NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Catawba Nuclear Station, Unit 2	0 5 0 0 0 4 1 4	1 OF 0 4

TITLE (4) Missed Reactor Coolant Gross Radioactivity Calculation Surveillance Due To A Personnel Error

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 2	2 6	8 8	8 8	— 0 0 9	— 0 0	0 3	2 5	8 8	N/A	0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	3
POWER LEVEL (10)	0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (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, NRC Form 366A)
	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
Julio G. Torre, Associate Engineer - Licensing	7 0 4 3 1 7 3 1 - 1 8 0 2 9

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)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On February 26, 1988, at 1300 hours, while performing the weekly Chemistry Periodic Surveillance Items Periodic Test, a Chemistry Support Supervisor discovered that the Reactor Coolant System gross radioactivity calculation had not been performed on February 22 as required by Technical Specifications. On February 19, 1988, at 1730 hours, the Reactor Coolant gross radioactivity calculation was performed as required. On February 22, 1988, at approximately 1300 hours, a Chemistry Technician obtained the sample, but he became involved in another activity and did not take the sample to be analyzed. The surveillance frequency interval was exceeded on February 22, 1988, at 1730 hours. On February 24, 1988, at 1344 hours, the Reactor Coolant gross radioactivity calculation was performed per the routine schedule. During the time of the missed surveillance, the Unit was in Mode 3, Hot Standby.

This incident is attributed to a personnel error. The Chemistry Technician assigned to perform the surveillance became involved in another activity and failed to have the sample analyzed. This incident has been reviewed with the involved Technician with emphasis on attention to detail. The health and safety of the public were unaffected by this event.

IE22
1/1

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Catawba Nuclear Station, Unit 2	0 5 0 0 0 4 1 4	8 8	— 0 0 9	— 0 0	0 2 OF 0 4

TEXT (If more space is required, use additional NRC Form 366A's) (17)

BACKGROUND:

Technical Specification 3.4.8 states that the specific activity of the Reactor Coolant (EIIS:AB) shall be limited to: 1)less than or equal to 1 microCurie per gram DOSE EQUIVALENT I-131; and 2)less than or equal to 100/E microCuries per gram of gross specific activity. The Technical Specification surveillance requires a gross radioactivity determination be performed every 72 hours in Mode 1, Power Operation; Mode 2, Startup; Mode 3, Hot Standby; and Mode 4, Hot Shutdown.

The gross radioactivity analysis shall consist of the quantitative measurement of the total specific activity of the Reactor Coolant except for radionuclides with half-lives less than 10 minutes and all radioiodines. The total specific activity shall be the sum of the degassed beta-gamma activity and the total of all identified gaseous activities in the sample within 2 hours after the sample is taken and extrapolated back to when the sample was taken. Determination of the contributors to the gross specific activity shall be based upon those energy peaks identifiable with a 95% confidence level. The latest available data may be used for pure beta-emitting radionuclides.

DESCRIPTION OF INCIDENT:

On February 19, 1988, at 1730 hours, the Reactor Coolant System gross radioactivity calculation was performed by Chemistry personnel as is required by Technical Specification surveillance requirements. On February 22, 1988, at approximately 0700 hours, a Chemistry Technician received the daily worklist which listed the gross radioactivity calculation to be performed as well as other activities. At approximately 1300 hours, the Chemistry Technician obtained the Reactor Coolant sample for the gross radioactivity calculation. At this time, he apparently became involved with another activity because the sample was not sent to the count room to be analyzed. At approximately 1500 hours, the Chemistry Technician signed off the sample as being completed on the lab worksheet. At 1730 hours, the gross activity sample surveillance frequency interval was exceeded. On February 23, 1988, at 1130 hours, the grace period for the surveillance expired.

On February 24, at 1344 hours, the Reactor Coolant System gross radioactivity calculation was performed per the routine surveillance requirement. On February 26, 1988, at approximately 1300 hours, while performing the weekly Periodic Surveillance Items Periodic Test, a Chemistry Support Supervisor discovered the missed surveillance.

