Commonwealth Edison
Quad Cities Nuclear Power Station
22710 20E Avenue North
Cordova, Illinois 61242
Telephone 309/654-2241

RAR-89-37

June 1, 1989

Director of Nuclear Reactor Regulations
U. S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D. C. 20555

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 May, 1989.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

R. A. Robey

R. A. Robey
Technical Superintendent

RAR/vmk/djb

Enclosure

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QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

MAY, 1989

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS & ELECTRIC COMPANY

NRC DOCKET NOS. 50-254 AND 50-265

LICENSE NOS. DPR-29 AND DPR-30

0027H/0061Z

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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 Lynne Deelsnyder and Verna Koselka, telephone number 309-654-2241, extensions 2185 and 2240.

II. SUMMARY OF OPERATING EXPERIENCE

A. Unit One

Unit One began the month of May holding load at 454 MWe. At 0455 hours, a load increase to full power was taken and achieved at 0955 hours. On May 2 at 1052 hours, the unit was placed in Economic Generation Control (EGC) at the request of the Chicago Load Dispatcher. The unit remained in EGC until May 3. At 0446 hours, the unit was taken out of EGC due to 'B' recirculation pump speed oscillations. At 0515 hours, a load increase to full power was taken per the request of the Load Dispatcher. B10 BWe was achieved at 0575 hours.

Power levels were held constant until May 4. At 2150 hours, a power reduction to 500 MWe was taken with recirculation pumps to repair a leaking valve. On May 5, repairs were completed, and at 0505 hours, the Load Dispatcher requested an increase in power levels. At 0720 hours, 820 MWe was achieved. The unit was placed in EGC. The unit remained in EGC until May 6. At 2225 hours, EGC was tripped and a power reduction was taken to perform maintenance on the Electro-Hydraulic Control (EHC) system.

On May 7 at 0500 hours, the generator was taken off-line to replace electrical boards in the EHC system. At 1120 hours, the turbine was reset, and the EHC pumps were turned on. At 1457 hours, the mode switch was placed in RUN and at 1645 hours, the generator was synchronized to the grid. An increase in power was begun with control rods and recirculation pumps. At 1950 hours, 450 MWe was achieved and power levels were held constant at the request of the Load Dispatcher until May 8. At 0105 hours, a load increase to full pwoer was taken and 815 MWe was achieved at 0930 hours. At 0955 hours, a "Turbine Bypass Valve Open" alarm was received in the control room and the turbine control vavles were found to be spiking 70% - 100% open. A power reduction was taken to 450 MWe and held constant while this problem was resolved. On May 9 at 0410 hours, power levels were increased to 750 MWe.

On May 10 at 0010 hours, the unit was placed in EGC. The unit remained in EGC until May 16 with minor interruptions to perform routine surveillances. At 2035 hours, the control room received a report that the leak on the low flow feedwater regulating valve drain line had significantly increased. This leak is unisolatable, thus a unit shutdown was begun as rapidly as systems would allow. The main generator was taken off-line at 2213 hours, and a manual scram was inserted at 2215 hours. From the remainder of May 16 thru May 19, the feedwater system was isolated, and repairs were made on the low flow feedwater drain line.

On May 19 at 1257 hours, maintenance was completed on the drain line, and rod maneuvers were begun. At 1526 hours, the reactor was made critical. On May 20 at 0910 hours, the mode switch was placed to RUN and at 1330 hours, the generator was synchronized to the grid. A load increase was begun, using control rods and recirculation pumps. 450 MWe was achieved at 2022 hours and held constant until May 22.

On May 22 at 0715 hours, a load increase to full power was begun at the request of the Chicago Load Dispatcher. At 0930 hours, 812 MWe was achieved. Full load was held until May 24 when power levels were adjusted, and the unit was placed in EGC. The unit remained in EGC until May 25. At 0733 hours, EGC was tripped and an ascent to full power was taken per the Load Dispatcher. At 1722 hours, power levels were adjusted, and the unit was placed in EGC. On May 26 at 0350 hours, the unit was taken off EGC and a power reduction to 580 MWe was taken. At 0500 hours, an ascent back to full power was begun per the Load Dispatcher. At 0602 hours, the unit was placed in EGC. The unit remained in EGC until May 28. At 0140 hours, the unit was taken off EGC and a load reduction to 568 MWe was taken. At 0440 hours, a further reduction in power was taken to 460 MWe. Power levels were held constant until 0830 hours. A load increase to 650 MWe was taken at the request of the Load Dispatcher.

