



**Commonwealth Edison**

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Director, Office of Management Information and Program Control  
Directorate of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Gentlemen:

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, 1980.

Very truly yours,

COMMONWEALTH EDISON COMPANY  
QUAD-CITIES NUCLEAR POWER STATION

N. J. Kalivianakis  
Station Superintendent

NJK/san

QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

FEBRUARY 1980

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, Inc. and the primary construction contractor was United Engineers & Constructors. The condenser cooling method is a closed-cycle spray canal, and 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 1 and 2 respectively were October 18, 1971 and April 26, 1972. Commercial generation of power began on February 18, 1973 for Unit 1 and March 10, 1973 for Unit 2.

This report was compiled by Becky Brown, Telephone number 309-654-2241, extension 245.

## II. SUMMARY OF OPERATING EXPERIENCE

### A. Unit One

February 1: Unit One began the reporting operating at 779 MWe. At 2200, load was reduced at a rate of 200 MWe/hr. due to an apparent condenser tube leak.

February 2: At 0130 Unit One load was held at 190 MWe while investigating condenser conductivity readings. Upon resolution of the problem, load was increased at the rate of 50 MWe/hr.

February 3: Unit One load continued to increase at 8 MWe/hr.

February 4-23: Unit One held an average load of 775 MWe. Load was reduced on February 10 and February 16 for main condenser flow reversal. On February 23 at 2300 load was reduced at the rate of 200 MWe/hr for an on-line control rod sequence exchange.

February 24: The control rod sequence exchange was performed, and load was subsequently increased to 100 MWe/hr.

February 25: The 1-203-1B MSIV failed to close during testing. Load was reduced to 300 MWe to investigate the problem. The exhaust restrictor on the MSIV exercise poppet valve was found plugged. At 0700 the problem was resolved and load was increased at 100 MWe/hr. to 400 MWe.

February 26-29: Unit One load was increased at 8 MWe/hr. From February 27-29 Unit One held an average load of 766 MWe.

### B. Unit Two

February 1-29: Unit Two remained shutdown for End of Cycle Four Refueling Outage.

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

A. Amendments to Facility License or Technical Specification

The following amendment was added to the Unit 1 Technical Specifications during the reporting period.

Amendment 55

The NRC issued Amendment No. 55 to Facility Operating License No. DPR-29, in response to letters dated January 24, 1980 and January 28, 1980. This amendment reduces the required number of operable ADS valves from five to four, and sets reduced MAPLHGR limits to ensure conservative peak clad temperatures with the four electromatic ADS valves operable.

B. Facility or Procedure Changes Requiring NRC Approval

There were no facility or procedure changes requiring NRC approval.

C. Tests and Experiments Requiring NRC Approval

There were no tests or experiments performed during the reporting period.

D. Corrective Maintenance of Safety Related Equipment

The following represents a tabular summary of the safety related maintenance performed on Unit One and Unit Two during the reporting period. The headings indicated in this summary include Work Request Numbers, LER Numbers, Components, Cause of Malfunctions, Results and Effects on Safe Operation, and Action Taken to Prevent Repetition.

UNIT ONE MAINTENANCE SUMMARY

W.R. NUMBER	LER NUMBER	COMPONENT	CAUSE OF MALFUNCTION	RESULTS & EFFECTS ON SAFE OPERATION	ACTION TAKEN TO PREVENT REPETITION
QO 3387	80-03/03L	RHR Valve (MO 1-1001-36A)	The control trans- former was bad.	RHR was availabe. LPCI mode was not affected & other cont. cooling loop was available.	The control transformer was replaced & the valve was operated three times.
QO 3365		1/2 D.G. 1/2-6601	The air strainer was dirty.	The D.G. was available.	The air strainer was replaced.
QO 3377		RCIC Steam Line Drain (1-1301-34)	The solenoid coil was bad.	The valve failed closed with switch in open position	The solenoid coil was replaced & the valve was stroked three times.
QO 3384		1/2 B SBT demister (1/2B-2501)	The filter was dirty.	There was a higher than normal DP across the demister. SBT was available.	The filter was changed & SBT was tested.
QO 3408		1/2 D.G. Fuel (1/2-5200)	Tubing fittings were leaking.	Minor fuel oil leakage. The DG was available.	Tubing & Fittings were replaced.

