



Commonwealth Edison

Quad Cities Nuclear Power Station
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GCT-92-005

February 3, 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 January 1992.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

G. C. Tietz
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Technical Superintendent

GCT/CALS/dak

Enclosure

cc: A. B. Davis, Regional Administrator
T. Taylor, Senior Resident Inspector

EX-24

QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

JANUARY 1992

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS & ELECTRIC 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 Iowa-Illinois Gas & Electric 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 Scott Woodruff and Debra Kelley, telephone number 309-654-2241, extensions 2936 and 2240.

II. SUMMARY OF OPERATING EXPERIENCE

A. Unit One

On 1/02/92 Unit One was brought down to 700 MWe for turbine testing. The Chicago Load Dispatch ordered a reduction to 615 MWe for the early morning of 1/03/92. On 1/22/92 the Automatic Depressurization System (ADS) was declared inoperative due to possible discrepancies with the -59" setpoint for Emergency Core Cooling System (ECCS). A GSEP Unusual Event was entered and an orderly shutdown was began. At 19:10 hours the Unusual Event was terminated, because engineering had determined that the scenario originally analyzed did not apply. The Load had been reduced to 450 MWe. Unit One was returned to full power and remained at full power for the rest of the month.

B. Unit Two

Q2R11 started on 1/01/92 and is scheduled to end on 3/11/92. The unit was brought down to 205 MWe, the turbine was tripped manually to produce an automatic SCRAM at 00:15 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. 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 tabular 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 Malfunctions, Results and Effects on Safe Operation, and Action Taken to Prevent Repetition.

UNIT 1 MAINTENANCE SUMMARY

<u>WORK REQUEST</u>	<u>SYSTEM</u>	<u>EID DESCRIPTION</u>	<u>WORK PERFORMED</u>
Q97001	6700	Inspect and repair breaker for U1 4 KV breakers number 39.	As Found: Aux. switch operator was twisted and bent. As Left: Straightened aux. switch operator. Adjusted to 14-1/2" from floor to top of roller when breaker is charged and closed. Tested electrically worked fine.
Q97582	5209	Repair union on fuel line upstream of motor driven fuel pump which leaks when diesel runs.	As Found: External condition of union elbow indicated the repeat disassembly, and reassembly with pipe wrenches. The union was disassembled appearing to be significantly tight however the union seats have some slight cuts in them and it appear they have been cleaned up before. As Left: Disassembled union, cleaned mating surfaces, polished with emery cloth, applied permatrix thread sealant to seating areas.
Q96776	8300	Investigate why no ground was found on hard positive ground; +125 V, -5V battery volt of 130V.	As Found: Ground was found in 2-203-2D MSIV limit switch. As Left: With support of OAD, checked panel 1A cubicle A02 on circuit 11. Checked relay house for moisture, but it was dry. Control room 902-3 panel was then cleared of ground indication. It was determined that probable cause of the indication was due to a moisture in limit switch probably due to a steam leak.
Q89251	0263	Investigate and repair pressure indicators 2-263-155B, 2-263-153B, 2-263-158, 2-263-115, which read 10 psi higher than all other pressure indications.	As Found: Computer point C211 reads +7.554 psi; digital indicator reads +9 psi; recorder reads +5 psi. As Left: Calibrated 2-263-155B, 2-263-153B, 2-263-158, 2-263-115. Found digital indicator 2-263-115 out of tolerance. This indicator was zeroed and spanned until a good indication was received.

