Commonwealth Edison Company Quad Cities Generating Station 22710 206th Avenue North Cordova, II. 61242-9740 Tel 309-654-2241



LWP-96-079

November 8, 1996

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 October 1996.

Respectfully,

ComEd

Quad-Cities Nuclear Power Station

L. W. Pearce Station Manager

LWP/dak

Enclosure

cc: A. Beach, Regional Administrator

C. Miller, Senior Resident Inspector

IE241/

STMGR\07996.LWP

### QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

OCTOBER 1996

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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### INTRODUCTION

Quad-Cities Nuclear Power Station is composed of two Boiling Water
Reactors and Steam Turbine/Generators, 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, respectively.

### II. SUMMARY OF OPERATING EXPERIENCE

### A. Unit One

Quad Cities Unit One was on-line the entire month of October 1996. A few load drops were performed for Weekly Turbine Testing, however the average daily power level remained at 80% or greater.

### B. Unit Two

Quad Cities Unit Two was Critical the entire month of October 1996. On October 24, 1996 at 0345 hours the Turbine was taken off-line to investigate why the #1 Combined Intermediate Valve drifted closed. The investigation revealed a hydraulic problem. The unit came back on-line Friday, October 25, 1996, but was forced back off-line Sunday, October 27, 1996 at 2125 hours. The forced outage was due to foreign material located in the Moisture Separator Drain Tank Level Control Valves. The unit was synched to the grid October 30, 1996 at 0542 hours.

# 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. <u>Tests and Experiments Requiring NRC Approval</u>

  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 of 10CFR50.73.

## UNIT 1

Licensee Event Report Number	Date	Title of occurrence
96-014	9/27/96	Electrical distribution weekly surveillance did not document voltage verification in accordance with Technical Specification 4.9E to an inadequate procedure.
96-021	10/11/96	B Control Room HVAC System was Declared Inoperable due to Crankcase Heater Power Supply Design Deficiency.
96-022	10/28/96	B Control Room HVAC INOP due to unable to maintain $+1/8$ " Positive Pressure in Control Room Compared to surrounding area.

## UNIT 2

Licensee Event Report Number	Date	Title of occurrence			
96-002	10/9/96	High Pressure Coolant Injection Inoperable due to Inadequate Venting.			

### V. DATA TABULATIONS

The following data tabulations are presented in this report:

- A. Operating Data Report
- B. Average Daily Unit Power Level
- C. Unit Shurdowns and Power Reductions

### APPENDIX C

### OPERATING DATA REPORT

DOCKET NO. 50-254

UNIT One

DATE November 8,

1996

COMPLETED BY Kristal Moore

TELEP\* UNE (309) 654-2241

#### OPERATING STATUS

0000 100196

- 1. REPORTING PERIOD: 2400 103196 GROSS HOURS IN REPORTING PERIOD: 745
- 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	745.00	2581.70	163045.20
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.60	3421.90
7. HOURS GENERATOR ON LINE	745.00	2305.70	158064.90
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	909.20
9. GROSS THERMAL ENERGY GENERATED (MWH)	1863336.00	5310565.90	343716363.50
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	604229.00	1682906.00	111296987.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)	577883.00	1603470.00	105077846.00
12. REACTOR SERVICE FACTOR	100.00	35.27	75.75
13. REACTOR AVAILABILITY FACTOR	100.00	35.27	77.34
14. UNIT SERVICE FACTOR	100.00	21.50	73.43
15. UNIT AVAILABILITY FACTOR	100.00	31.50	73.85
16. UNIT CAPACITY FACTOR (Using MDC)	100.87	28.49	63.48
17. UNIT CAPACITY FACTOR (Using Design MWe)	98.31	27.76	61.87
18. UNIT FORCED OUTAGE RATE	0.00	4.83	7.55

- 19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH): N/A
- 20. IF SHUTDOWN AT END OF REPORT PERIOD < ESTIMATED DATE OF STARTUP:
- 21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION): N/A

	FORECAST	ACHIEVED	Take ALL
INITIAL CRITICALITY			
INITIAL ELECTRICITY			
COMMERCIAL OPERATION			

#### APPENDIX C

#### OPERATING DATA REPORT

DOCKET NO. 50-265

UNIT Two

DATE November 8,

1996

COMPLETED BY Kristal Moore

TELEPHONE (309) 654-2241

#### **OPERATING STATUS**

0000 100196

- 1. REPORTING PERIOD: 2400 103196 GROSS HOURS IN REPORTING PERIOD: 745
- 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	745.00	5052.10	159122.55
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	2985.80
7. HOURS GENERATOR ON LINE	645.00	4885.80	154785.35
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	702.90
9. GROSS THERMAL ENERGY GENERATED (MWH)	1488014.40	11803960.90	336145181.82
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	453926.00	3739301.00	107884836.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)	433048.00	3579811.00	102232697.00
12. REACTOR SERVICE FACTOR	100.00	69.02	74.46
13. REACTOR AVAILABILITY FACTOR	100.00	69.02	75.86
14. UNIT SERVICE FACTOR	86.58	66.75	72.43
15. UNIT AVAILABILITY FACTOR	86.58	66.75	72.76
16. UNIT CAPACITY FACTOR (Using MDC)	75.59	63.59	62.21
17. UNIT CAPACITY FACTOR (Using Design MWe)	73.67	61.98	60.64
18. UNIT FORCED OUTAGE RATE	13.42	33.25	11.27

