

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MREB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)

Catawba Nuclear Station Unit 1

DOCKET NUMBER (2)

05000413

PAGE (3)

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TITLE (4)

Both Diesel Generators Inoperable due to Misinterpretation of Technical Specification Resulting in a Failure to Perform a Diesel Generator Surveillance within the Required Surveillance Interval

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 NAME	DOCKET NUMBER(S)
8	5	1998	1998	- 014	- 00	9	02	1998		

OPERATING MODE (9) 1

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

POWER LEVEL (10)	20.402(b)	20.405(a)(1)(I)	20.405(a)(1)(II)	20.405(a)(1)(III)	20.405(a)(1)(IV)	20.405(a)(1)(V)	20.405(c)	50.36(c)(1)	50.36(c)(2)	50.73(a)(2)(iv)	50.73(a)(2)(v)	50.73(a)(2)(vii)	50.73(a)(2)(viii)(A)	50.73(a)(2)(viii)(B)	50.73(a)(2)(x)	73.71(b)	73.71(c)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
100																		

LICENSEE CONTACT FOR THIS LER (12)

NAME

G.A. Copp, Regulatory Compliance

TELEPHONE NUMBER

AREA CODE (803)

831-3622

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED

MONTH

DAY

YEAR

YES (if yes, complete EXPECTED SUBMISSION DATE)

X NO

SUBMISSION DATE (15)

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

On August 5, 1998 with Unit 1 in Mode 1 at 100% power, a review of surveillance procedures revealed that the requirements of Technical Specification (TS) Surveillance Requirement (SR) 4.8.1.1.2.i.2, 10 year pressure test of Class 3 Diesel Generator fuel oil piping, had not been performed as required. This SR requires performance of a pressure test at 110% of system design pressure. The SR was actually performed at normal operating pressure as allowed by ASME Code Case N-498-1 which was approved for use at Catawba. This is reportable as a condition prohibited by TS. When this was discovered, both Diesel Generators were declared inoperable and Enforcement Discretion was requested. The root cause was misinterpretation of TS requirements. A change to the Technical Specifications was requested that will allow the use of Code Case N-498-1 by deleting SR 4.8.1.1.2.i.2.

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BACKGROUND

Catawba Nuclear Station, Units 1 and 2 are four loop Westinghouse pressurized water reactors [EIIS:RCT]. The emergency Diesel Generators (D/G) [EIIS:EK] provide emergency electrical power to safety related equipment when off-site power is not available during off-normal and accident conditions. Each D/G has a Fuel Oil System (FD) [EIIS:DC] which stores and supplies fuel oil to the associated D/G. The FD system consists of two storage tanks [EIIS:TK] for each D/G and associated piping, pumps [EIIS:P] and valves [EIIS:V] which transfer fuel oil from the storage tanks to the D/Gs. Major piping and components are designed to ASME Section III, Class 3 requirements.

Operability of the FD system is required for the associated D/G to be considered operable. Technical Specifications (TS) surveillance requirements (SR) include the following requirement for DG testing:

"4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

i. At least once per 10 years by:

2) Performing a pressure test of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code at a test pressure equal to 110% of the system design pressure."

This TS surveillance applies to the Class 3 components and piping in the FD System.

In the event that both DGs are inoperable, TS Limiting Condition for Operation (LCO) 3.8.1.1, ACTION f.2. states:

" Restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours."

Inservice inspection of ASME Section III piping and components is also governed by TS. Specifically, TS 4.0.5 states:

"a. Inservice inspection of ASME Code Class 1, 2, and 3 components.... shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR Part 50, Section 50.55a(g), except where specific written relief has been

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granted by the Commission pursuant to 10 CFR Part 50, Section 50.55a(g)(6)(i);"

and

"d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements;"

TS 4.0.3 states:

"Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed."

EVENT DESCRIPTION

June 22, 1994

Duke sent a letter to NRC which requested relief from the provisions of 10 CFR 50.55a(g) to allow the use of ASME Code Case N-498-1 to permit a system pressure test at normal operating pressure to be performed in lieu of a hydrostatic test at 110% of system design pressure.

February 13, 1995

NRC responded in a letter to Duke that use of ASME Code Case N-498-1 was approved.

March 6, 1995

System pressure testing was completed on FD System for D/G 1A and 1B using the provisions of ASME Code Case N-498-1. This was documented in procedure MP/0/A/7650/088.

