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ACCESSION NBR:8808250384      DOC.DATE: 88/08/15      NOTARIZED: NO      DOCKET #  
 FACIL:50-269 Oconee Nuclear Station, Unit 1, Duke Power Co.      05000269  
 AUTH.NAME      AUTHOR AFFILIATION  
 NORTH,P.J.      Duke Power Co.  
 TUCKER,H.B.      Duke Power Co.  
 RECIP.NAME      RECIPIENT AFFILIATION

SUBJECT: LER 88-011-00:on 880715,HPI pump 1B tested w/o proper pump venting.Caused by personnel error.W/880815 ltr.  
W/8      ltr.

DISTRIBUTION CODE: IE22D      COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 6  
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:AEOD/Ornstein:lcy. 05000269

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
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	PASTIS,H	1 1		
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	2 2
	ACRS WYLIE	1 1	AEOD/DOA	1 1
	AEOD/DSP/NAS	1 1	AEOD/DSP/ROAB	2 2
	AEOD/DSP/TPAB	1 1	ARM/DCTS/DAB	1 1
	DEDRO	1 1	NRR/DEST/ADS 7E	1 0
	NRR/DEST/CEB 8H	1 1	NRR/DEST/ESB 8D	1 1
	NRR/DEST/ICSB 7	1 1	NRR/DEST/MEB 9H	1 1
	NRR/DEST/MTB 9H	1 1	NRR/DEST/PSB 8D	1 1
	NRR/DEST/RSB 8E	1 1	NRR/DEST/SGB 8D	1 1
	NRR/DLPQ/HFB 10	1 1	NRR/DLPQ/QAB 10	1 1
	NRR/DOEA/EAB 11	1 1	NRR/DREP/RAB 10	1 1
	NRR/DREP/RPB 10	2 2	NRR/DRIS/SIB 9A	1 1
	NUDOCS-ABSTRACT	1 1	<u>REG FILE</u> 02	1 1
	RES TELFORD,J	1 1	RES/DSIR DEPY	1 1
	RES/DSIR/EIB	1 1	RGN2 FILE 01	1 1
EXTERNAL:	EG&G WILLIAMS,S	4 4	FORD BLDG HOY,A	1 1
	H ST LOBBY WARD	1 1	LPDR	1 1
	NRC PDR	1 1	NSIC HARRIS,J	1 1
	NSIC MAYS,G	1 1		
NOTES:		1 1		

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Oconee Nuclear Station, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 6 9 1	PAGE (3) OF 0 5
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TITLE (4)  
Failure to Vent a High Pressure Injection Pump Results in a Condition Prohibited by Technical Specifications due to Personnel Error.

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)
0 7	1 5	8 8	8 8	0 1 1	0 0	0 8	1 5	8 8			0 5 0 0 0
											0 5 0 0 0

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) 1 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)			
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.38(e)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)			
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.38(e)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)			
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)				
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)				
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)					

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME Philip J. North, Licensing		AREA CODE 7 0 4	3 7 3 - 7 4 5 6

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
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO				

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

On July 15, 1988, at approximately 1430 hours, supervisory review of High Pressure Injection (HPI) System Performance Test procedure revealed that the 1B HPI pump had been tested without proper pump venting. Technical Specifications require that a non-operating HPI pump be vented prior to performing the Performance Test (PT).

At approximately 1100 hours on July 14, 1988, Performance personnel began the PT of 1B HPI pump. Maintenance had recently been performed on the pump motor and the pump was not in operation. Performance personnel failed to realize the requirement to vent the pump prior to testing. The root cause of this incident was determined to be a personnel error due to the failure to follow procedure.

The subsequent corrective actions included: review the technician's Employee Training and Qualification System (ETQS) sheet, re-training the technician involved, and counseling the technician's supervisor to be more cognizant of plant conditions and procedure requirements.