On May 29 at 1140 hours, an ascent to full load was taken. On May 30 at 0220 hours, a power reduction to 595 MWe was taken. At 2122 hours, the unit was placed in EGC. On May 31 at 1330 hours, control rods were inserted to reduce power to 450 MWe due to control valves spiking and a "Turbine Bypass Valve Open" alarm recieved in the control room. Unit was held at 450 MWe for the remainder of the month.

B. Unit Two

Unit Two began the month of May operating in Economic Generation Control (EGC). Normal operational activities occurred for Unit Two until May 22. The unit operated near full power or remained in EGC with minor interruptions to perform routine surveillances. Power levels were adjusted accordingly.

On May 22 at 1753 hours, a power reduction to 450 MWe was taken at the request of the Chicago Load Dispatcher. At 2120 hours, a further reduction in power was taken to 200 MWe to de-inert the drywell in preparation for entry to repair leakage discovered.

At 0500 hours, repairs were completed and the drywell was inerted. At 1000 hours, an ascent to full power was begun. 818 MWe was achieved at 1241 hours. At 2315 hours, a power reduction to 450 MWe was taken per request of the Load Dispatcher.

On May 24 at 0415 hours, Unit Two drywell floor drain leakage rate increased above the Tech Spec limit of 5 gallons per minute. The Shift Engineer was notified of this abnormality. A GSEP unusual event was declared, and at 0640 hours a unit shutdown was initiated. Investigation was begun into the cause of the excess leakage and was identified as coming from the Reactor Core Isolation Cooling (RCIC) Turbine Steam Supply Inboard Isolation Valve. At 1540 hours, the generator was taken off-line, and at 1559 hours, a manual scram was inserted. The RCIC isolation valve was repacked, and the valve was tested for proven operability. At 2017 hours, the GSEP unusual event was terminated.

On May 25 at 0537 hours, the mode switch was placed in STARTUP and at 0705 hours, control rod maneuvers were begun. At 0945 hours, the reactor was made critical. At 1505 hours, the generator was synchronized to the grid. A gradual increase to full power was begun and on May 26 at 2100 hours, 808 MWe was achieved. Power levels were held constant until May 28. At 0039 hours, power levels were adjusted, and the unit was placed in EGC. The unit remained in EGC until May 29. At 2055 hours, EGC was tripped due to the loss of 2B Recirculation Pump Speed indication.

On May 30 at 0012 hours, it was discovered that neither of the Drywell Floor Drain Sump Pumps were operating properly. Per Generic Letter 84-11 if the drywell floor drain sump monitoring system is inoperable and cannot be restored within 24 hours, the unit must initiate an orderly shutdown within 12 hours and be in cold shutdown within the following 24 hours. At 1821 hours, the generator was taken off-line and at 1829 hours, a manual scram was inserted. Unit Two remained shutdown thru the end of the month while maintenance was performed on the drywell floor drain sump pumps.

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. Test 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

WORK REQUEST NO.: Q66683

LER NUMBER: NA

COMPONENT: System 6600 - The 1/2 DG would not close in to Bus 13-1.

CAUSE OF MALFUNCTION: While performing monthly procedure QOS 6600-1 in preparation for the Diesel Generator maintenance, the 1/2 Diesel Generator would not close to Bus 13-1. Upon investigation, the cause for the 1/2 Diesel Generator's initial failure to close in to Bus 13-1 could not be determined because operating personnel racked out the breaker before Electrical Maintenance could inspect it in the failed state.

RESULTS & EFFECTS ON SAFE OPERATION: The safety of the plant and personnel were unaffected because the breaker could be closed successfully on subsequent attempts.

ACTION TAKEN TO PREVENT REPETITION: After the 1/2 Diesel Generator was declared inoperable, Electrical Maintenance inspected both the 13-1 and 23-1 breakers. In addition, strip charts were placed in the 1/2 Diesel Generator logic to Buses 13-1 and 23-1. The breaker was replaced under Work Request Q66682. The old breaker was rebuilt under Work Request Q66683.

WORK REQUEST NO.: Q68258

LER NUMBER: 87-008

COMPONENT: System 1000 - Inspect and verify that the anchor bolts for all CEA plates with RHRSW support attachments are properly torqued. The bolts were inspected and checked by torquing the bolts to 45 ft. lbs.

