LICENSEE EVENT REPORT (LER)

Facility Name (1)	Docket Number (2)	Page (3)
QUAD-CITIES NUCLEAR POWER STATION, UNIT ONE	0 5 0 0 0 2 5 4	1 of 0 5

Title (4) Missed Calibration and Functional Tests Due to Inadequate Procedure

Event Date (5)			LER Number (6)			Report Date (7)			Other Facilities Involved (8)	
Month	Day	Year	Year	Sequential Number	Revision Number	Month	Day	Year	Facility Names	Docket Number(s)
0 1	1 2	8 8	3 8	0 0 2	0 1	0 5	2 6	8 8		0 5 0 0 0 1 1
										0 5 0 0 0 1 1

OPERATING MODE (9)	4
POWER LEVEL (10)	1 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)

___ 20.402(b)	___ 20.405(c)	___ 50.73(a)(2)(iv)	___ 73.71(b)
___ 20.405(a)(1)(i)	___ 50.36(c)(1)	___ 50.73(a)(2)(v)	___ 73.71(c)
___ 20.405(a)(1)(ii)	___ 50.36(c)(2)	___ 50.73(a)(2)(vii)	___ Other (Specify in Abstract below and in Text)
___ 20.405(a)(1)(iii)	X 50.73(a)(2)(i)	___ 50.73(a)(2)(viii)(A)	
___ 20.405(a)(1)(iv)	___ 50.73(a)(2)(ii)	___ 50.73(a)(2)(viii)(B)	
___ 20.405(a)(1)(v)	___ 50.73(a)(2)(iii)	___ 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER AREA CODE
Suzette Walters - Technical Staff Engineer, X2144	3 0 9 6 5 4 - 2 2 4 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

___ Yes (If yes, complete EXPECTED SUBMISSION DATE)

___ X NO

Expected Submission Date (15): Month | Day | Year

ABSTRACT (Limit to 1400 spaces, i.e, approximately fifteen single-space typewritten lines) (16)

On January 12, 1988, at 0900 hours, it was determined that a quarterly functional test of the Reactor Core Isolation (RCIC) system low pressure isolation had not been performed prior to Unit One startup from its refuel outage as required by Technical Specification Table 4.2-1. The functional test was immediately performed on January 12, 1988 after this was identified. On April 30, 1988, during a surveillance document review, it was discovered that calibrations involving reactor low low level switches and Residual Heat Removal pump discharge pressure switches had also been overlooked during this period.

The cause for the missed tests was an inadequate procedure. The calibration and functional tests are normally completed concurrently. In these cases, the tests could not be performed due to system out-of-services or asbestos areas created during the refuel outage. The testing was overlooked during the subsequent startup from the refuel outage because the procedure checklist in use did not differentiate between calibration and functional testing.

The procedure checklist used and other similar checklists have been revised to differentiate between calibration and functional testing. A memorandum has been issued to Instrument Maintenance personnel detailing this event and stating that an appropriate notation must be made on the scheduling checklist to ensure that this type of condition does not recur. This report is provided to satisfy 10 CFR 50.73 (a) (2) (i) (B).

IE22

1102H/0392Z

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor - 2511 MWt rated core thermal power. Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

EVENT IDENTIFICATION: Functional and calibration tests were missed due to an inadequate procedure.

A. CONDITIONS PRIOR TO EVENT:

Unit: ONE Event Date: January 12, 1988 Event Time: 0900
Reactor Mode: 4 Mode Name: RUN Power Level: 100%

This report was initiated by Deviation Report D-4-1-88-008

RUN Mode(4) - In this position the reactor system pressure is at or above 825 psig, and the reactor protection system is energized, with APRM protection and RBM interlocks in service (excluding the 15% high flux scram).

B. DESCRIPTION OF EVENT:

On January 12, 1988, Quad Cities Unit One was in the RUN mode at 100 percent of rated thermal power. At 0900 hours, the Quality Assurance Department discovered that the Reactor Core Isolation Cooling (RCIC) [BN] low pressure functional test (QIS 17-2) had not been performed at its quarterly interval. This test, in conjunction with the calibration test (QIS 17-1) must be performed once every three months per Technical Specification Table 4.2-1. The calibration and functional tests are normally performed concurrently and had last been completed on August 20, 1987. The calibration test was completed on November 24, 1987, but the functional test could not be performed then because the system trip logic was out-of-service for maintenance activities during the Unit One refueling outage. Note 2 of Table 4.2-1 states that functional tests and calibrations are not required when these instruments are not required to be operable. Thus completion of the functional test was not required, however the test should have been scheduled to be performed during startup when the instruments would be required to be operable. The functional test was overlooked during startup activities on December 22, 1987 and was not completed until identified on January 12, 1988.

On April 30, 1988, Quad-Cities Unit One was in the RUN mode at 89 percent of rated core thermal power. At that time, during the Instrument Maintenance Department's review of last quarter's surveillance documents, it was discovered that the calibration tests for reactor low low level instruments (QIS 11-1)(LIS 1-263-72A-D) and two Residual Heat Removal (RHR) pump [BO,P] discharge pressure switches [PS] (PS 1-1053E,F)(QIS 22-1) were not performed. These tests should be performed once every three months per Technical Specification Table 4.2-1. The calibration test for reactor low low level

instruments had last been performed on July 14, 1987. The calibration tests for the two RHR pump discharge pressure switches had last been performed on August 24, 1987. The tests could not be performed at their regular quarterly interval because of system out-of-services for maintenance activities and asbestos areas created during the Unit One refueling outage. Note 2 of Table 4.2-1 states that functional tests and calibrations are not required when these instruments are not required to be operable. Therefore, completion of the calibrations would not have been necessary until startup and should have been scheduled at that time. These calibrations were overlooked during startup activities in December, 1987, and were not completed until January 12, 1988, for the reactor low low level instruments and February 19, 1988, for the RHR pump discharge pressure switches. All monthly functional tests for these instruments were performed as required and found satisfactory.