UNIT TWO MAINTENANCE SUMMARY

W.R. NUMBER	LER NUMBER	COMPONENT	CAUSE OF MALFUNCTION	RESULTS & EFFECTS ON SAFE OPERATION	ACTION TAKEN TO PREVENT REPETITION
QO 2679	79-30/03L	RHR service water vault bed plate drain isolation valve (2-4999-59)	The operator was worn. There was an air leak.	The isolation valve would not close on a high level float signal.	The operator was rebuilt & the air leak was fixed. The valve was tested.
QO 2997		Solenoid valve (S0-2-1601-65) For A0-2-1601-56	The solenoid valve was worn.	Air was leaking from the solenoid valve. 2-1601-56 was operable.	The valve was rebuilt. A0-2-1601-56 was stroked three times and timed.
QO 3155		HPCI valve (A0-2-2301-65) above seat drain valve.	The air line was broken.	The valve was failed closed in its fail-safe position. HPCI not needed.	The air line was repaired & the valve was stroked three times.
QO 3252		RCIC check valve (A0-2-1301-50)	The air supply valve would not open properly.	The valve would not open from A0. Check function not affected.	The air supply valve was repaired & the valve was retested.
QO 2162	79-27/03L	Torus cooling valve (2-1001-36B)	The valve was worn.	The valve failed leak rate testing.	The valve was relapped & repacked. The valve was leak rate tested.
QO 2264	79-27/03L	Drywell vent valve (A0-2-1601-23)	The valve was out of adjustment.	The valve failed leak rate testing.	The valve was adjusted & leak rate tested.
QO 2302		CRD 18-23	An Air line was broken	The CRD was available.	The air line was repaired & leak tested.



## UNIT TWO MAINTENANCE SUMMARY

W.R. NUMBER	LER NUMBER	COMPONENT	CAUSE OF MALFUNCTION	RESULTS & EFFECTS ON SAFE OPERATION	ACTION TAKEN TO PREVENT REPETITION
QO 3119		Torus Vent valve (A0-2-1601-61)	The operator was worn.	The valve would not open. PCI not needed at time of occurrence.	The operator was rebuilt & the seats were cleaned. The valve was cycled three times & leak rate tested.
QO 3120	79-27/03L	Drywell vent bypass valve (2-1601-62)	The operator was worn.	The valve failed leak rate testing.	The operator was rebuilt & the seats were cleaned. The valve was cycled & leak rate tested.
QO 3129		CRD 26-39 (2-305-127)	The diaphragm was cracked.	The valve was leaking. The CRD was available, and rod was inserted.	The diaphragm was repaired & checked for leaks.
QO 3251		CRD Scram solenoids (54-15 & 58-27)	Diaphragm screws were stripped	The CRDs were available & rods were inserted.	The valves were replaced & operated three times.
QO 3337		CRD Scram solenoid valves 117 & 118 (46-47 & 42-07)	The diaphragms were on the wrong side.	The valves operated slowly. The CRDs were available, and rods were inserted.	The diaphragms were re-installed & the valves were tested.
QO 3352	79-27/03L	RHRS suppression chamber spray valve (M0-2- 1001-36B)	The torque switch was out of adjustment.	The valve failed leak rate testing.	The torque switch was adjusted. The valve was stroked three times & leak rate tested.
QO 3448		D.G. fuel oil transfer pump (2-5203)	Three main contacts were bad.	The pump did not run when the D.G. ran. The D.G. was available.	The contacts were replaced & the pump was run.

UNIT TWO MAINTENANCE SUMMARY

W.R. NUMBER	LER NUMBER	COMPONENT	CAUSE OF MALFUNCTION	RESULTS & EFFECTS ON SAFE OPERATION	ACTION TAKEN TO PREVENT REPETITION
QO 3541	80-03/03L	Reactor Bldg. vent relay (2-1705-105)	The relay was burnt.	The vent system isolated properly, & SBGTS auto- started.	The relay was replaced.
3168-78		D.G. air start system.	The valve was worn.	The isolation valve was leaking through.	The valve was rebuilt & the system was tested.
5762-78		D.G. Cooling water pump (2-3903)	The pump was worn.	D.G. cooling water was available.	The pump was rebuilt & tested.
2282-79		D.G. Lube Oil pump (2-6600)	A seal was bad.	Oil was leaking. The D.G. was available.	The seal was replaced. The diesel & pump were operated.
QO 3655	80-04/03L	Auto Blowdown Logic.	The timer was worn out of adjustment.	The timer took too long to time out. The other timer was operable. ADS was operable.	The timer was adjusted & tested.
QO 3631		D.G. Soak back pump.	The motor & belt was bad.	The motor was vibrating.	The motor was replaced & tested.

#### IV. LICENSEE EVENT REPORTS

The following is a tabular summary of all license 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.

<u>Licensee Event Report Number</u>	<u>UNIT ONE</u> <u>Date of Occurrence</u>	<u>Title of Occurrence</u>
80-03/03L	2-6-80	RHR Suppression Chamber Dump Valve M0-1-1001-36A Failed in Closed Position
80-04/03L	2-15-80	Reactor Low-Low Water Level Switch, Yarway LIS 1-263-72A failed to operate.
80-05/03L	2-24-80	1B MSIV failed to close.
	<u>UNIT TWO</u>	
80-03/03L	12-13-80	Reactor Building Vent System would not reset isolation.
80-04/03L	2-19-80	Auto Blowdown Timer Setpoint Drift.

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.

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 during the reporting period.

- B. CONTROL ROD DRIVE SCRAM TIMING DATA FOR UNITS ONE AND TWO

There were no control rod drive scram timing operations during the reporting period.

VIII. 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.