CAUSE OF MALFUNCTION: While performing a visual inspection of the "B" and "C" RHRSW pump vault, it was discovered that two of the four bolts on a Concrete Expansion Anchor (CEA) plate were sheared off. Pipe hangar M-994D-107, which provides support for the "C" RHRSW Pump Discharge Line (1-1004B-12"), is attached to that plate. Work Request Q55793 was initiated to repair the problem. The operating engineer determined that the damage to the hangar did not make the 1C RHRSW pump inoperable. The cause of the anchor bolt failure was determined to be due to anchor bolt nuts loosening in service while being subjected to operational vibration near the location.

RESULTS & EFFECTS ON SAFE OPERATION: The safety consequences of the event were minimal because at no time was the RHRSW system, or any component thereof, inoperable.

ACTION TAKEN TO PREVENT REPETITION: The initial corrective action was to replace the existing bolts and CEA plate with heavy duty bolts and plate. Work Request Q55793 was written to do the work. The supports for other RHRSW pump discharge lines were visually examined by a Techanical Staff Engineer at the time of the problem. Work Request Q68258 was written to inspect all CEA on Unit One. A followup by Impell concluded that the bolt failure was not a result of poor bolt material. Pump vibration caused the loosening of the nuts and resulted in the fatigue failure of the bolts.

WORK REQUEST NO.: Q71741, 71742, 71743, 71744

LER NO: NA

COMPONENT: System 5600 - Inspected scram limit switch on fast-acting solenoid for loose mounting screws on Turbine Control Valve (TCV) #1, #2, #3, and #4. EPN 1-5601-CV1, CV2, CV3, and CV4

CAUSE OF MALFUNCTION: While control room personnel were performing QOS 5600-1, Turbine Control Valve Fast Closure Scram Instrumentation Functional Test, the #4 TCV failed to give the expected Reactor Protection System (RPS) "B" channel half-scram on two of four actuations of the fast-acting solenoid. The cause of the failure of TCV #4 to give a half-scram on RPS channel "B" when the fast-acting solenoid was energized was determined to be a loose limit switch on the fast-acting solenoid.

RESULTS & EFFECTS ON SAFE OPERATION: The safety consequences of the event were considered to be minimal. Immediately prior to the event, TCV #1, TCV #2, and TCV #3 were all successfully tested. If a generator load rejection had occurred while the TCV #4 fast-acting solenoid was inoperable, the fast-acting solenoid on TCV #3 would have provided a scram signal to RPS channel "B".

ACTION TAKEN TO PREVENT REPETITION: Work Request Q70721 was written to reinstall the screw and tighten the limit switch in place for TCV #4. The limit switches on the other Unit Two TCV's were inspected under Work Requests Q71745, Q71746, and Q71747. Unit 1 TCV's were also inspected under Work Request Q71741, Q71742, Q71743, and Q71744.

UNIT 2 MAINTENANCE SUMMARY

WORK REQUEST NO.: Q66106

LER NUMBER: 87-019

COMPONENT: System 1000 - Piping support on Line 1-1024B-20" found to be outside FSAR criteria.

CAUSE OF MALFUNCTION: Two piping supports were found to be out of FSAR compliance. The affected line was 2-1024B-20" (Residual Heat Removal 2C/2D Suction). The apparent cause of the event was design error involving A/E and contractor personnel.

RESULTS & EFFECTS ON SAFE OPERATION: The safety of the plant and personnel were not affected during this event because the piping met operability requirements even though it didn't meet FSAR compliance.

ACTION TAKEN TO PREVENT REPETITION: The corrective action was to replace a rigid strut on line 1-1024B-20". Work Request Q66106 was written to replace the strut.

WORK REQUEST NO.: Q70920, Q70921

LER NUMBER: NA

COMPONENT: System 1000 - Two spring can piping supports were found to be out of adjustment. The line affected was line 2-1012A-16".

CAUSE OF MALFUNCTION: Piping supports 1012A-M-204 and 1012B-M-207 were found to be out of adjustment. The cause of the event was inadequate work instructions for Work Requests Q69427 and Q69851. The piping supports had been improperly adjusted to the "Hot Load" setting instead of to the "Cold Load" setting. The piping for the RHR system was not in use; therefore the system would be considered "Cold".

