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**DUKE POWER**

December 2, 1996

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

Subject: Catawba Nuclear Station  
Docket No. 50-413  
LER 414/96-006

Gentlemen:

Attached is Licensee Event Report **Missed Technical Specification Surveillance For AC Offsite Power Sources.**

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

Very truly yours,

W. R. McCollum, Jr.

Attachment

cc: Mr. S.D. Ebner  
Administrator, Region II  
U.S. Nuclear Regulatory Commission  
101 Marietta St., NW, Suite 2900  
Atlanta, GA 30323

INPO Records Center  
700 Galleria Place  
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Mr. P. S. Tam  
U.S. Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation  
Washington, D.C. 20555

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Mr. R. J. Freudenberger  
NRC Resident Inspector  
Catawba Nuclear Station

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PDR ADOCK 05000414  
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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 (MNBB 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 2

DOCKET NUMBER (2)

05000414

PAGE (3)

1 of 4

TITLE (4)

Missed Technical Specification Surveillance For AC Offsite Power Sources

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)
11	01	96	96	006	000	12	02	96	N/A	
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (Check one or more of the following) (11)										
OPERATING MODE (9)		1	20.402(b)			20.405(c)			50.73(a)(2)(iv)	
POWER LEVEL (10)		100%	20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v)	
			20.405(a)(1)(ii)			50.36(c)(2)			50.73(a)(2)(vii)	
			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)	
OTHER (Specify in Abstract below and in Text, NRC Form 366A)										

LICENSEE CONTACT FOR THIS LER (12)

NAME

D. P. Kimball, Safety Review Group Manager

TELEPHONE NUMBER

AREA CODE

(803)

831-3743

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)

YES (if yes, complete EXPECTED SUBMISSION DATE)

X NO

**ABSTRACT** (Limit to 1400 spaces, i.e. approximately fifteen single-space typewritten lines) (16)**Unit Status:** Unit 2 - mode 1, power operation, 100% power.

**Event Description:** On November 2, 1996, the Control Room Senior Reactor Operator discovered that technical specification (T/S) surveillance requirement 4.8.1.1a was missed when AC offsite power sources were not verified operable within one hour of the unit 2A diesel generator (D/G) being placed in the maintenance mode. 2A D/G was placed in the maintenance mode for normal diesel maintenance testing at 1013 hours on November 1, 1996 and returned to the operational mode on November 1, 1996, at 1117 hours. Diesel Generator 2A was in the maintenance mode for one hour and four minutes.

**Root Cause:** The root causes of this event are:

- Management expectations for short term inoperability items have not been well defined.
- Insufficient detail in the test procedure.

**Corrective Action:** Corrective actions include procedure revisions and creation of a quality improvement team (QIT) to look at how to track short duration inoperabilities.

**LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION**

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BACKGROUND

The Diesel Generator [EIIS:EK] (EQA) system operates to provide standby AC power to equipment required to safely shutdown the reactor [EIIS:RCT] in the event of a loss of the normal power source and to supply power to safeguards equipment as required during a design basis accident coincident with a loss of the normal power source. Two mutually redundant diesel generators (D/Gs) are provided per unit and are physically separated in individual category 1 enclosures to preserve their independence and integrity and to assure their maximum availability.

PT/2/A/4350/02A, Diesel Generator 2A Operability Test, is completed monthly to verify the operability of Diesel Generator 2A. As part of this normal surveillance the D/G is placed in the maintenance mode to bar and air roll the D/G. The D/G is normally in the maintenance mode less than an hour.

Technical Specification 3.8.1.1 requires, as a minimum, that the following AC electrical power sources shall be operable during Modes 1 - Power Operation, 2 - Startup, 3 - Hot Standby, and 4 - Hot Shutdown:

- Two physically independent circuits between the offsite transmission network and the onsite essential auxiliary power system, and
- Two separate and independent diesel generators.

Per action statement (c) to this T/S, with one D/G inoperable, action is required to demonstrate the operability of the AC offsite sources by performing the surveillance requirement within one hour and at least once per eight hours thereafter. PT/2/A/4350/02C, Available Power Source Operability Check, is performed to satisfy this action statement.

EVENT DESCRIPTION

November 1, 1996

1013 hours D/G 2A was placed in the maintenance mode per PT/2/A/4350/02A making D/G 2A inoperable.

1117 hours D/G 2A was placed back into the operational mode per PT/2/A/4350/02A making the D/G operable.

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November 2, 1996

While reviewing the November 1, 1996 reactor operator (RO) logbook the control room senior reactor operator (CRSRO) discovered that the 2A D/G was in the maintenance mode for one hour and four minutes which required completing PT/2/A/4350/02C.

CONCLUSION

The root causes of this event are:

- Management expectations for short term inoperability items have not been well defined.
- Insufficient detail in the test procedure.

The licensed operator entered in the RO logbook the time that the 2A diesel was placed in the maintenance mode. This method of tracking the available power source operability test was not well defined. T/S surveillance requirement 4.8.1.1.1a was not met when available power sources were not verified within one hour of the 2A D/G being placed in the maintenance mode.

When D/G test procedures were revised to add other required actions, the consequences affecting the impact on the AC offsite power source test were not considered. The D/G operability test procedures were changed to include barring of the D/G along with rolling the D/G on air while in the maintenance mode. The procedure changes increased the amount of time to complete both tests with the D/G in the maintenance mode. The licensed operator was misled because of the note in the test procedure suggesting short duration of time the D/G would be in the maintenance mode and that it would not be necessary to verify available power sources.

A review of the Operating Experience Data Base (OEDB) for the past 24 months indicates that T/S violations due to missed T/S surveillance of AC offsite power sources is recurring. LER (414/95-006) involved a missed T/S surveillance of AC offsite power sources. The root cause of that incident was attributed to work practices, because, pertinent information was not transmitted. Corrective action to prevent this recurring problem includes procedural guidance to complete the AC offsite power source availability test before a D/G is placed in the maintenance mode.

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CORRECTIVE ACTIONSSUBSEQUENT

- 1) The following changes were made to PT/1(2)/A/4350/02A(B), diesel generator operability test:
  - The PT now has one enclosure to bar and air roll the diesel.
  - Short term inoperability is no longer discussed.
  - Available AC power source operability test shall be performed before placing a diesel in maintenance mode.
- 2) An operator up-date was issued to communicate the procedure change as a result of this event.
- 3) A step was added in OP/1(2)/A/6350/02, Diesel Generator Operation, enclosures to complete PT/1(2)/A/4350/02C before checking for cylinder head leakage or barring a D/G.

Planned

- 1) Creation of a quality improvement team (QIT) to look at how to track short duration inoperabilities.

SAFETY ANALYSIS

Between 1013 hours and 1117 hours on November 1, 1996, the operability of AC offsite power sources was not verified as required by T/S 4.8.1.1.1a. In the event of a loss of offsite power, annunciators would have alerted control room personnel. No related alarms were received during this time period. Therefore, it is apparent that redundant AC offsite power sources were available the entire time the 2A D/G was inoperable.

The health and safety of the public were not affected by this event.