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January 31, 1991

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

Subject: Catawba Nuclear Station
Docket No. 50-413
LER 414/91-02

Gentlemen:

Attached is Licensee Event Report 414/91-02, concerning TECHNICAL SPECIFICATION VIOLATION DUE TO A VALVE BEING RETURNED TO SERVICE WITH AN EXPIRED SURVEILLANCE.

This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

J W Hampton RNS

J. W. Hampton
Station Manager

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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
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TITLE (4): Technical Specification Violation Due to a Valve Being Returned to Service with and Expired Surveillance

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)
									N/A	0 5 0 0 0
0 1	0 6	9 1	9 1	- 0 0 2	- 0 0	0 1	3 1	9 1		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
3		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
1 0		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
C. L. Hartzell, Compliance Manager	8 0 3 8 3 1 - 3 6 6 5

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 December 8, 1990, with Unit 2 in Mode 1, Power Operation, 2NM-197B, S/G Upper shell Sample Insd Cont Isol Vlv, would not open during Auxiliary Safeguards testing. The valve was deenergized and tagged closed to ensure containment integrity, and a work request was generated for its repair. Since 2NM-197B would not open, the required stroke time test was not completed by the late test date, December 18, 1990. However, a Technical Specification Operability Notification Sheet (TSONS) was not generated. On January 6, 1991, with Unit 2 in Mode 3, Hot Standby, work was completed on 2NM-197B and at 1731 hours the valve was declared operable, even though the surveillance had expired on December 18, resulting in a violation of Technical Specifications. On January 7, at approximately 0800 hours, with Unit 2 in Mode 3, a Performance Test Supervisor noted while reviewing the Shift Manager's Logbook that the repair of 2NM-197B was complete. Performance personnel satisfactorily stroke time tested the valve by 0910 hours. This incident is attributed to an inappropriate action, because Performance personnel did not ensure that a TSONS was submitted to document the surveillance due on valve 2NM-197B. As corrective actions, this incident has been discussed with Performance personnel and a program has been implemented to ensure that a TSONS is generated when a surveillance is due.

BACKGROUND

Technical Specification (T/S) 3/4.6.3, Containment [EIIS:NH] Isolation Valves [EIIS:V], required that containment isolation valves listed on Tables 3.6-2a and 3.6-2b be operable with isolation times as shown on these tables. The required action if one or more of these valves is inoperable, is to maintain at least one isolation valve operable in the penetration [EIIS:PEN] and either restore the inoperable valve to operable status within four hours, isolate the affected penetration within four hours by use of at least one deactivated automatic valve secured in the isolation position, isolate the affected penetration within four hours by use of at least one closed manual valve or blind flange, or be in at least Hot Standby within the next six hours and in Cold Shutdown within the following 30 hours. T/S Surveillance Requirement 4.6.3.3 requires the isolation time of these valves to be determined to be within the times specified, when tested pursuant to T/S 4.0.5.

T/S 4.0.5 requires testing of components at surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code. Subsection IWV of the code, Inservice Testing of Valves in Nuclear Power Plants, is implemented through the Valve Inservice Testing Program. This program specifies the testing requirements, including the type of test required and required frequency.

The Nuclear Sampling [EIIS:KN] (NM) System provides a means for frequent samples to be taken during normal plant operation from nuclear related systems. 2NM-197B, S/G Upper Shell Sample Isol Vlv, is a normally closed containment isolation valve in containment penetration M-338. 2NM-197B is listed in T/S Table 3.6-2b and is required to be stroke time tested, from open to closed, on a quarterly basis by the Valve Inservice Testing Program. The procedure used to test this valve is PT/2/A/4200/25, NM Valve Performance Test. Since 2NM-197B is also cycled during performance of PT/2/A/4200/09A, Auxiliary Safeguards Test Cabinet Periodic Test, which is also performed on a quarterly basis, the test requirement is typically met by conducting PT/2/A/4200/25 in conjunction with PT/2/A/4200/09A.

