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LWP-95-091

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October 5, 1995

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 September 1995.

Respectfully,

ComEd Quad-Cities Nuclear Power Station

L. W. Pearce Station Manager

LWP/dak

Enclosure

cc: H. Miller, Regional Administrator C. Miller, Senior Resident Inspector

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# QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

September 1995

COMMONWEALTH EDISON COMPANY

AND

MID-AMERICAN ENERGY 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 Mid-American Energy 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 Kristal Moore and Debra Kelley, telephone number 309-654-2241, extensions 3070 and 2240.

## II. SUMMARY OF OPERATING EXPERIENCE

### A. Unit One

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Quad Cities Unit One spent the month of September 1995 at full power and has been on line for 260 days. A load drop was taken on September 14, 1995 to perform Control Rod Pattern Adjustment. After the Control Rod Pattern Adjustment was completed, the Prime Computer failed affecting Core Monitoring Code. Therefore, the scheduled load drop revolved into a forced load drop.

#### B. Unit Two

Quad Cities Unit Two started the month of September 1995 shutdown in a Forced Outage due to a auto scram that occurred during EHC Testing in the month of August. The reactor went critical on September 1, 1995 at 2141 hours and the generator was synched to the grid on September 2, 1995 at 1511 hours. A few load drops were performed, however the average daily level remained at 80% or greater.

### III. <u>PLANT OR PROCEDURE CHANGES, TESTS, EXPERIMENTS,</u> AND SAFETY RELATED MAINTENANCE

### A. Amendments to Facility License or Technical Specifications

Technical Specification Amendment No. 157 was issued on June 23, 1995 to Facility Operating License DPR-29 and Amendment No. 153 to Facility Operating License DPR-30 for Quad Cities Nuclear Power Station. The amendments would revise the Technical Specification Section 3/4.10 (Refueling Operations). These changes are part of the Technical Specification Upgrade Program (TSUP).

Technical Specification Amendment No. 158 was issued on July 27, 1995 to Facility Operating License DPR-29 and Amendment No. 154 to Facility Operating License DPR-30 for Quad Cities Nuclear Power Station. The amendments would revise the Technical Specification Section 3.3 (Reactivity Controls). These changes are part of the Technical Specification Upgrade Program (TSUP).

Technical Specification Amendment No. 159 was issued on September 11, 1995 to Facility Operating License DPR-29 and Amendment No. 155 to Facility Operating License DPR-30 for Quad Cities Nuclear Power Station. The amendments revise the Quad Cities Nuclear Power Station, Units 1 and 2, operating licenses to reflect the transfer of the Iowa-Illinois Gas and Electric Company's (IIGEC) 25 percent undivided ownership to Mid-American Energy Company.

Technical Specification Amendment No. 160 was issued on September 18, 1995 to Facility Operating License DPR-29 and Amendment No. 156 to Facility Operating License DPR-30 for Quad Cities Nuclear Power Station. The amendments would revise the Technical Specification Section 3/4.9 (Electrical Power Systems). These changes are part of the Technical Specification Upgrade Program (TSUP).

Technical Specification Amendment No. 161 was issued on September 20, 1995 to Facility Operating License DPR-29 and Amendment No. 157 to Facility Operating License DPR-30 for Quad Cities Nuclear Power Station. The amendments would revise the Technical Specification Section 3/4.1 (Reactor Protection Systems). These changes are part of the Technical Specification Upgrade Program (TSUP).

Technical Spacification Amendment No. 162 was issued on September 21, 1995 to Facility Operating License DPR-29 and Amendment No. 158 to Facility Operating License DPR-30 for Quad Cities Nuclear Power Station. The amendments would revise the Technical Specification Section 3/4.6 (Primary System Boundary). These changes are part of the Technical Specification Upgrade Program (TSUP).

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### III. <u>PLANT OR PROCEDURE CHANGES, TESTS, EXPERIMENTS,</u> AND SAFETY RELATED MAINTENANCE

## 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

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There were no Tests or Experiments requiring NRC approval for the reporting period.

## 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 <u>Report Number</u>	Date	Title of occurrence
95-006	8-18-95	1A Recirc Pump speed increased Rx thermal. This LER was downgraded.

