

# CATEGORY 1

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9706030116 DOC.DATE: 97/05/27 NOTARIZED: NO  
 FACIL:50-269 Oconee Nuclear Station, Unit 1, Duke Power Co.  
 AUTH.NAME AUTHOR AFFILIATION  
 BOND,R.T. Duke Power Co.  
 HAMPTON,J.W. Duke Power Co.  
 RECIP.NAME RECIPIENT AFFILIATION

DOCKET #  
05000269

SUBJECT: LER 97-005-00:on 970426,low pressure svc water piping was outside design basis for high trajectory turbine missiles. Root cause of event is unknown.Amend to UFSAR was submitted. W/970527 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 3  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

### NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD2-2 PD	1 1	LABARGE,D	1 1
INTERNAL:	ACRS	1 1	<del>AEOD/SPD/RAB</del>	2 2
	AEOD/SPD/RRAB	1 1	<del>FILE CENTER</del>	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 LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

FULL TEXT CONVERSION REQUIRED

TOTAL NUMBER OF COPIES REQUIRED: LTTR 25 ENCL 25

C  
A  
T  
E  
G  
O  
R  
Y  
  
1  
  
D  
O  
C  
U  
M  
E  
N  
T

13  
President  
104 887 888 000  
104 887 888 000



**DUKE POWER**

May 27, 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 269/97-05  
Problem Investigation Process No.: 5-096-1741

Gentlemen:

Pursuant to 10 CFR 50.73 Sections (a) (1) and (d),  
attached is Licensee Event Report 269/97-05, concerning  
Low Pressure Service Water Piping being outside the  
design basis for High Trajectory Turbine Missiles.

This report is being submitted in accordance with 10 CFR  
50.73 (a) (2) (ii) (B). This event is considered to be  
of no significance with respect to the health and safety  
of the public.

Very truly yours,

*J. W. Hampton*

J. W. Hampton, Vice President  
Oconee Nuclear Site

/fts

Attachment

020057



9706030116 970527  
PDR ADOCK 05000269  
S PDR

1/3  
2002

Document Control Desk

Date: May 27, 1997

Page 2

cc: Mr. Luis A. Reyes  
Administrator, Region II  
U.S. Nuclear Regulatory Commission  
61 Forsyth Street, S. W., 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

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) Oconee Nuclear Station, Unit One	DOCKET NUMBER (2) 05000 269	PAGE (3) 1 OF 1
-------------------------------------------------------	--------------------------------	--------------------

TITLE (4)  
Low Pressure Service Water Piping Outside Design Basis For High Trajectory Turbine Missiles

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)
04	26	97	97	05	00	05	27	97	Oconee, Unit Two	05000 270
									Oconee, Unit Three	05000 287

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (Check one or more of the following) (11)																				
POWER LEVEL (10)	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(i)	<input checked="" type="checkbox"/> 50.73(a)(2)(ii) (B)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.71(b)	<input type="checkbox"/> 73.71(c)	<input type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME R. T. Bond, Safety Review Manager		AREA CODE (864)	NUMBER 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)				X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)									

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

The Oconee original design criteria, as stated in the Updated Final Safety Analysis Report (UFSAR), requires Engineered Safety (ES) Features to be protected from turbine generated missiles by means of shielding or separation. In addressing a concern found during the Service Water Upgrade Project, Oconee Engineering began a review in September 1996 to verify that the Low Pressure Service Water (LPSW) [EIIS:BI] system piping met the separation criteria for turbine missiles. On October 3, 1996, an evaluation determined that Low Trajectory missiles, thought to be most limiting, were not a concern. On April 26, 1997, Units 1 and 3 were at 100% full power and Unit 2 was at cold shutdown, when it was determined that portions of the LPSW system piping did not meet the Oconee separation criteria for High Trajectory Missiles. Separation was addressed by Engineering in the original design of ES systems, but these portions of LPSW piping do not have separation or documentation of adequate shielding from High Trajectory Missiles. The root cause of this event is Unknown. This event is not recurring and had no personnel injuries, exposures or releases of radiation. Corrective action included submitting an amendment to the UFSAR to allow for current industry and NRC guidance concerning vulnerable target area and probability of impact of a turbine missile without shielding or separation protection. This license amendment was approved by the NRC on May 16, 1997. When applying the NRC approved methodology, the LPSW system piping in question provides an acceptably low probability target. Therefore, the health and safety of the public was not impacted by this event.