Station Directive 3.1.15, Activities Affecting Station Operations or Operating Indications, requires that Operations be notified immediately if a component or system is declared operable or inoperable per Technical Specifications. If a component or system is found to be inoperable, a Technical Specification Operability Notification Sheet (TSONS) is to be used to notify the Operations Manager on duty, or the Shift Supervisor on nights or weekends.

The Catawba Periodic Test (CPT) program provides a means for Station groups to specify and monitor required testing intervals. The CPT program includes required and late test dates, which include the grace period. In Performance, the Test Supervisors review CPT periodically to ensure that tests are scheduled as required before the required test date.

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

Station Directive 3.2.2, Development and Conduct of the Periodic Testing Program, requires that, in the event that a test cannot be performed within its required interval due to system or unit condition, the responsible section must complete Attachment 4 and send copies to the Compliance Engineer, Unit Coordinator, and the Performance Engineer. Attachment 4 documents the procedure and states that the test was not performed by the latest scheduled test date due to unacceptable plant conditions, specifies the reason for unacceptable plant conditions, and specifies the next posrible date at which the test can be performed. The directive further states that the responsible group should ensure that the test is performed as soon as the required conditions are met, regardless of the estimated next possible date.

EVENT DESCRIPTION

On December 8, 1990, with Unit 2 in Mode 1, Power Operation, valve 2NM-197B would not open for Auxiliary Safeguards testing per PT/2/A/4200/09A. Work Request 476350PS was written to repair the valve. 2NM-197B was tagged closed and deenergized to ensure containment integrity per the required action of Technical Specification 3/4.6.3. A Technical Specification Action Item Log (TSAIL) entry (#2317) was made, to ensure that 2NM-197B remained tagged closed for containment isolation until completion of the work request.

On December 14, 1990, the section of PT/2/A/4200/09A in which 2NM-197B was to be cycled, was successfully completed per a procedure change written to allow testing of the relay test circuit with 2NM-197B remaining in the closed position.

On December 18, 1990, the required valve stroke time test interval expired for 2NM-197B. The surveillance had not been completed per PT/2/A/4200/25, since the valve would not open. Performance personnel had not generated a TSONS to document the expiration of the surveillance interval.

On December 19, 1990, the motor [EIIS:MO] control center breaker [EIIS:BRK] for 2NM-197B was investigated under work request 476350PS. Tags were cleared, and 2NM-197B was reenergized. The valve would not fully open from the Control Room. Operations personnel then closed the valve from the Control Room. During this work, valve 2NM-201A, S/G 2B Smpl Hdr Cont Isol, the outside containment isolation valve for penetration M-338, was closed. Since 2NM-197B is located inside containment, work under work request 476350PS was to be continued when the Unit was not at power.

On January 4, 1991, the decision was made to go to Mode 3, Hot Standby, to inspect ice condenser basket U-bolts since problems were found with U-bolts during a Unit 1 inspection (also on January 4).

On January 6, 1991, with Unit 2 in Mode 3, Instrumentation and Electrical (IAE) personnel investigated the problem with 2NM-197B not opening, under work request 476350PS. Valve 2NM-201A was deenergized in the closed position for this work. It was found that debris in the valve's torque switch [EIIS:XIS] was preventing the valve from opening. After cleaning out the debris, tags were cleared and Operations reenergized 2NM-197B. Valve 2NM-197B was then twice cycled open and closed, successfully. It was subsequently determined by the appropriate Station groups that no retesting was required, since the valve was not adjusted such that stroke time or leakage would be affected. These determinations were correct, based upon the scope of the IAE work. The CPT program was not required to be consulted in these determinations, to see if a surveillance was due for 2NM-197B. At 1700 hours, the tag was lifted for the breaker for 2NM-201A, and at 1730 hours, the tag was lifted for valve 2NM-201A. At 1731 hours, valve 2NM-197B was declared operable and TSAIL entry #2317 was cleared. Since the surveillance had expired on December 18, Technical Specification 3.6.3, requiring testing per Technical Specification 4.0.5, was violated when 2NM-197B was returned to service.