## UNIT 2

Licensee Event Report Number Date Title of occurrence

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

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## V. DATA TABULATIONS

The following data tabulations are presented in this report:

A. Operating Data Report

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- B. Average Daily Unit Power Level
- C. Unit Shutdowns and Power Reductions

APPEN	DIX C		
OPERATING D	ATA REPORT		
		DOCKET NO.	50-254
		UNIT	One
		DATE	October 5, 1995
		COMPLETED BY	Kristal Moore
		TELEPHONE	(309) 654-2241
OPERATING STATUS			
0000 090195 1. REPORTING PERIOD: 2400 093095 GROSS HOURS IN	REPORTING PERIOD	9: 720	
2. CURRENTLY AUTHORIZED POWER LEVEL (MWI): 251 DESIGN ELECTRICAL RATING (MWe-NET): 789	I MAX > DEPEND	> CAPACITY: 769	
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MW	e-Net): N/A		
4. REASONS FOR RESTRICTION (IF ANY):			
	THIS MONTH	YR TO DATE	CUMULATIVE
5. NUMBER OF HOURS REACTOR WAS CRITICAL	720.00	6319.80	158752.30
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	3421.9
7. HOURS GENERATOR ON LINE	720.00	6264.00	154087.9
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	909.20
9. GROSS THERMAL ENERGY GENERATED (MWH)	1755983.00	15178836.10	334334959.50
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	557809.00	4840694.00	108304548.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)	533277.00	4637876.00	102226042.00
12. REACTOR SERVICE FACTOR	100.00	96.47	77.13
13. REACTOR AVAILABILITY FACTOR	100.00	96.47	78.83
14. UNIT SERVICE FACTOR	100.00	95.62	74.90
15. UNIT AVAILABILITY FACTOR	100.00	95.62	75.34
16. UNIT CAPACITY FACTOR (Using MDC)	96.32	92.06	64.62
17. UNIT CAPACITY FACTOR (Using Design MWe)	93.87	89.73	62.98
18. UNIT FORCED OUTAGE RATE	0.00	4.38	7.36
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (T)	YPE, DATE, AND DU	RATION OF EACH):	
20. IF SHUTDOWN AT END OF REPORT PERIOD < ESTIMA	TED DATE OF STAR	TUP:	
21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPE	RATION):		
	FORECAST	ACHIEVED	
INITIAL CRITICALITY			
INITIAL ELECTRICITY			
COMMERCIAL OPERATION			

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APPEN	DIX C		
OPERATING D	ATA REPORT		
		DOCKET NO. UNIT DATE	50-265 Two October 5, 1995 Kristel Moore
		TELEBUONE	(300) 654.2241
		TELEPHONE	(309) 034-2241
1. REPORTING PERIOD: 2400 093095 GROSS HOURS IN	REPORTING PERIOD	: 720	
2. CURRENTLY AUTHORIZED POWER LEVEL (MWI): 251 DESIGN ELECTRICAL RATING (MWe-NET): 789	1 MAX > DEPEND	> CAPACITY: 769	
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MW	e-Net): N/A		
4. REASONS FOR RESTRICTION (IF ANY):			
	THIS MONTH	YR TO DATE	CUMULATIVE
5. NUMBER OF HOURS REACTOR WAS CRITICAL	698.30	2659.80	152435.65
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	2985.80
7. HOURS GENERATOR ON LINE	680.80	2566.70	148498.35
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	702.90
9. GROSS THERMAL ENERGY GENERATED (MWH)	1423117.50	5197103.92	321137808.02
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	442821.00	1612020.00	103125921.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)	422180.00	1528435.00	97684344.00
12. REACTOR SERVICE FACTOR	96.99	40.60	74.66
13. REACTOR AVAILABILITY FACTOR	96.99	40.60	76.13
14. UNIT SERVICE FACTOR	94.56	39.18	72.74
15. UNIT AVAILABILITY FACTOR	94.56	39.18	73.08
16. UNIT CAPACITY FACTOR (Using MDC)	76.25	30.34	62.22
17. UNIT CAPACITY FACTOR (Using Design MWe)	74.32	29.57	60.64
18. UNIT FORCED OUTAGE RATE	5.42	11.21	9.95
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (T	YPE, DATE, AND DU	RATION OF EACH)	
20. IF SHUTDOWN AT END OF REPORT PERIOD < ESTIMA	TED DATE OF STAR	TUP:	
21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPE	RATION):		
	FORECAST	ACHIEVED	
INITIAL CRITICALITY			
INITIAL ELECTRICITY			
COMMERCIAL OPERATION			

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### APPENDIX B AVERAGE DAILY UNIT POWER LEVEL

		DOCKET N UNI DAT COMPLETED E TELEPHON	NO <u>50-254</u> IT <u>One</u> IE <u>October 5, 1995</u> BY <u>Kristal Moore</u> NE <u>(309) 654-2241</u>
MONTH Se	ptember 1995		
DAY AVERAG	E DAILY POWER LEVEL (MWe-Net)	DAY AVERAGE	E DAILY POWER LEVEL (MWe-Net)
1	739	17	742
2	739	18	740
3	747	19	756
4	750	20	723
5	752	21	767
6	754	22	720
7	754	23	688
8	756	24	753
9	755	25	737
10	751	26	768
11	754	27	768
12.	760	28	766
13	754	29	770
14	557	30	723
15	712	31	
16	749		