RESULTS & EFFECTS ON SAFE OPERATION: The safety consequences of the event were minimal because engineering analysis showed that the spring type piping supports were operable.

ACTION TAKEN TO PREVENT REPETITION: The corrective action was to reset the spring cans. The work was done under Work Requests Q70920 and Q70921. To prevent future problems, training was to be given to Mechanical Maintenance Analysts and ISI group for the purpose of defining proper pipe support adjustment procedures.

WORK REQUEST NO.: Q71745, Q71746, Q71747

LER NUMBER: NA

COMPONENT: System 5600 - Inspected scram limit switch on fast-acting solenoid for loose mounting screws on Turbine Control Valve (TCV) #1, #2, and #3. EPN 2-5601-CV1, CV2, and CV3

CAUSE OF MALFUNCTION: While control room personnel were performing QOS 5600-1, Turbine Control Valve Fast Closure Scram Instrumentation Functional Test, the #4 TCV failed to give the expected Reactor Protection System (RPS) "B" channel half-scram on two of four actuations of the fast-acting solenoid. The cause of the failure of TCV #4 to give a half-scram on RPS channel "B" when the fast-acting solenoid was energized was determined to be a loose limit switch on the fast-acting solenoid.

RESULTS & EFFECTS ON SAFE OPERATION: The safety consequences of the event were considered to be minimal. Immediately prior to the event, TCV #1, TCV #2, and TCV #3 were all successfully tested. If a generator load rejection had occurred while the TCV #4 fast-acting solenoid was inoperable, the fast-acting solenoid on TCV #3 would have provided a scram signal to RPS channel "B".

ACTION TAKEN TO PREVENT REPETITION: Work Request Q70721 was written to reinstall the screw and tighten the limit switch in place for TCV #4. The limit switches on the other Unit Two TCV's were inspected under Work Requests Q71745, Q71746, and Q71747. Unit 1 TCV's were also inspected under Work Request Q71741, Q71742, Q71743, and Q71744.

WORK REQUEST NO.: Q72095

LER NUMBER: NA

COMPONENT: System 1000 - 2A RHRSW pump didn't meet required flow.

CAUSE OF MALFUNCTION: While performing QOS 1000-S4, "RHRSW Pump Flowrate Testing Data Sheet", the 2A RHRSW pump did not meet the required flowrate. It was then declared inoperable. The cause of the event was material found in the main pump and the wear rings out of tolerance on the booster pump.

RESULTS & EFFECTS ON SAFE OPERATION: The safety significance of the event was minimal. All other components of the containment cooling system were operable as required by Tech Specs.

ACTION TAKEN TO PREVENT REPETITION: Work Request Q72095 was written to investigate the low flowrate problem. Mechanical Maintenance brought the wear rings back into tolerance by knurling the motor wear ring surface.

WORK REQUEST NO.: Q72892

LER NUMBER: NA

COMPONENT: System 260 - Thermocouple 261-13G on Safety Valve 203-4G was reading erratically.

CAUSE OF MALFUNCTION: A failed thermocouple or loose electrical connection was suspected as the cause of the problem.

RESULTS & EFFECTS ON SAFE OPERATION: The safety consequences of the event were minimal. The temperature indication is a passive device and in no way affects the operation of the safety valve. The acoustic monitor for this valve was functional; therefore, adequate valve position indication was available to satisfy technical specifications.

ACTION TAKEN TO PREVENT REPETITION: The thermocouple was replaced. It was verified that a proper reading was received. No futher corrective action was required.

WORK REQUEST NO. Q73543

LER NUMBER: NA

COMPONENT: System 1700 - Fuel Pool Radiation Monitor tripped due to loose power supply connector. The Radiation Monitor affected was 2-1705-16A.

CAUSE OF MALFUNCTION: While performing ST-35, Fuel Pool Radiation Monitor Functional, it was thought that a loose connector caused both the 2A Fuel Pool and 2A Reactor Building Ventilation Radiation Monitors to trip downscale. The actual cause of the inoperable 2A Fuel Pool and 2A Reactor Building Ventilation Radiation Monitors was the failure of the high voltage power supply, which is the common supply to both of these radiation monitors.

RESULTS & EFFECTS ON SAFE OPERATION: The consequences were minimal since the Reactor Building Vents were already isolated. In addition, the Standby Gas Treatment System was already running when the power supply failed. All trips and alarms functioned as designed during this event.

