CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9712030017 DOC.DATE: 97/11/25 NOTARIZED: NO DOCKET #
FACIL:50-287 Oconee Nuclear Station, Unit 3, Duke Power Co. 05000287
AUTH.NAME AUTHOR AFFILIATION
BOND,R.T. Duke Power Co.
MCCOLLUM,W.R. Duke Power Co.
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 97-004-00:on 971029,deficient procedure resulted in missed TS surveillance check.Caused by deficient written communications.Review of periodic instrument surveillance procedures performed.W/971125 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 7
TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD2-2 PD	1	1	LABARGE,D	1	1
INTERNAL:	ACRS	1	1	AEOD/SPD/RAB	2	2
	AEOD/SPD/RRAB	1	1	FILE CENTER	1	1
	NRR/DE/ECGB	1	1	NRR/DE/EELB	1	1
	NRR/DE/EMEB	1	1	NRR/DRCH/HHFB	1	1
	NRR/DRCH/HICB	1	1	NRR/DRCH/HOLB	1	1
	NRR/DRCH/HQMB	1	1	NRR/DRPM/PECB	1	1
	NRR/DSSA/SPLB	1	1	NRR/DSSA/SRXB	1	1
	RES/DET/EIB	1	1	RGN2 FILE 01	1	1
EXTERNAL:	L ST LOBBY WARD	1	1	LITCO BRYCE,J H	1	1
	NOAC POORE,W.	1	1	NOAC QUEENER,DS	1	1
	NRC PDR	1	1	NUDOCS FULL TXT	1	1

NOTE TO ALL "RIDS" RECIPIENTS:
PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LIS
OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTR
DESK (DCD) ON EXTENSION 415-2083

FULL TEXT CONVERSION REQUIRED
TOTAL NUMBER OF COPIES REQUIRED: LTTR 25 ENCL 25

Duke Power
A Duke Energy Company

W. R. McCollum, Jr.
Vice President

Duke Power
Oconee Nuclear Site
P.O. Box 1439
Seneca, SC 29679
(864) 885-3107 OFFICE
(864) 885-3564 FAX

November 25, 1997

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

Subject: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287
Licensee Event Report 287/97-04
Problem Investigation Process No.: 0-097-3784

Gentlemen:

Pursuant to 10 CFR 50.73 Sections (a) (1) and (d), attached is Licensee Event Report 287/97-04, concerning a deficient procedure which resulted in a missed Technical Specification surveillance check.

This report is being submitted in accordance with 10 CFR 50.73 (a) (2) (i) (B). 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.

IE22

Attachment

cc: Mr. Luis A. Reyes
Administrator, Region II
U.S. Nuclear Regulatory Commission
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303

Mr. D. E. LaBarge
U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

INPO Records Center
700 Galleria Parkway, NW
Atlanta, GA 30339-5957

Mr. M. A. Scott
NRC Resident Inspector
Oconee Nuclear Station

NRC FORM 366 (4-95) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMD NO. 3150-0104
EXPIRES: 04/30/98
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)	DOCKET NUMBER (2)	PAGE (3)
Oconee Nuclear Station, Unit Three	05000 287	1 of 5

TITLE (4) Deficient Procedure Results In A Missed Technical Specification Surveillance Check

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) 05000
10	29	97	97	-	04	- 00	11	25	97		05000

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (Check one or more of the following) (11)					
POWER LEVEL (10)	100	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)(B)		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
R. T. Bond, Safety Review Manager	(864) 885-3043

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 October 29, 1997, Unit 3 was operating at 100 % full power. As a result of a training package that was issued earlier, Operations shift personnel raised questions in regard to the Periodic Instrument Surveillance procedure. Operations staff personnel reviewed the questions and discovered that one Technical Specification surveillance check had not been performed on Unit 3 since the March 1997 startup. The associated procedure step requires a daily check between the Operator Aid Computer (OAC) subcooling margin and the Inadequate Core Cooling Monitor subcooling margin. The OAC was removed from service prior to startup due to the calculations for the subcooling margin being non-conservative. The cause of this event is Deficient Written Communications; Content, Omission of relevant information. Corrective actions included Engineering developing an alternate method to perform the surveillance check with the OAC out of service. The Periodic Instrument Surveillance procedures for Unit 2 and Unit 3 were revised to reference the associated Technical Specification surveillances.

BACKGROUND

Technical Specification (TS) 4.1, Table 4.1-1, Item 61 requires a monthly channel check of the Subcooling Margin Monitor (SMM). The monthly check is performed during the performance of Periodic Instrument Surveillance procedure (PT/1,2,3/A/600/01) and is conservatively required by the procedure to be performed on a daily frequency when the unit is above 200 degrees F (required by TS when Reactor Coolant [EIIS:AB] temperature is greater than 300 degrees F). The check consists of a comparison between the Operator Aid Computer (OAC) [EIIS:ID] SMM program output and the Inadequate Core Cooling Monitor (ICCM) indication.

The ICCM system includes indications of hot leg level, reactor vessel head level, loop subcooling margin, core subcooling margin, and core exit temperatures to provide an advanced warning of the approach to inadequate core cooling. The SMM is a subsystem of the ICCM. The SMM has a primary coolant saturation meter available to the operators to provide on-line indication of coolant saturation conditions. The SMM indicates when saturation conditions occur and thus provides advance warning that inadequate core cooling is a possibility.