### INSTRUCTIONS

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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

MONTH	September 1995	DOCKET N UNI DAT COMPLETED B TELEPHON	0 <u>50-265</u> T <u>Two</u> E <u>October 5, 1995</u> Y <u>Kristal Moore</u> E <u>(309) 654-2241</u>
DAY AVERA	AGE DAILY POWER LEVEL (MWe-Net)	DAY AVERAGE	DAILY POWER LEVEL (MWe-Net)
1	- 9	17	653
2	38	18	619
3	301	19	656
4	373	20	646
5	333	21	664
6	423	22	652
7	514	23	714
3	593	24	714
9	661	25	720
10	652	26	769
11	667	27	754
12	668	28	765
13	667	29	719
14	660	30	679
15	657	31	
16	657		

#### 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

NO. DATE NO State NO STATION (HOURS) NO STATE NO S	ATE	Octo	ober 5	<u>, 1995</u> P	EPOR	I MONTH	_September	1995	-	TELEPHONE <u>309-654-2241</u>
95.08   9/14/95   S   0   H   5     Control Rod Pattern Adjustment     95.09   9/14/95   F   0   A   5     Image: Control Rod Pattern Adjustment     95.09   9/14/95   F   0   A   5    Image: Control Rod Pattern Adjustment     95.09   9/14/95   F   0   A   5    Image: Control Rod Pattern Adjustment     95.09   9/14/95   F   0   A   5    Image: Control Rod Pattern Adjustment     95.09   9/14/95   F   0   A   5    Image: Control Rod Pattern Adjustment     96.09   9/14/95   F   0   A   5    Image: Control Rod Pattern Adjustment     91.01   Image: Control Rod Pattern Adjustment     1   Image: Control Rod Pattern Adjustment     1   Image: Control Rod P	NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT	SYSTEM CODE	COMPONENT	CORRECTIVE ACTIONS/COMMENTS
95.09     9/14/95     F     0     A     S       Prime Computer Failed Affecting Con- Monitoring Code       I     <	95-08	9/14/95	s	0	н	5				Control Rod Pattern Adjustment
Image: Section of the section of th	95-09	9/14/95	F	0	A	5				Prime Computer Failed Affecting Core Monitoring Code
										an e a sense su man e anno anno anno anno anno anno anno
	and an approximation of the second									

### APPENDIX D UNIT SHUTDOWNS AND POWER REDUCTIONS

OCKET NIT NA ATE	NO. <u>50-</u> ME <u>Two</u> Oct	265 ober 5	<u>, 1995</u> 1	REPOR	T MONTH	September	1995	-	COMPLETED BY <u>Kristal Moore</u> TELEPHONE <u>309-654-2241</u>
NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
95-08	9-01-95	F	39.2	B	3				Continued Forced Outage.
_									
	de model de desenant de manie								
-	- 14							1.1.1	

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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

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: One

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Date: September 10, 1995

Valve Actuated: No. & Type of Actuation:

1-203-3A	1 Manual	1
1-203-3B	1 Manual	1
1-203-30	1 Manua	1
1-203-3D	1 Marua	١.
1-203-3E	1 Manua	1

Plant Conditions: Reactor Pressure 1002 psig

Description of Events: Surveillance Testing

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.

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### OUAD CITIES REFUELING INFORMATION REQUEST

QTP 300-532 Revision 2 October 1989

1.	Unit:	Q1	and the state of the	Reload:	13	Cycle:	14	menoration trapped to the
2.	Scheduled	date for	next	refueling	shutdown:		2/5/96	
3.	Scheduled	date for	rest	art follows	ng refueling:		5/15/96	

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

NO

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

7-4-95

 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:

232 GE10 Fuel Bundles will be loaded during Q1R14.

7. The number of fuel assemblies.

٤.	Number	of	assemblies	in	core:			724
6.	Number	of	assemblies	in	spent	fuel	pool:	1717

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:

۹.	Licensed storage	capacity for spent fuel:	3657
b.	Planned increase	in licensed storage:	0

 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

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QUAD CITIES REFUELING INFORMATION REQUEST QTP 300-532 Revision 2 October 1989

1.	Unit: Q2	Reload: 13	Cycle: 14
2.	Scheduled date for next	refueling shutdown:	1-6-97
3.	Scheduled date for rest	art following refueling:	3-30-97

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

YES

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1.

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

November, 1996

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:

Approx. 200 Siemens 9X9IX Power Corporation Fuel Bundles will be loaded during Q2R14.

7. The number of fuel assemblies.

å.	Number	of	assemblies	10	core:	724
ь.	Number	of	assemblies	tn	spent fuel pool:	3377
					spans tost poor.	AND A RELEASE OF THE OTHER POST OF THE POS

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:

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# 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