ACTION TAKEN TO PREVENT REPETITION: The two monitors were bypassed to allow work on the high voltage power supply. Under Work Request Q74543, it was verified that there were no problems with the multipin connector and a new high voltage supply was installed. Work Request Q73582 was written to repair the faulty high voltage supply.

WORK REQUEST NO.: Q73576, Q73577, Q73579, Q73580, Q73581

LER NUMBER: NA

COMPONENT: System 2300 - Replaced existing splice for connecting the pigtails of the Rosemount conduit seal to its associated power leads with a Environmentally Qualified (EQ) splice. EPN 2-2352, 2-2353, 2-2389B, 2-2389C, and 2-2389D

CAUSE OF MALFUNCTION: It was determined that the signal leads for the Rosemount conduit seal pigtails on Rosemount transmitters 2-2352, 2-2353, and 2-2389A, B, C, and D had questionable EQ splicing configurations. A managmeent deficiency error was determined to be the reason for the improper installations. This was caused by a failure of BWRED in its review process to recognize that the AE's design could not be implemented. An additional cause was that, on discovery of the inability to properly install the conduit seal splicers, the Substation Construction Department failed to inform BWRED of the discrepancy.

RESULTS & EFFECTS ON SAFE OPERATION: The safety significance was minimal because all transmitters were declared operable although they were not EQ qualified.

ACTION TAKEN TO PREVENT REPETITION: Splices for 2-2389B, C, and D were replaced under Work Request Q73579, Q73580, and Q73581. Splices 2-2352 and 2-2353 were replaced under Work Requests Q73576 and Q73577. In order to be assured that all EQ criteria have been met in past installations of Raychem splices, Quad Cities Station will perform a 100 percent walkdown of all identified EQ cable splices in harsh environments. This will be done by the end of the next refuel outage.

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 Report Number	DATE	Title of Occurrence
89-005	5-22-89	RCIC Inoperable

UNIT 2

89-002	5-24-89	DW Floor Drain Leakage > 5 gpm
89-003	5-29-89	Loss of Secondary Containment - Interlock Doors Open

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 Report Number	DATE	Title of Occurrence
89-003	4-12-89	Manual Scram, EHC problems
89-004	4-17-89	Manual Scram, Stuck open on Relief valve
89-005 * Cancelled	4-17-89	Control Room Emergency Air Filtration Unit inoperable

UNIT 2

89-001	4-06-89	Turbine Trip - Reactor Scram while testing Turbine Master trip solenoid

*This has been cancelled since the report in April due to the Control Room Emergency Air Filtration Unit was not inoperable.

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 June 9, 1989

COMPLETED BY Lynne Deelsnyder

TELEPHONE 309-654-2241

OPERATING STATUS 0000 050189

1. REPORTING PERIOD: 2400 053189 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2511 MAX. DEPEND. CAPACITY (MWe-Net): 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	678.6	3432.8	120975
6. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	3421.9
7. HOURS GENERATOR ON LINE	645.0	3363.7	117022.9
8. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	909.2
9. GROSS THERMAL ENERGY GENERATED (MWH)	1414370	7768701	249458780
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	455303	2528938	8088655
11. NET ELECTRICAL ENERGY GENERATED (MWH)	433876	2419860	75985134
12. REACTOR SERVICE FACTOR	91.2	94.8	80.9
13. REACTOR AVAILABILITY FACTOR	91.2	94.8	83.2
14. UNIT SERVICE FACTOR	86.7	92.8	78.3
15. UNIT AVAILABILITY FACTOR	86.7	92.8	78.9
16. UNIT CAPACITY FACTOR (Using MDC)	75.8	86.9	66.1
17. UNIT CAPACITY FACTOR (Using Design MWe)	73.9	84.7	64.4
18. UNIT FORCED OUTAGE RATE	13.3	7.2	5.4

