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

ComEd

SVP-98-087

...

March 10, 1998

U.S. Nuclear Regulatory Commission Washington, D.C. 20555

ATTN: Document Control Desk

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 February, 1998.

If you have any questions concerning this letter, please contact Mr. Charles Peterson, Regulatory Affairs Manager, at (309) 654-2241, extension 3609.

Respectfully,

E. S. Kraft, Jr. Site Vice President Quad Cities Station

ESK/dak

Enclosure

A. Beach, Regional Administrator cc: R. Pulsifer, Project Manager, NRR C. Miller, Senior Resident Inspector W. Leech, MidAmerican Energy Company D. Tubbs, MidAmerican Energy Company F. Spangenberg, Regulatory Affairs Manager, Dresden INPO Records Center Office of Nuclear Facility Safety, IDNS TERY! DCD License M. Wagner, Licensing ComEd Bob Ganser, IDNS Deb Kelley, Quad Cities Dick Stockman, Quad Cities SVP Letter File

9803180082 980228 PDR ADDCK 05000254 R PDR

a · · · · · ·

QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

FEBRUARY 1998

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

NRC DOCKET NOS. 50-254 AND 50-265

LICENSE NOS. DPR-29 AND DPR-30

.

•• ••

II. SUMMARY OF OPERATING EXPERIENCE

A. Unit One

1.0

..

Quad Cities Unit One was off-line the entire month of February 1998 due to a unplanned extension of maintenance Outage Q1P01.

B. Unit Two

Quad Cities Unit Two remained shutdown for the month of February 1998 due to a unplanned extension of maintenance outage Q2P01.

TABLE OF CONTENTS

I. Introduction

. .

II. Summary of Operating Experience

A. Unit One B. Unit Two

- III. Plant or Procedure Changes, Tests, Experiments, and Safety Related Maintenance
 - A. Amendments to Facility License or Technical Specifications
 - B. Facility or Procedure Changes Requiring NRC Approval
 - C. Tests and Experiments Requiring NRC Approval
 - IV. Licensee Event Reports
 - V. Data Tabulations
 - A. Operating Data Report
 - B. Average Daily Unit Power Level
 - C. Unit Shutdowns and Power Reductions
- VI. Unique Reporting Requirements
 - A. Main Steam Relief Valve Operations
 - B. Control Rod Drive Scram Timing Data
- VII. Refueling Information

VIII. Glossary

I. 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 MidAmerican 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 Dick Stockman and Debra Kelley, telephone number 309-654-2241, extensions 3221 and 2240, respectively.

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

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.

. .

..

IV. LICENSEE EVENT REPORTS

The following is a tabular summary of all licensee event reports for Quad-Cities Units One and Two submitted during the reporting period.

UNIT 1

Licensee Event Report Number	Submission <u>Date</u>	Title of Occurrence
1-98-01	2/4/98	The Unit One Emergency Diesel Generator (EDG) Received an Inadvertent Start Signal When a Relay Was Bumped During Testing, the EDG Failed to Start as Would be Expected on Receipt of this Signal, and the EDG was Inadvertently Started 15 Minutes Later Due to an Error by an Operator Who Was Responding to the Failure to Start.
1-97-26, R1	2/4/98	Technical Specification (TS) Required Instrument Channel Checks and Primary Containment Sump Flowrate Surveillances Were Not Documented Prior to Entering the Applicable Mode Due to Inadequate Procedure Development and Review.
1-98-03	2/5/98	Technical Specification (TS) Limiting Condition for Operation (LCO) was exceeded when both Standby Gas Treatment (SBGT) subsystems were inoperable because both the Unit 1 and the Unit 2 Emergency Diesel Generators (EDG) were inoperable due to inadequate procedure development and review.

..

UNIT 1 CONTINUED

Licensee Event Report Number	Submission Date	Title of Occurrence
1-98-04	2/12/98	Residual Heat Removal (RHR) Shutdown Cooling Common Suction Header was Made Inoperable Due to a Technical Specification Limiting Condition for Operation (LCO) When Evaluating an Unacceptable Mechanical Shock Arrestor (Snubber) Due to Operations and Engineering Knowledge Deficiencies and an Inadequate Procedure.
1-98-07	2/11/98	The design basis of the Quad Cities Station Reactor Building (RB) superstructure is not in literal conformance with Updated Final Safety Analysis Report (UFSAR) description of Class I loading combinations. This is due to the fact that the FSAR, when originally written, lacked sufficient detail in description of Class I loading combinations for addressing infrequent loading conditions (such as the crane) concurrent with a seismic event.
1-98-08	2/26/98	Residual Heat Removal (RHR) Shutdown Cooling Common Suction Header was Inoperable Due to Inadequate Installation Instructions Resulting in Mechanical Failure of a Mechanical Shock Arrestor (Snubber).
1-98-06	2/25/98	Reactor Building Post Loss of Coolant Accident (LOCA) Temperatures are Higher Than Values Used for the Environmental Qualification of Electrical Equipment Due to Unvalidated Engineering Judgement, the Cause of Which Cannot Be Determined.