EVENT DESCRIPTION

In October 1997, a training package associated with the Standby Shutdown Facility surveillance procedure was routed to Operations personnel. The training package included expectations on procedure use and adherence. As a result of the training package, Operations shift personnel raised questions in respect to the Periodic Instrument Surveillance procedure.

Operations staff personnel reviewed the questions associated with the Periodic Instrument Surveillance procedure. During the review, it was discovered that Operators had been signing a step in the Unit 3 Periodic Instrument Surveillance procedure as not applicable since startup. The step requires a daily check between the Operator Aid Computer (OAC) and the Inadequate Core Cooling Monitor (ICCM) subcooling margin. The Unit 3 OAC subcooling margin was removed from service prior to unit startup because the OAC calculations for subcooled margin, degrees subcooled and degrees superheat had been determined to be non-conservative.

On October 30, 1997, Unit 3 was operating at 100 % full power. Operations staff determined that the surveillance check which is required to be performed monthly by Technical Specification (TS) 4.1, Table 4.1-1 had not been performed since Unit 3 exceeded 200 degrees F on March 1, 1997.

On October 30, 1997, with the OAC subcooling margin monitor out of service, Engineering provided an alternate method to perform the Inadequate Core Cooling Monitor subcooling margin check. This was completed by Operations and found to be within the acceptable range. Therefore, the ICCM would have performed as required.

A review of the completed Periodic Instrument Surveillance procedures since Unit 3 exceeded 200 degrees F on March 1, 1997, was performed. The step which requires a daily check between the OAC and the ICCM subcooling margin was marked "not applicable" by Reactor Operators with an asterisk referring to a note explaining why the step could not be performed. This method of noting steps which cannot be performed was specified in the procedure. Various Senior Reactor Operators (SRO) initialed the "not applicable" step. The front of the procedure contained a note that stated "computer SCMs OOS for program rewrite". The procedure's completion verification section had been signed by various shift SROs. The procedure's completion approval section was signed by various shift SROs.

Interviews were conducted with various SROs and ROs from different shifts. The interviews revealed that the SROs and ROs did not recognize that this step was a TS required surveillance check. The consensus was that they were only comparing the ICCM to the OAC for utilization of the OAC, should the ICCM be lost during an accident. The associated enclosure of Periodic Instrument Surveillance procedure referenced TS 3.5.6, which relates to Limiting Conditions Operations associated with the ICCM channels, but did not reference TS 4.1 surveillance section.

CONCLUSIONS

The cause of this event is Deficient Written Communications; Content, Omission of relevant information. The Periodic Instrument Surveillance procedure did not clearly indicate that this step was a required Technical Specification (TS) surveillance. This event may have been prevented if the procedure had clearly identified that this was a required TS surveillance.

There were two contributing factors:

(1) failure by the Operations Technical Staff to identify the loss of the TS surveillance capability when the Operator Aid Computer subcooling monitor was taken out of service.

(2) failure by the shift Senior Reactor Operators to evaluate all the effects of the inability to perform the subcooling monitor surveillance checks.

A review of past events over the last two years involving missed TS surveillances indicated that one surveillance had been missed in 1996 (LER 269/97-09). This was associated with the failure to calibrate Low Pressure Injection flow transmitters. The root cause of that event was attributed to Deficient Work Practices; Document Use Practices, Documents not followed correctly because the Instrument and Control personnel misinterpreted the work order task description. Therefore, this event is not considered recurring.

This event did not involve a component failure or malfunction, therefore it is not NPRDS reportable. There were no personnel injuries, radiation exposures, or releases of radioactive materials associated with this event.

CORRECTIVE ACTIONS

Immediate

None

Subsequent

1. A review of Unit 2 and 3 Periodic Instrument Surveillance procedures were performed. The review identified the surveillances that were not being performed and confirmed that they were not required by the Technical Specifications. Unit 1 is currently in a refueling outage and the Periodic Instrument Surveillance procedure is not required.

2. An alternate method was developed to manually perform the Inadequate Core Cooling Monitor subcooling margin check and this method was incorporated into the Periodic Instrument Surveillance procedures for Units 2 and 3. Using this method, the required surveillance was performed on Unit 3 within twenty four hours of the initial discovery of the problem.

3. All operations personnel were notified of the lessons learned from this event in that an apparently acceptable procedure issue constituted a missed Technical Specification surveillance.

Planned

1. Revise surveillance procedures PT/1,2,3/A/600/01 to provide clearer reference to Technical Specification required surveillance steps.

2. Provide training to ensure operators clearly understand Technical Specification surveillance requirements referenced in Operations procedures.

Planned corrective actions 1 and 2 are considered to be the only commitments to the NRC contained within this report.

SAFETY ANALYSIS

A monthly check of the Inadequate Core Cooling Monitor (ICCM) subcooling margin is required to be performed. The check consists of comparing the Operator Aid Computer (OAC) subcooling margin to the ICCM subcooling margin. This ensures that sufficient information is available on selected plant parameters to monitor and assess such parameters following an accident.

The monthly check was not performed between March 1, 1997 and October 30, 1997. The maximum allowed frequency was exceeded in April 1997. After the error was discovered, an alternate method was developed by Engineering. Operations performed this alternate method with satisfactory results. Therefore, even though the Technical Specification frequency for the check was exceeded, the ICCM subcooling margin would have supplied Operators with the correct information following an accident.

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