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

20. IF SHUT DOWN 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 June 9, 1989

COMPLETED BY Lynne Deelsnyder

TELEPHONE 309-654-2241

OPERATING STATUS 0000 050189

1. REPORTING PERIOD: 2400 053189 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2511 MAX. DEPEND. CAPACITY (MWe-Net): 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	696.7	3507.4	114457.3
6. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	2985.8
7. HOURS GENERATOR ON LINE	690.9	3482.7	111214.4
8. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	702.9
9. GROSS THERMAL ENERGY GENERATED (MWH)	1505911	7929015	238839288
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	486806	2589827	76523298
11. NET ELECTRICAL ENERGY GENERATED (MWH)	5183	2480999	72217576
12. REACTOR SERVICE FACTOR	93.6	96.8	77.0
13. REACTOR AVAILABILITY FACTOR	93.6	96.8	79.0
14. UNIT SERVICE FACTOR	92.9	96.1	74.8
15. UNIT AVAILABILITY FACTOR	92.9	96.1	75.3
16. UNIT CAPACITY FACTOR (Using MDC)	81.3	89.0	63.2
17. UNIT CAPACITY FACTOR (Using Design MWe)	79.2	86.8	61.6
18. UNIT FORCED OUTAGE RATE	7.1	3.9	8.3

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

20. IF SHUT DOWN 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 June 5, 1989
COMPLETED BY Lynne Deelsnyder
TELEPHONE 309-654-2241

MONTH May, 1989

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	689	17	-12
2	755	18	-13
3	746	19	-13
4	744	20	132
5	743	21	403
6	731	22	672
7	149	23	773
8	642	24	765
9	660	25	744
10	655	26	686
11	701	27	686
12	756	28	564
13	691	29	625
14	583	30	706
15	731	31	742
16	624		

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 June 5, 1989
COMPLETED BY Lynne Deelsnyder
TELEPHONE 309-654-2241

MONTH May, 1989

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	720	17	710
2	727	18	708
3	694	19	714
4	680	20	713
5	713	21	674
6	721	22	707
7	683	23	461
8	704	24	198
9	769	25	65
10	751	26	515
11	711	27	715
12	734	28	715
13	677	29	688
14	703	30	412
15	690	31	-11
16	711		

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.

ID/5A

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

QTP 300-S13
Revision 6
August 1982

DOCKET NO. 50-254

UNIT NAME QUAD-CITIES UNIT ONE

COMPLETED BY L. DEELSNYDER

DATE June 7, 1989

REPORT MONTH May, 1989

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
89-4	890507	F	11.7	A	5	------	HE	INSTR4	Generator Off-Line To Replace Electrical Boards in EHC System
89-5	890516	F	87.3	A	2	------	CH	PIPEX	Reactor Manually Scrammed Due to Low Flow Feedwater Regulating Drain Line Leaking By
89-6	890528	F	0.0	H	5	------	ZZ	ZZZZZZ	Power Reduction At the Request of the Chicago Load Dispatcher

APPROVED
AUG 16 1982
QCOSR

ID/5A

APPENDIX D
UNIT SHUTDOWNS AND POWER REDUCTIONS

QTP 300-S13
Revision 6
August 1982

DOCKET NO. 50-265

UNIT NAME QUAD-CITIES UNIT TWO

COMPLETED BY L. DEELSNYDER

DATE June 7, 1989

REPORT MONTH May, 1989

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
89-6	890523	F	0.0	A	5	------	ZZ	ZZZZZZ	Power Reduction For Drywell Entry Due To Leak
89-7	890524	F	23.4	A	2	89-002		VALVEX	Reactor Manually Scrammed Due To Drywell Floor Drain Leakage Rate in Excess of Tech Spec 's/1301-16 valve packing leak
89-8	890530	F	29.7	A	2	------		PUMPXX	Reactor Manually Scrammed Due To Both Drywell Floor Drain Sump Pumps Failing

APPROVED
AUG 16 1982
QCOSR

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.

QTP 300-S32
Revision 1
March 1978

QUAD-CITIES REFUELING INFORMATION REQUEST

*

1. Unit: Q1 Reload: 9 Cycle: 10

2. Scheduled date for next refueling shutdown: 9-9-89

3. Scheduled date for restart following refueling: 12-11-89

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:

   JUNE 10, 1989

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: 1773

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: 2008

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APR 2 0 1978

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QTP 300-S32
Revision 1
March 1978

QUAD-CITIES REFUELING INFORMATION REQUEST

*

1. Unit: Q2 Reload: 9 Cycle: 10

2. Scheduled date for next refueling shutdown: 2-3-90

3. Scheduled date for restart following refueling: 5-7-90

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:

   NOVEMBER 2, 1990

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: 1475

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: 2008

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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
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