UNIT 2

Licensee Event Submission Report Number Date Title of Occurrence

The were no U2 LER's for this reporting period.

V. DATA TABULATIONS

The following data tabulations are presented in this report:

- A. Average Daily Unit Power Level
- B. Operating Data Report

**

C. Unit Shutdowns and Power Reductions

APPEN	DIX C		
OPERATING D.	ATA REPORT		
		DOCKET NO.	50-254
		UNIT	One
		DATE	March 10, 1998
		COMPLETED BY	Dick Stockman
		TELEPHONE	(309) 654-2241
OPERATING STATUS			
0000 020198 1. REPORTING PERIOD: 2400 022898 GROSS HOURS IN	REPORTING PERIOD	: 672	
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 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	0.00	0.00	172375.40
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	3421.90
7. HOURS GENERATOR ON LINE	0.00	0.00	167295.30
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	909.20
9. GROSS THERMAL ENERGY GENERATED (MWH)	0.00	0.00	365437242.60
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	0.00	0.00	118253369.0
11. NET ELECTRICAL ENERGY GENERATED (MWH)	0.00	0.00	106154969.00
12. REACTOR SERVICE FACTOR	0.00	0.00	75.9
13. REACTOR AVAILABILITY FACTOR	0.00	0.00	77.48
14. UNIT SERVICE FACTOR	0.00	0.00	73.73
15. UNIT AVAILABILITY FACTOR	0.00	0.00	74.13
16. UNIT (CAPACITY FACTOR (Using MDC)	0.00	0.00	60.84
17. UNIT CAPACITY FACTOR (Using Design MWe)	0.00	0.00	59.30
18. UNIT FORCED OUTAGE RATE	0.00	0.03	7.19
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (T	YPE, DATE, AND DU	RATION OF EACH)	:
20. IF SHUTDOWN AT END OF REPORT PERIOD < ESTIM	ATED DATE OF STAR	TUP: Q1P01 - 4/17/9	98
21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPI	ERATION): N/A		
	FORECAST	ACHIEVED	
INITIAL CRITICALITY			
INITIAL ELECTRICITY			
COMMERCIAL OPERATION			an a

APPEN	DIX C						
OPERATING D.	ATA REPORT						
		DOCKET NO.	50-265				
		UNIT	Two				
		DATE	March 10, 1998				
		COMPLETED BY	Dick Stockman				
		TELEPHONE	(309) 654-2241				
OPERATING STATUS		constant and a state of some of some second states and some " the	New York of Control & Local Property of the Local Property of the				
0000 020198 1. REPORTING PERIOD: 2400 022898 GROSS HOURS IN	REPORTING PERIOD	: 672					
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 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	0.00	0.00	164367.05				
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	2985.80				
7. HOURS GENERATOR ON LINE	0.00	0.00	159969.85				
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	702.90				
9. GROSS THERMAL ENERGY GENERATED (MWH)	0.00	0.00	348356256.32				
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	0.00	0.00	111762544.00				
11. NET ELECTRICAL ENERGY GENERATED (MWH)	0.00	0.00	105947458.00				
12. REACTOR SERVICE FACTOR	0.00	0.00	72.94				
13. REACTOR AVAILABILITY FACTOR	0.00	0.00	74.27				
14. UNIT SERVICE FACTOR	0.00	0.00	70.99				
15. UNIT AVAILABILITY FACTOR	0.00	0.00	71.30				
16. UNIT CAPACITY FACTOR (Using MDC)	0.00	0.00	61.14				
17. UNIT CAPACITY FACTOR (Using Design MWe)	0.00	0.00	59.59				
18. UNIT FORCED OUTAGE RATE	0.00	0.00	11.19				
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (T	YPE, DATE, AND DU	RATION OF EACH)	: N/A				
20. IF SHUTDOWN AT END OF REPORT PERIOD < ESTIMA	ATED DATE OF STAR	TUP: Q2P01 - 4/12/9	98				
21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPI	ERATION):						
	FORECAST	ACHIEVED					
INITIAL CRITICALITY							
INITIAL ELECTRICITY							
COMMERCIAL OPERATION							