UNIT 2 MAINTENANCE SUMMARY

<u>WORK REQUEST</u>	<u>SYSTEM</u>	<u>EID DESCRIPTION</u>	<u>WORK PERFORMED</u>
Q97353	5741	Repair U2 reactor building supply damper failed test.	As Found: Two check valves removed from line piping had white powdery substance probably due to moisture and teflon tape. As Left: Removed piping and labeled all schematic piping; cleaned out pipes, changed out check valves, replaced piping back in place.
Q97386	5741	Repair or replace reactor building vents fail safe check valve.	As Found: Exterior looked OK and flows go in the right direction. As Left: Installed new check valves to replace previous check valves.
Q97384	5742	Repair and replace U2 fail safe check valve on reactor building vents.	As Found: Valve exterior looked OK and flow goes in the right direction. As Left: Installed new check valves to replace previous check valves.
Q97385	5742	Repair and replace U2 fail safe check valve on reactor building vents.	As Found: Valve exterior was painted and flow goes in the right direction. As Left: Installed new check valves and replaced the pipe to tubing connectors.
Q97363	8294	Replace breaker and wire and appears to be no. 8, which showed signs of overheating.	As Found: Breaker terminal was bad with some wires showing signs of overheating. As Left: Removed old breakers, installed new breaker.
Q97492	8294	Investigate 1/2 A SBTG fan breaker MCC 29-4 A4 which tripped.	As Found: Common adjustable setting set at "LO". As Left: Settings were checked with the breaker test set. The new adjustable common setting is "4". Installed breaker in it's cubicle.

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

<u>Licensee Event Report Number</u>	<u>Date</u>	<u>Title of Occurrence</u>
92-001	01-06-92	RWCU isolation on non-regen Hx outlet H1 Temp.

UNIT 2

92-001	01-01-92	U-2 Reactor scram during turbine trip test for a Group I isolation.
92-002	01-03-92	LLRT leakage limits exceeded.
92-003	01-06-92	R.B. Vent isolation and SBGT start.
92-004	01-16-92	Inadvertent closure of the U-2 Reactor Building isolation damper.
92-005	01-25-92	SBGT initiation and Reactor Building vent isolation from fuel pool monitor switch falling out of the panel.

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 February 3, 1992
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

OPERATING STATUS

- 0000 010192
1. REPORTING PERIOD: 2400 013192 GROSS HOURS IN REPORTING PERIOD: 744
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 | 744.0 | 744.0 | 132257.1 |
| 6. REACTOR RESERVE SHUTDOWN HOURS | 0.0 | 0.0 | 3421.9 |
| 7. HOURS GENERATOR ON LINE | 744.0 | 744.0 | 132975.1 |
| 8. UNIT RESERVE SHUTDOWN HOURS | 0.0 | 0.0 | 909.2 |
| 9. GROSS THERMAL ENERGY GENERATED (MWH)..... | 1845909.6 | 1845909.0 | 285912933.6 |
| 10. GROSS ELECTRICAL ENERGY GENERATED (MWH)..... | 603475.0 | 603475.0 | 92677811.0 |
| 11. NET ELECTRICAL ENERGY GENERATED (MWH)..... | 594876.0 | 594876.0 | 87304434.0 |
| 12. REACTOR SERVICE FACTOR..... | 100.0 | 100.0 | 94.0 |
| 13. REACTOR AVAILABILITY FACTOR..... | 100.0 | 100.0 | 96.3 |
| 14. UNIT SERVICE FACTOR | 100.0 | 100.0 | 91.1 |
| 15. UNIT AVAILABILITY FACTOR | 100.0 | 100.0 | 91.7 |
| 16. UNIT CAPACITY FACTOR (Using MDC)..... | 100.0 | 100.0 | 77.8 |
| 17. UNIT CAPACITY FACTOR (Using Design MWe) | 100.0 | 100.0 | 75.8 |
| 18. UNIT FORCED OUTAGE RATE | 0.0 | 0.0 | 5.7 |
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 February 3, 1992
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