- 19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH): 3/1/97
- 20. IF SHUTDOWN AT END OF REPORT PERIOD < ESTIMATED DATE OF STARTUP:
- 21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION): N/A

	FORECAST	ACHIEVED	
INITIAL CRITICALITY			
INITIAL ELECTRICITY			
COMMERCIAL OPERATION			

# APPENDIX B AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO 50-254

MONTH October 1996	DOCKET NO 50-254 UNIT One DATE November 8, 1996 COMPLETED BY Kristal Moore TELEPHONE (309) 654-2241
DAY AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY AVERAGE DAILY POWER LEVEL (MWe-Net)
1. 779	17
2. 777	18
3. 780	19
4. 780	20. 776
5. 771	21. 779
6. 778	22
7. 779	23
8. 780	24
9. 780	25
10	26749
11	27
12	28
13	29
14	30
15	31
16. 778	

### 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

MONTH October 1996	DOCKET NO 50-265  UNIT Two DATE November 8, 1996  COMPLETED BY Kristal Moore TELEPHONE (309) 654-2241
DAY AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY AVERAGE DAILY POWER LEVEL (MWe-Net)
1. 767	17
2. 767	18768
3	19769
4. 767	20. 74.3
5. 760	21771
6. 750	22771
7. 767	23367
8. 767	2416
9. 767	25
10. 756	26324
11	27230
12	289
13. 755	299
14	30110
15	31176
16. 766	

### 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 COMPLETED BY Kristal Moore One DATE November 8, 1996 REPORT MONTH October 1996 TELEPHONE 309-654-2241 METHOD OF SHUTTING DOWN REACTOR COMPONENT SYSTEM REASON F OR S LICENSEE DURATION EVENT NO. DATE (HOURS) REPORT CORRECTIVE ACTIONS/COMMENTS None for the month of October.

## APPENDIX D UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO.	50-265			
UNIT NAME	Two		COMPLETED BY	Kristal Moore
DATE	November 8, 1996	REPORT MONTH October 1996	TELEPHONE	309-654-2241

NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT	SYSTEM	COMPONENT	CORRECTIVE ACTIONS/COMMENTS
96-07	10-24-96	F	43.7	A	9		***		Turbine Trip to tend instruction #1 combined intermediate valve.
96-08	10-27-97	F	56.3	A	9	******			Tripped Turbine to support inspections of the the Moisture Separator Drain Tank Level Control Valves.

### 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.

## QUAD CITIES REFUELING INFORMATION REQUEST

QTP 300-S32 Revision 2 October 1989

1.	Unit: Q1 Reload: 14	Cycle: 15
2.	Scheduled date for next refueling shutdown:	2/10/98
3.	Scheduled date for restart following refueling:	4/1/98
4.	Will refueling or resumption of operation thereafte Specification change or other license amendment:	er require a Technical
	No	
5.	Scheduled date(s) for submitting proposed licensing supporting information:	action and
6.	Important licensing considerations associated with or different fuel design or supplier, unreviewed desanalysis methods, significant changes in fuel design procedures:	sign or performance
	Approx. 216 SPC 9X9IX Fuel Bundles Q1R15 will be 13a	ded.
	The number of fuel assemblies.	
	a. Number of assemblies in core:	724
	b. Number of assemblies in spent fuel pool:	1933
	The present licensed spent fuel pool storage capacity any increase in licensed storage capacity that has be planned in number of fuel assemblies:	y and the size of een requested or is
	a. Licensed storage capacity for spent fuel:	3657
	b. Planned increase in licensed storage:	0
	The projected date of the last refueling that can be spent fuel pool assuming the present licensed capacit	

APPROVED OCT 3 0 1989

(final)

## QTP 300-S32 Revision 2 October 1989

## QUAD CITIES REFUELING INFORMATION REQUEST

1.	Unit: Q2 Reload: 13	Cycle:14
2.	Scheduled date for next refueling shutdown:	3/1/97
3.	Scheduled date for restart following refueling:	5/23/97
4.	Will refueling or resumption of operation thereaf Specification change or other license amendment:	ter require a Technical
5.	Scheduled date(s) for submitting proposed licensin supporting information:	ng action and
	August 1996	
6.	Important licensing considerations associated with or different fuel design or supplier, unreviewed danalysis methods, significant changes in fuel designocedures:	esign or performance
	216 Siemens 9X9IX Power Corporation Fuel Bundles widuring Q2R14.	11 be loaded
	The number of fuel assemblies.	
	a. Number of assemblies in core:	724
	b. Number of assemblies in spent fuel pool:	2727
	The present licensed spent fuel pool storage capacitany increase in licensed storage capacity that has planned in number of fuel assemblies:	ty and the size of been requested or is
	a. Licensed storage capacity for spent fuel:	3897
	b. Planned increase in licensed storage:	0
	The projected date of the last refueling that can be spent fuel pool assuming the present licensed capac	

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 ATWS - Anticipated Transient Without Scram BWR - Boiling Water Reactor CRD - Control Rod Drive EHC - Electro-Hydraulic Control System EOF - Emergency Operations Facility - Generating Stations Emergency Plan GSEP 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 - Maximum Average Planar Linear Heat Generation Rate MAPLHGR 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 - Shutdown Cooling Mode of RHRS SDC SDV - Scram Discharge Volume SRM - Source Range Monitor TBCCW - Turbine Building Closed Cooling Water System TIP - Traversing Incore Probe

- Technical Support Center

TSC