On January 7, 1991, at approximately 0800 hours, with Unit 2 in Mode 3, a Performance Test Supervisor noted while reviewing the Shift Manager's Logbook that the repair of 2NM-197B was complete. Technicians were immediately sent to test the valve, and 2NM-197B was successfully tested by 0910 hours, on January 7.

CONCLUSION

This incident is attributed to an inappropriate action, due to action not being taken because the need was not recognized. The Test Supervisor reviewed CPT at least twice per week between December 8 and January 7, and was aware of both the December 18 expiration date and of the status of 2NM-197B. However, the Test Supervisor assumed that a TSONS had been submitted by Performance technicians who were responsible for valve testing. The Test Supervisor did not ensure that a TSONS was submitted as required by Station Directive 3.1.15. Based on previous experience, there was an expectation that a valve repair would result in a stroke time test. Performance has implemented a program to prevent the recurrence of this incident. The Performance Manager will review the printout of surveillances for which the grace period will be exceeded within the next week, and for which the grace period has been exceeded. These items will be handled through the Test Engineers. In addition, Performance technicians have been trained on submitting a TSONS one or two days prior to the late test date, regardless of whether or not the valve is inoperable. This incident was discussed with the Test Supervisor involved.

An Attachment 4 was not submitted to reschedule the surveillance test for 2NM-197B. Since it was not possible to determine when the surveillance could next have been performed, following repair, and since submitting Attachment 4

would not have ensured that the TSAIL entry would have indicated a required test per PT/2/A/4200/25, the fact that Attachment 4 was not submitted is not considered to be a factor in this incident. However, Station Directive 3.2.2 also required that the responsible group ensure that a test is performed when conditions permit. Action should have been taken to ensure that PT/2/A/4200/25 was performed as soon as 2NM-197B was repaired. This action would have been in the form of a TSONS, as required by Station Directive 3.1.15. A planned corrective action will be for Station Directive 3.2.2 to be enhanced to clarify the actions required when a test cannot be performed within its required interval due to system or unit conditions.

Missed surveillances resulting in Technical Specification violations are a recurring problem at Catawba. During the past two years, two other incidents occurred involving a failure to follow the requirements of Station Directive 3.2.2: LER 413/90-016, in which a Refueling Water Storage Tank sample was missed, and LER 414/90-018, in which a Low Temperature Overpressurization Protection surveillance was missed. The planned action to enhance Station Directive 3.2.2 described above should reduce the chances of future missed surveillances.

CORRECTIVE ACTION

SUBSEQUENT

1) Valve 2NM-197B was satisfactorily stroke time tested per PT/2/A/4200/25.

2) A program has been implemented in which the Performance Manager will review the CPT printout of surveillances for which the grace period will be exceeded within the next week, and for which the grace period has been exceeded. Those items will then be handled through the Test Engineers.

3) Performance technicians were trained on submitting a TSONS one or two days prior to the late test date, regardless of whether or not the valve is operable.

4) This incident was discussed with the Test Supervisor involved.

PLANNED

1) Station Directive 3.2.2 will be revised to clarify the actions required when a test cannot be performed within its required interval due to system or Unit conditions.

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

SAFETY ANALYSIS

From December 8 to December 19, 1990, 2NM-197B was deenergized in its safe position, closed. On December 19, when it was reenergized for a functional, 2NM-201A, the outside containment isolation valve for penetration M-338, was closed. Valve 2NM-197B was then deenergized in the closed position from December 19, 1990 to January 6, 1991. When it was reenergized for a functional on January 6, valve 2NM-201A was deenergized in the closed position. During the cycling of 2NM-197B on January 6, 2NM-201A was closed. When 2NM-197B was returned to service with an expired surveillance, from approximately 1730 hours on January 6 to 0910 hours on January 7, with Unit 2 in Mode 3, the valve was in its safe position, closed. Thus, at all times penetration M-338 was adequately isolated to prevent the inadvertent release of radioactive material in the event of an accident. Therefore, the health and safety of the public were not affected by this incident.