C. APPARENT CAUSE OF EVENT:

This report is submitted in accordance with 10 CFR 50.73 (a) (2) (i) (B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

The cause of these events is due to an inadequate procedure which allowed the sign off for unperformed surveillances in QIP 100-S12. This resulted in an oversight in surveillance scheduling. QIP 100-S12 is used as a checklist for signing off the monthly/quarterly surveillances performed by the Instrument Maintenance Department (IMD). If all the required testing can be completed when scheduled, the specific surveillance is signed off. If all testing cannot be performed due to system conditions, the surveillance is signed off as being unperformable or partially performed, with notes attached for the testing to be completed when conditions permit it.

At the end of the refuel outage, the IMD work scheduler went through the applicable checklists to identify those surveillances that needed to be completed when Unit One restarted. Since the tests had been signed off and the notes were overlooked, the tests mentioned previously were missed.

D. SAFETY ANALYSIS OF EVENT:

The Final Safety Analysis Report (FSAR) section 7.7.2 states that the RCIC turbine [TUR] steam line low pressure isolation function is used to automatically close the two isolation vaives [ISV] in the RCIC turbine steam line so that steam and radioactive gases will not escape from the turbine shaft seals [SEAL] into the reactor building [NH] after steam pressure has decreased to such a low value that the turbine cannot be operated. The isolation setpoint is chosen at a pressure below that which the RCIC turbine can operate effectively. The steam line low pressure switches were all in an acceptable range when calibrated on November 24, 1987, and the functional test was satisfactorily completed on January 12, 1988. Additionally the RCIC logic testing performed during the refuel outage verified that the isolation logic circuit was operable. And during unit startup, per QGP 1-1, it was verified that the RCIC low pressure isolation alarm reset when reactor pressure increased above the low pressure setpoint. Thus the system would have provided isolation capability if required. This event did not affect the ability of the RCIC system to provide an alternate source of makeup water to the reactor vessel if required.

Reactor Level Switches

The low low reactor water level switches that were not calibrated prior to Unit One startup provide an initiation signal to the following:

1. High Pressure Coolant Injection (HPCI)[BJ],
2. Reactor Core Isolation Cooling (RCIC)[BN],
3. Emergency Diesel Generator [EK] autostart,
4. Core Spray [BM] and Low Pressure Coolant Injection (LPCI)[BO] mode of RHR with low reactor pressure permissive,
5. Input to Automatic Pressure Relief (APR)[SB] on low low reactor level.

The level switches are set to trip high enough to prevent spurious operation but low enough to initiate the above actions.

The calibration test missed at Unit One startup was performed satisfactorily on January 12, 1988. The monthly functional tests for these switches were performed satisfactorily.

All other reactor level switches that initiate a reactor scram, Group isolations, and recirculation pump [AD] trips were available. A review of records from 1985 to present noted only one level switch found out of calibration.

RHR Pump Discharge Pressure Switches

The RHR pump discharge pressure switches are an input to the APR subsystem logic that allows the relief valves to open, after confirmation, that a LPCI mode of RHR or Core Spray pump is running. This permits the LPCI or Core Spray subsystem to cool the reactor core during a small break loss of coolant accident with HPCI not available.

With four switches still operable in that instrument channel and properly calibrated, the APR subsystem would have still functioned as designed. Technical Specification Table 3.2-2 notes that the minimum number of operable or tripped instrument channels is four. Since only two switches in one instrument channel were not calibrated when required, this specification was met.

The two RHR pump discharge pressure switches that were not calibrated at Unit One startup were tested satisfactorily on February 19, 1988. The monthly functional testing of these switches had been satisfactorily performed. A review through 1985 found no instances of these instruments out of calibration.

E. CORRECTIVE ACTIONS:

The immediate corrective action was to perform the required test for RCIC low pressure isolation surveillance QIS 17-2. This was successfully completed on January 12, 1988. Since the calibrations for reactor low low level and RHR pump discharge pressure switches were performed on January 12 and February 19, 1988, no specific action was necessary.

To prevent recurrence, portions of the procedure QIP 100-S12, and others similar in nature, have been changed from "CAL" to "CAL/FUNC" with sign offs required for each specific test. The procedure revision was approved April 28, 1988. This will insure that all items required can be easily found and addressed. A memorandum has been sent to the Instrument Maintenance management personnel identifying the circumstances.

A task force has been established to review the existing surveillance programs at Quad-Cities. The task force was established as a result of Licensee Event Report (LER) 254/88-006, which involved a missed Technical Specification weekly surveillance. The task force will make recommendations based on its review. Task force efforts are being tracked by Nuclear Tracking System number 2545418800301.

F. PREVIOUS EVENTS:

A previous event is documented in Licensee Event Report (LER) 265/86-002 which involved a missed Technical Specification required tritium sample due to personnel error.

G. COMPONENT FAILURE DATA:

There was no component failure identified in this event.

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Telephone 309/654-2241

RLB-88-177

May 26, 1988

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Reference: Quad-Cities Nuclear Power Station
Docket Number 50-254, DPR-29, Unit One

Enclosed is Licensee Event Report (LER) 88-002, Revision 01, for Quad-Cities Nuclear Power Station. This revision identifies further surveillances not performed when required, during the same time frame.

This report is submitted in accordance with the requirements of the Code of Federal Regulations, Title 10, Part 50.73(a)(2)(i)(B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

R. L. Bax
Station Manager

RLB/MSK/djb

Enclosure

cc: I. Johnson
R. Higgins
INPO Records Center
NRC Region III

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