APPENDIX B AVERAGE DAILY UNIT POWER LEVEL

	DOCKET NO $50-254$
	UNIT One
	DATE March 10, 1998
	COMPLETED BY Dick Stockman
	TELEPHONE (309) 654-2241
	A state of the sta
MONTH February 1998	
DAY AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY AVERAGE DAILY POWER LEVEL (MWe-Net)
17	177
2 7	187
37	19 7
46	207
57	21 7
68	228
78	238
8 8	247
98	257
108	267
118	277
128	287
138	29
147	30
157	31
167	

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. 1.16-8

APPENDIX B AVERAGE DAILY UNIT POWER LEVEL

MONTH Februay 19	998	DOCKET NO UNIT DATE COMPLETED BY TELEPHONE	50-265 Two March 10, 1998 Dick Stockman (309) 654-2241
DAY AVERAGE DAILY (MWe-N	POWER LEVEL Net)	DAY AVERAGE I	DAILY POWER LEVEL (MWe-Net)
1	2	17	- 7
2	7	18	- 7
3	7	19	- 7
4	1	20	- 7
5	7	21	- 6
6	3	22	- 8
7	3	23	7
86	3	24	- 6
9	3	25	- 7
10	3	26	- 7
11 6	3	27	- 7
12 8	3	28	- 7
13 = 8	3	29	
14 = 8	3	30	
15	7	31	
16	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.

1.16-8

APPENDIX D UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NG. 50-254

, :

UNIT NAME	One		COMPLETED BY	Dick Stockman	
DATE	March 10, 1998	REPORT MONTH February 1998	TELEPHONE	309-654-2241	
		α.			

NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOF	LICENSEE EVENT REPORT	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
98-02	980201	S	672.0	В	4				Continuation of Maintenance Outage Q1P01 (Unplanned Extension).

APPENDIX D UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-265

UNIT NAME TWO

COMPLETED BY Dick Stockman

.. ..

DATE March 10, 1998 REPORT MONTH February 1998 TELEPHONE 309-654-2241

NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
98-01	980201	S	672.0	В	4				Continuation of Maintenance Outage Q2P01 (Unplanned Extension).

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.

.

1

QTP 0300-S32 Revision 3 April 1997

2002

QUAD CITIES REFUELING INFORMATION REQUEST

1.	Unit:	01	Reload:14	Cycle:	15
2.	Scheduled d	late for next	t refueling shutdown:		11/07/98
3.	Scheduled d	late for rest	tart following refueling:		12/17/98

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

Yes

9.

...

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

Approved

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. 216 SPC 9X9IX Fuel Bundles will be loaded.

the present licensed capacity:

7. The number of fuel assemblies.
a. Number of assemblies in core: 724
b. Number of assemblies in spent fuel pool: 1933
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	i storage	capacity	for spent	fuel:	3657	
b.	Planned	increase	in licen	sed storag	e:	0	
The p be di	orojected scharged	date of the sp	he last : ent fuel	refueling pool assu	that can ming		

QTP 0300-S32 Revision 3 April 1997

QUAD CITIES REFUELING INFORMATION REQUEST

.

.

.

1.	Unit: Q2 B	Reload:	14	Cycle: _	15
2.	Scheduled date for next a	refueling shu	utdown:		1/8/2000
3.	Scheduled date for restan	t following	refueling:	-	2/17/2000
4.	Will refueling or resumpt Specification change or o	tion of operation of the second se	ation thereafte a mendment:	er requir	e a Technical
	Yes				
5.	Scheduled date(s) for sub supporting information:	omitting prop	posed licensing	g action	and
	August, 1999				
6.	Important licensing consi or different fuel design analysis methods, signifi procedures:	iderations an or supplier icant change	ssociated with , unreviewed de s in fuel desig	refuelin esign or gn, new c	ng, e.g., new performance operating
	N/A				
7.	The number of fuel assemb	olies.			
	a. Number of assemblie	es in core:			724
	b. Number of assemblie	es in spent	fuel pool:		2943
8.	The present licensed spen any increase in licensed planned in number of fuel	nt fuel pool storage cap l assemblies	storage capac acity that has :	ity and t been req	the size of quested or is
	a. Licensed storage ca	apacity for	spent fuel:		3897
	b. Planned increase in	n licensed s	torage:		0
9.	The projected date of the	e last refue	ling that can		
	be discharged to the spent the present licensed capa	nt fuel pool acity:	assuming		2002

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 - J-tegrated 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 - Maximum Fraction Limiting Critical Power Ratio MFLCPR 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