

QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

November 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

Quad Cities Unit One started the month of November 1995 shutdown due to a design issue with the Scram Discharge Volume Level Switch. On November 9, 1995 at 0244 hours the reactor went critical. On November 10, 1995 at 0646 hours the reactor was manually scrammed due to the 1-220-1 steam drain valve leaking. After repairs the reactor went critical on November 12, 1995 at 2120 hours. The generator was synched to the grid on November 13, 1995 at 0914. A few load drops were performed, however the average daily level remained at 80% or greater.

B. Unit Two

Quad Cities Unit Two started the month of November 1995 shutdown in a forced outage due to the same design issue that shutdown Unit 1. The reactor was made critical on November 22, 1995 at 0954 hours. The generator was synched to the grid on November 23, 1995 at 1411 hours. The Turbine was tripped on November 29, 1995 at 0513 hours due to EHC leak at the #1 Turbine Control Valve. On November 29, 1995 at 2351 hours the generator was back on-line.

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

A. Amendments to Facility License or Technical Specifications

Technical Specification Amendment No. 164 was issued on November 20, 1995 to Facility Operating License DPR-29 and Amendment No. 160 to Facility Operating License DPR-30 for Quad Cities Nuclear Power Station. The amendments contained the proposed upgrade of Section 3/4.2 (Instrumentation) of the Quad Cities Technical Specifications.

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 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.

There were no Licensee Event Reports for Unit 1 and Unit 2 for this reporting period.

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 December 8, 1995
 COMPLETED BY Kristal Moore
 TELEPHONE (309) 654-2241

OPERATING STATUS

0000 110195
 1. REPORTING PERIOD: 2400 113095 GROSS HOURS IN REPORTING PERIOD: 720

2. 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	462.70	7287.00	159719.50
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	3421.90
7. HOURS GENERATOR ON LINE	422.80	7191.30	155015.20
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	909.20
9. GROSS THERMAL ENERGY GENERATED (MWH)	968932.30	17401097.20	336557220.60
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	310678.00	5554593.00	109018447.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)	293985.00	5315043.00	102903209.00
12. REACTOR SERVICE FACTOR	64.26	90.91	77.09
13. REACTOR AVAILABILITY FACTOR	64.26	90.91	78.74
14. UNIT SERVICE FACTOR	58.72	89.71	74.82
15. UNIT AVAILABILITY FACTOR	58.72	89.71	75.26
16. UNIT CAPACITY FACTOR (Using MDC)	53.10	86.22	64.59
17. UNIT CAPACITY FACTOR (Using Design MWe)	51.75	84.04	62.95
18. UNIT FORCED OUTAGE RATE	41.28	10.29	7.62

19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):

20. IF SHUTDOWN 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 December 8, 1995
 COMPLETED BY Kristal Moore
 TELEPHONE (309) 654-2241

OPERATING STATUS

0000 110195
 1. REPORTING PERIOD: 2400 113095 GROSS HOURS IN REPORTING PERIOD: 720

2. 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	206.10	3550.60	153326.45
6. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	2985.80
7. HOURS GENERATOR ON LINE	159.10	3223.90	149155.55
8. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	702.90
9. GROSS THERMAL ENERGY GENERATED (MWH)	294462.60	6550630.72	322491334.82
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	87064.00	2035622.00	103549523.00
11. NET ELECTRICAL ENERGY GENERATED (MWH)	77988.00	1925231.00	98081140.00
12. REACTOR SERVICE FACTOR	28.63	44.29	74.56
13. REACTOR AVAILABILITY FACTOR	28.63	44.29	76.02
14. UNIT SERVICE FACTOR	22.10	40.22	72.54
15. UNIT AVAILABILITY FACTOR	22.10	40.22	72.88
16. UNIT CAPACITY FACTOR (Using MDC)	14.09	31.23	62.03
17. UNIT CAPACITY FACTOR (Using Design MWe)	13.73	30.44	60.45
18. UNIT FORCED OUTAGE RATE	77.90	25.98	10.35

19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):

20. IF SHUTDOWN 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 December 8, 1995
COMPLETED BY Kristal Moore
TELEPHONE (309) 654-2241

