.80	282465002.50
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	445726.00	765827.00	90696017.00
11.	NET ELECTRICAL ENERGY GENERATED (MWH)	424231.00	706141.00	85840316.00
12.	REACTOR SERVICE FACTOR	100.00	29.21	76.71
17.	REACTOR AVAILABILITY FACTOR	100.00	29.21	78.41
14.	UNIT SERVICE FACTOR	100.00	27.58	74.70
15.	UNIT AVAILABILITY FACTOR	100.00	27.58	75,10
16.	UNIT CAPACITY FACTOR (Using MDC)	76.62	21.03	63.54
17.	UNIT CAPACITY FACTOR (Using Design MWe)	74.68	20.49	61,93
18.	UNIT FORCED OUTAGE RATE	0.0	0.0	5.02
20.	SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION	OF STARTUP:	DF EACH):	
	INITIAL CRITICALITY	FORECAST	ACHTEVED	
	INITIAL ELECTRICITY			
	COMMERCIAL OPERATION			

#### APPENDIX B AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO	50-254
UNIT	One
DATE	July 2, 1992
COMPLETED BY	Matt Benson
TELEPHONE	(309) 654-2241

DAY AVER	RAGE DAILY POWER LEVEL	DAY AVER	AGE DAILY POWER LEVEL	
	(MWe-Net)		(MWe-Net)	
1	- 8	17	744	
?	101	18	736	
3	647	19	731	
4	764	20.	734	
5	729	21	727	
6	768	22.	709	
7	726	25	707	
8	749	24	701	
9	695	25	705	
10	756	26	700	
11	744	27	652	
12	695	28	657	
13	7	29	679	
14	- 8	30	651	
15	39	31		
16	62?			

#### INSTRUCTIONS

On this form, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nears t 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 2, 1992

COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

DAY AVE	RAGE DAILY POWER LEVEL (MWe-Net)	DAY AVERAGE DAIL FOWER LEVE (MWe-Net)			
1	784	17.	777		
2	785	18	701		
3	771	19	726		
4	663	20.	735		
5	776	21	539		
6	466	22.	718		
7	367	23	761		
8	310	24.	776		
)	270	25	754		
10	330	26	779		
11	153	27	742		
12	88	28	717		
13	102	29	756		
14	121	30	780		
15	642	31			
16	771				

#### INSTRUCTIONS

On this form, list the average daily unit power level in MW2-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 Matthew Benson

DATE

July 2, 1992

REPORT MONTH June, 1992

TELEPPONE

309-654-2241

NO.	DATE	F OR S	DURATION (HOURS)	REASON	SHUTTING DOWN REACTOR	Licensee EVENT REPORT NO.	SYSTEM	COMPONENT	CORRECTIVE ACTIONS/COMMENTS
92-23	6-1-92	F	35.6	В	4				Continued Cond. Tube Repair
92-24	6-5-92	S	4.5	F	5				Load cop per Chicago Load Dispatcher
92-25	6-7-92	S	4.6	F	5				Load Drop per Chicago Load Dispatcher
92-26	6-8-82	S	2.8	F	5				Load Drop per Chicago Load Dispatcher
92-27	6-9-92	S	5.9	F	5				Load Drop per Chicago Load Dispatcher
92-28	6-13-92	F	62.3	В	2				Cond. Tube Repair

## APPENDIX D UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-265

UNIT NAME Unit Two

COMPLETED BY Matthew Benson

DATE

July 2, 1992

REPORT MONTH June, 1992

TELEPHONE

309-654-2241

NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT NO.	SYSTEM	COMPONENT	COPPECTIVE ACTIONS/COMMENTS
2-05	6-04-92	S	17.1	F	5				Load Drop per Chicago Load Dispatcher
92-06	6-06-92	F	8.6	D	3				Increased Off Gas/Cond Leak
92-07	6-06-92	F	202.0	D	5				Increased Off Gas/Cond Leak
92-08	6-18-92	S	5.9	F	5				Load Drop per Chicago Load Dispatcher
92-09	6-19-92	S	4.8	F	5				Load Drop per Chicago Load Dispatcher
92-10	6-20-92	S	6.6	F	5				Load Drop per Chicago Load Dispatcher
92-11	6-21-92	S	35.0	F	5				Lord Drop per Chicago Load Dispatcher
92-12	6-23-92	S	2.9	F	5				Load Drop per Chicago Load Dispatcher
92-13	6-25-92	S	5.0	F	5				Load Drop per Chicago Load Dispatcher
92-14	6-27-92	S	7.6	В	5				Turbine Weekly Test
92-15	6-28-92	S	6.3	F	5				Load Drop per Chicago Load Dispatcher
92-16	6-29-92	S	4.3	F	5				Load Drop per Chicago Load Dispatcher

-1-(final)

#### 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

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 End Drive Scram Timing for the reporting period. All scram timing was performed with reactor pressure greater than 800 PSIG.