August 5, 1998

0900 hours

Work Control personnel questioned whether current surveillance procedures for FD system pressure testing were in strict compliance with TS 4.8.1.1.2.i.2. This was discovered as part of an ongoing review of maintenance and testing procedures against surveillance requirements in preparation for implementation of Improved Technical Specifications.

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August 5, 1998

1755 hours

D/Gs 1A and 1B were declared inoperable due to a missed surveillance. TS 4.0.3 was entered which allowed 24 hours before TS LCO 3.8.1.1, Action f.2. had to be implemented.

August 6, 1998

1010 hours

Plant Operations Review Committee approved pursuing Enforcement Discretion to allow continued unit operation. The decision to pursue Enforcement Discretion was made since SR 4.8.1.1.2.i.2 could not be performed as written. In particular, a pressure test could not be conducted at 110% of design pressure on the D/G fuel tank since it is vented to atmosphere.

August 6, 1998

1445 hours

NRC granted Enforcement Discretion which allowed both D/Gs to be considered operable with TS 4.8.1.1.2.i.2. not met until such time as a TS amendment is issued by NRC. D/Gs 1A and 1B were declared operable.

CONCLUSION

The root cause of this event was misinterpretation of TS requirements. Procedure MP/0/A/7650/088 was revised to incorporate the provisions of ASME Code Case N498-1 with the perception that this testing met SR 4.8.1.1.2.i.2. The testing that was performed using this procedure met the requirements of SR 4.0.5 in that ASME Code requirements were met. However, SR 4.8.1.1.2.i.2 contained a specific requirement to perform a pressure test at 110% of system design pressure on portions of the FD system designed to ASME Section III, Class 3 requirements and the revised procedure did not strictly meet this SR. Failure to meet this SR within the time limits of the surveillance interval plus grace period constitutes a condition prohibited by TS and is reportable pursuant to 10CFR 50.73(a)(2)(i). The surveillance interval plus grace period expired on July 17, 1997. Since SR 4.8.1.1.2.i.2 was not performed, both D/Gs were declared inoperable pursuant to TS 4.0.3. Catawba requested Enforcement Discretion to avoid an undesirable transient as a result of forcing compliance with the TS and, thus, minimizing potential safety consequences and operational risks.

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The Unit 2 surveillance was not missed since the 10 year surveillance interval plus grace period does not expire until November 15, 1998.

A review of operating experience at Catawba revealed eight previous events in the past 24 months involving missed or inadequate TS surveillances. This has been previously identified as a recurring problem. Five of these events, Licensee Event Reports 413/96-010, 413/97-004, 413/98-003, 413/98-006, and 413/98-009 were similar to the current event in that personnel did not recognize that the testing performed did not meet TS surveillance requirements. There is a pending corrective action from a previous event (LER 413/97-004) to perform a common cause analysis to analyze the trend in missed surveillances.

There were no EPIX reportable equipment failures as a result of this event.

CORRECTIVE ACTIONS**Immediate**

- 1) Both D/Gs were declared inoperable. TS 4.0.3 was entered.

Subsequent

- 1) Notice of Enforcement Discretion was obtained to restore the D/G to operable status.
- 2) License amendment request was submitted to delete SR 4.8.1.1.2.i.2 which will allow the ASME Code required testing to be specified solely in TS 4.0.5.

Planned

- 1) A common cause analysis will be performed to analyze the noted trend in missed TS surveillances (this is corrective action from LER 413/97-004).
- 2) The ongoing review of SRs against maintenance and testing procedures will be completed (Commitment).
- 3) Improved Technical Specifications (ITS) will be implemented at Catawba. This planned action is not a specific action for this LER; however, this action should resolve problems with misinterpretations of TS. SRs which duplicate requirements from other sources (10CFR, ASME, etc.) have been deleted from ITS and/or rewritten and the BASES section of ITS has been expanded to clarify the intent of both LCOs and SRs. Also, as part

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of ITS implementation, specific training on ITS structure and philosophy will be given to Engineering, Operations, Regulatory Compliance, and selected personnel in other station groups.

SAFETY ANALYSIS

The FD System was capable of performing its safety function at all times during the course of this event. There are no negative safety consequences associated with continued use of Code Case N498-1 for performing the pressure testing required by the ASME Code and TS 4.0.5. This issue does not create any concerns regarding the capability of any safety related structures, systems, or components to perform their safety function. The health and safety of the public were not affected by this event.