MONTH November 1995

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1.	<u>- 9</u>
2.	<u>- 9</u>
3.	<u>- 8</u>
4.	<u>- 9</u>
5.	<u>- 9</u>
6.	<u>- 9</u>
7.	<u>- 9</u>
8.	<u>- 9</u>
9.	<u>-11</u>
10.	<u>-10</u>
11.	<u>-10</u>
12.	<u>- 9</u>
13.	<u>73</u>
14.	<u>166</u>
15.	<u>503</u>
16.	<u>772</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17.	<u>775</u>
18.	<u>777</u>
19.	<u>777</u>
20.	<u>776</u>
21.	<u>774</u>
22.	<u>775</u>
23.	<u>773</u>
24.	<u>779</u>
25.	<u>758</u>
26.	<u>778</u>
27.	<u>778</u>
28.	<u>776</u>
29.	<u>771</u>
30.	<u>776</u>
31.	<u></u>

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 December 8, 1995
COMPLETED BY Kristal Moore
TELEPHONE (309) 654-2241

MONTH November 1995

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1.	<u>- 8</u>
2.	<u>- 8</u>
3.	<u>- 8</u>
4.	<u>- 8</u>
5.	<u>- 8</u>
6.	<u>- 9</u>
7.	<u>- 9</u>
8.	<u>- 9</u>
9.	<u>-11</u>
10.	<u>-10</u>
11.	<u>- 9</u>
12.	<u>- 9</u>
13.	<u>-10</u>
14.	<u>- 8</u>
15.	<u>- 8</u>
16.	<u>- 8</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17.	<u>- 8</u>
18.	<u>- 9</u>
19.	<u>- 8</u>
20.	<u>- 8</u>
21.	<u>- 8</u>
22.	<u>- 8</u>
23.	<u>45</u>
24.	<u>197</u>
25.	<u>293</u>
26.	<u>696</u>
27.	<u>766</u>
28.	<u>770</u>
29.	<u>126</u>
30.	<u>552</u>
31.	<u></u>

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.

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 Rod Drive Scram timing for the reporting period. All scram timing as performed with reactor pressure greater than 800 PSIG.

RESULTS OF SCRAM TIMING MEASUREMENTS
 PERFORMED ON UNIT 1 & 2 CONTROL
 ROD DRIVES, FROM 01/01/95 TO 07/31/95

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)
01/15/95	177	0.31	0.70	1.47	2.57	3.30 J-6	Post Maintenance after Q1F35 Seq A, B, Done for Unit 1
04/28/95	1	0.29	0.65	1.42	2.48	2.48 L14	Q18840 to torque Scram Inlet Valve Packing.
06/24/95	1	0.30	0.65	1.37	2.41	2.41 H-9	Diagnostic Testing of U-1 H-9
07/03/95	172	0.31	0.71	1.55	2.71	3.15 K10	BOC for Q2C14
08/05/95	20	0.30	0.67	1.41	2.46	2.65 K-2	10% for new Tech Spec Unit 1
08/05/95	54	0.32	0.70	1.48	2.58	3.02 K10	Remainder of BOC for Q2C14 after maintenance was performed Unit 2
11/14/95	21	0.33	0.71	1.49	2.59	2.71 H-6	10% for Tech Spec and 1 PMTV Unit 1
11/24/95	46	0.32	0.71	1.51	2.65	3.00 K10	10% for Spec and 26 PMTV Unit 2

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

1. Unit: Q1 Reload: 13 Cycle: 14
2. Scheduled date for next refueling shutdown: 2/5/96
3. Scheduled date for restart following refueling: 5/15/96
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment:

NO
5. Scheduled date(s) for submitting proposed licensing action and supporting information:

7-4-95
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:

232 GE10 Fuel Bundles will be loaded during Q1E14.
7. The number of fuel assemblies.
 - a. Number of assemblies in core: 724
 - b. 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:
 - 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: 2006

QUAD CITIES REFUELING
INFORMATION REQUEST

1. Unit: Q2 Reload: 13 Cycle: 14
2. Scheduled date for next refueling shutdown: 1-6-97
3. Scheduled date for restart following refueling: 3-30-97
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment:

YES
5. 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.
 - a. Number of assemblies in core: 724
 - b. Number of assemblies in spent fuel pool: 3377
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:

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