OPERATING STATUS

0000 010192
1. REPORTING PERIOD: 2400 013192 GROSS HOURS IN REPORTING PERIOD: 744
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):
5. NUMBER OF HOURS REACTOR WAS CRITICAL THIS MONTH YR TO DATE CUMULATIVE
6. REACTOR RESERVE SHUTDOWN HOURS 0.3 0.3 133483.0
7. HOURS GENERATOR ON LINE 0.0 0.0 2985.8
8. UNIT RESERVE SHUTDOWN HOURS 0.3 0.3 129864.8
9. GROSS THERMAL ENERGY GENERATED (MWH)..... 0.0 0.0 702.9
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)..... 0.0 0.0 280083887.0
11. NET ELECTRICAL ENERGY GENERATED (MWH)..... 50.0 50.0 89949319.0
12. REACTOR SERVICE FACTOR..... 0.0 0.0 85134175.0
13. REACTOR AVAILABILITY FACTOR..... 0.0 0.0 73.8
14. UNIT SERVICE FACTOR 0.0 0.0 75.5
15. UNIT AVAILABILITY FACTOR 0.0 0.0 71.8
16. UNIT CAPACITY FACTOR (Using MDC) 0.0 0.0 72.2
17. UNIT CAPACITY FACTOR (Using Design MWe) -1.0 -1.0 61.2
18. UNIT FORCED OUTAGE RATE -1.0 -1.0 59.7
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
20. 1F SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: 3/11/92
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 February 3, 1992
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

MONTH January 1992

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1. 819
2. 776
3. 766
4. 819
5. 818
6. 816
7. 817
8. 817
9. 818
10. 820
11. 818
12. 817
13. 819
14. 817
15. 818
16. 818

17. 817
18. 817
19. 816
20. 817
21. 817
22. 693
23. 817
24. 821
25. 820
26. 820
27. 818
28. 816
29. 818
30. 813
31. 815

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 February 3, 1992
COMPLETED BY Matt Benson
TELEPHONE (309) 654-2241

MONTH January 1992

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1. 2
2. 0
3. 0
4. 0
5. 0
6. 0
7. 0
8. 0
9. 0
10. 0
11. 0
12. 0
13. 0
14. 0
15. 0
16. 0

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17. 0
18. 0
19. 0
20. 0
21. 0
22. 0
23. 0
24. 0
25. 0
26. 0
27. 0
28. 0
29. 0
30. 0
31. 0

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 Unit 1

DATE February 3, 1992

REPORT MONTH January 1992

COMPLETED BY Matt Benson

TELEPHONE 309-654-2241

NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT NO.	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
92-01	1-22-92	F	0	D					ADS declared INOP along with all other ECCS. An Unusual Event declared. Unusual Event terminated when engineering determined that the scenario originally analyzed on 1-21-92 did not apply to QCNPS.

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-265

UNIT NAME Unit 2

DATE February 3, 1992

COMPLETED BY Matt Renson

TELEPHONE 309-654-2241

REPORT MONTH January 1992

NO.	DATE	TYPE 1 OR 2	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT NO.	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
92-001	1-01-92	S	743.75	C	9 Manually Tripped Turbine Produced Automat- ic Scram				

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: 11 Cycle: 12
2. Scheduled date for next refueling shutdown: 9-5-92
3. Scheduled date for restart following refueling: 12-5-92
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 assemblies.
 - a. Number of assemblies in core: 724
 - b. Number of assemblies 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. 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: 2009

QUAD CITIES REFUELING
INFORMATION REQUEST

1. Unit: Q2 Reload: 10 Cycle: 11
2. Scheduled date for next refueling shutdown: 01/01/92
3. Scheduled date for restart following refueling: 03/11/92
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment: Yes, as listed below:
1. Remove Table 3.7-2
2. Modification to turbine control valve fast acting solenoid valve.
3. Modification to HPCI turbine exhaust steam line.
4. HPCI/RCIC 24-hour shutdown action provision.
5. Scheduled date(s) for submitting proposed licensing action and supporting information:
1. 01/15/92
2. 04/18/91
3. 06/28/91
4. 12/31/91
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 assemblies.
- a. Number of assemblies in core: 0
- b. Number of assemblies in spent fuel pool: 3115*
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: 2009

* 48 new fuel assemblies in new fuel vault.

APPROVED

OCT 30 1989

Q.C.O.S.R.

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
PCOMR	- 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