CONCLUSION:

This incident is attributed to a personnel error. The Chemistry Technician who was responsible for sampling the Reactor Coolant apparently became involved in another activity and failed to take the sample to the Count Room for analysis.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Catawba Nuclear Station, Unit 2	0 5 0 0 0 4 1 4	8 8	— 0 0 9	— 0 0	0 3 OF 0 4

TEXT (If more space is required, use additional NRC Form 366A's) (17)

Unit 2 was in Mode 3, Hot Standby, at the time of this incident and preparing to startup following End-of-Cycle 1 refueling outage. The Unit status required extra sampling to be performed in addition to the regular duties during this shift.

The Reactor Coolant System gross radioactivity calculation is routinely performed on Mondays, Wednesdays, and Fridays in order to ensure that the 72-hour surveillance requirement is met. Following the missed surveillance, which occurred on a Monday, the surveillance was performed on the following Wednesday per the normal schedule.

This incident was reviewed with the involved Technician with emphasis on attention to detail. A review of previous incident reports revealed six previous occurrences of Technical Specification violations due to lack of attention to detail (see LER 413/85-05, LER 413/86-32, LER 413/86-37, LER 413/85-46, LER 413/87-41, and LER 413/87-38). Only one of the previous occurrences involved Chemistry personnel and none of the previous occurrences involved this Technical Specification. This incident is considered to be a recurring event.

CORRECTIVE ACTION:

SUBSEQUENT

(1) This incident was reviewed with the involved Chemistry Technician with emphasis on attention to detail.

(2) PT/0/A/4600/12, Chemistry Periodic Surveillance Items, has been revised to require a review of Technical Specification surveillances at least three times per week.

(3) The Chemistry day shift has been instructed to review Technical Specification surveillances daily Monday through Friday.

PLANNED

All Shift personnel will be reminded not to sign off any work until it is completed.

SAFETY ANALYSIS:

During the time of the missed surveillance, Unit 2 was in Mode 3 preparing for Unit startup. The gross radioactivity in the Reactor Coolant was calculated to be 0.059 microCuries/ml on February 19 and 0.073 microCuries/ml on February 24, 1988. During the time of the missed surveillance, there was no control rod (EIIS:ROD) movement. Also, Process Radiation Monitor 2EMF48, Reactor Coolant Monitor, was in service between 1730 hours on February 22 and 1344 hours on February 24. This EMF would have alarmed in the event of a significant increase in the radioactivity level of the Reactor Coolant. Therefore, the gross activity of the Reactor Coolant did not exceed the Technical Specification limits.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Catawba Nuclear Station, Unit 2	0 5 0 0 0 4 1 4	8 8	— 0 0 9	— 0 0	0 4 OF 0 4

TEXT (If more space is required, use additional NRC Form 366A's) (17)

This incident is reportable pursuant to 10 CFR 50.73, Section (a)(2)(i)(B).

The health and safety of the public were unaffected by this incident.

DUKE POWER COMPANY
P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

March 25, 1988

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

Subject: Catawba Nuclear Station, Unit 2
Docket No. 50-414
LER 414/88-09

Gentlemen:

Pursuant to 10 CFR 50.73 Section (a) (1) and (d), attached is Licensee Event Report 414/88-09 concerning a missed reactor coolant gross radioactivity calculation surveillance due to a personnel error. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

Hal B. Tucker

Hal B. Tucker

JGT/10011/sbn

Attachment

xc: Dr. J. Nelson Grace
Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

M&M Nuclear Consultants
1221 Avenue of the Americas
New York, New York 10020

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

American Nuclear Insurers
c/o Dottie Sherman, ANI Library
The Exchange, Suite 245
270 Farmington Avenue
Farmington, CT 06032

Mr. P. K. Van Doorn
NRC Resident Inspector
Catawba Nuclear Station

IE22
1/1