# RESULTS OF SCRAN TIMING MEASUREMENTS PERFORMED ON UNIT 1 & 2 CONTROL ROD DRIVES, FROM 1-1-92 TO 12-31-92

	T	AVERA	GE TIME II	N SECONDS FULLY WIT	AT % HDRAWN	MAX. TIME FOR 90% INSERTION	DESCRIPTION	
DATE	NIMBER 5   20   50   90	7 sec.	Technical Specification 3.3.C.1 & 3.3.C.2 (Average Scram Insertion Time)					
2-19-92	2	0.28	0.67	1.43	2.48	J-2 2.55	Drive Replacement (J-2), Scrau Valve N-7	
2-20-92	1	0.32	0.69	1.45	2.45	N-5 2.45	Scram Valve Work N-5	
5-12-9?	177	0.31	0.69	1.47	2.58	L-13 3.43	Start-up Scram Timing Unit Two	
6-02-92	1	0.31	0.65	1.37	2.35	N-5 2.35	Scram Valve Work	
6-26-92	2	0.27	0.62	1.32	2.32	C-13 2.26	ACCUM C-13, N-7	
					5 - 1			

#### VII. REFUELING INFORMATION

The following information about future rcloads at Quad-Cities Station was requested in a January 26, 1978, licensing memorandum (78-24) from D. E. G'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

	Unit:	Q1	Reload:	11	Cycle: 12				
2.	Scheduled	date for ne	xt refueling	shutdown:	9-5-92				
3.	Scheduled	date for re	start following	ng refugling:	12-5-92				
4.	specific.	cron change	or other lice	eration thereaf nse amendment: xhaust steam li	ter require a Technical ne.				
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 P	RESENT TIME.							
7.	The numbe	r of fuel as:	semblies.						
	a. Numb	er of assemb	lies in core:		724				
	b. Numb	er of assemb	lies 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. Lice	nsed storage	capacity for	spent fuel:	3657				
	b. Plan	ned increase	in licensed	torage:					
9.	The project spent fue	cted date of 1 pool assumi	the last refu ing the preser	deling that can nt licensed capa	be discharged to the acity: 2009				

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

#### QTP 300-532 Revision 2 October 1989

#### QUAD CITIES REFUELING INFORMATION REQUEST

١.	Unit: Q2	Reload:	11	Cycle:	12				
2.	Scheduled date for next	refueling s	shutdown:		03/06/93				
3.	Scheduled date for rest	art following	ng 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(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 assem	blies.							
	a. Number of assemblie	s in core:		******	724				
	b. Number of assemblie	s in spent i	fuel pool:	-	2439				
3.	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 ca	pacity for s	pent fuel:	-	2897	-			
	b. Planned increase in	licensed st	o.age:		0	nation (violatio			
).	The projected date of the spent fuel pool assuming	e last refue the present	ling that can be licensed capac	e discharity: 200	rged to the				

APPROVED OCT 3 0 1989

#### 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 - Anticipated Transient Without Scram ATWS BWR - Boiling Water Reactor CRD - Contra Rod Drive EHC - Electro-Hydraulic Control System - Emergency Operations Facility FOF GSEP - Generating Stations Emergency Plan HEPA - High-Efficiency Particulate Filter HPCI - High Pressure Coolant Injection System KRSS - High Radiation Sampling System IPCLRT - Integrated Primary Containment Leak Rate Test IRM - Intermediate Range Monitor ISI - Inservice Inspection 1.ER - 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 Friction Limiting Critical Power Ratio MPC - Maximum Permissible Concentration MSIV - Main Steam Isolation Valve MIOSH - National Institute for Occupational Safety and Health-- Primary Containment Isolation PCI PCTOMR - 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 SBGYS - Standby Gas Treatment System - Standby Liquid Control SBLC SDC - Shutdown Cooling Mode of RHRS SDV - Scram Discharge Volume SAM - Source Range Monitor TBCCW - Turbing Building Closed Cooling Water System

TIP

TSC

- Traversing Incore Probe

- Technical Support Center