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PDR ADCK 05000269  
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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		8	011	00	02	OF	05

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

Background

The High Pressure Injection (HPI) [EIIS:BQ] pumps [EIIS:P] provide normal make-up and Reactor Coolant Pump seal injection to the Reactor Coolant System [EIIS:AB] during normal operation, as well as, emergency injection during an Engineered Safeguards [EIIS:JE] actuation. Technical Specification 4.0 (Surveillance Standards) requires the HPI pumps to be tested in accordance with Section XI of the ASME Boiler and Pressure Vessel Code. Section XI requires quarterly testing as well as post-maintenance testing. Per Technical Specifications Table 4.1-2 Item 10, prior to testing a non-operating pump, the pump casing must be vented. The HPI Performance Test (PT) was written to address the quarterly testing of the pumps, rather than specifically post-maintenance testing.

SEQUENCE OF EVENTS

July 14, 1988

(all times are approximate)

0730

Mechanical Maintenance (MM) completed lubrication of 1A HPI pump motor.

Performance group notified by MM that 1A HPI pump is ready for testing.

The Performance Technician told by the Performance Supervisor to start the HPI PT with the 1A HPI pump.

0800

The Performance Technician identified 1B HPI pump as the operating pump.

The Performance Technician recorded the 1B HPI pump on Step 12.1 of the procedure.

The Performance Technician began the PT.

0805

The Performance Technician vented 1A and 1C HPI pumps.

0845

The Performance Technician completed the PT on 1A HPI pump.

0900

MM lubricated 1B HPI pump motor.

1100

The Performance Technician failed to perform Technical Specification required venting of 1B HPI pump prior to testing.

The Performance Technician began PT on 1B HPI pump.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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					0   3	OF 0   5

TEXT (If more space is required, use additional NRC Form 386A's) (17)

- 1145 The Performance Technician completed PT on 1B HPI pump.
- 1230 MM lubricated 1C HPI pump motor.
- 1530 The Performance Technician began PT of 1C HPI pump.
- 1615 The Performance Technician completed PT of 1C HPI pump.

July 15, 1988

- 1430 Failure to vent 1B HPI pump prior to testing, discovered by the Performance Supervisor.

Description of Incident

On July 14, 1988, at approximately 0730 hours, with Unit 1 operating at 100% power, Mechanical Maintenance (MM) personnel completed lubrication of the 1A HPI pump motor. At this time a Performance Supervisor was notified that the pump was ready for testing. The Performance Supervisor notified Performance Technician to perform the High Pressure Injection Performance Test (PT), procedure beginning with 1A HPI pump. The Performance Technician obtained a copy of the required procedure and went out into the plant to perform the test.

Step 12.1 of the PT procedure requires that the operating HPI pump be documented and tested first. The Performance Technician properly documented the 1B HPI pump as the operating pump. The Performance Technician then vented the 1A and 1C HPI pumps. He stated that he believed this action satisfied the Technical Specification requirements for venting prior to the PT. Had the procedure been performed as written, the Performance Technician's belief would have been correct. Following the Performance Supervisor instructions, the Performance Technician began the PT of the 1A HPI pump. With the test of the 1A HPI pump complete, MM lubricated the 1B HPI pump motor. Performance personnel were notified by MM that lubrication of the 1B HPI pump motor was complete. The Performance Technician began the PT of 1B HPI pump. Since the pump had been stopped for lubrication, it should have been vented prior to the PT, in accordance with plant Technical Specifications. However, since the PT had not been performed as it was written, venting of the pump was not done. Thus resulting in a condition prohibited by Technical Specification 4.1. Upon completion of the PT, MM was notified to begin maintenance on 1C HPI pump.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  Oconee Nuclear Station, Unit 1	DOCKET NUMBER (2)  0   5   0   0   0   2   6   9   8   8   -   0   1   1   -   0   0	LER NUMBER (6)			PAGE (3)	
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					0   4	OF 0   5

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

When lubrication of the 1C HPI pump motor was completed, the Performance Technician performed the PT on 1C HPI pump. On the following day, during his review of the completed procedure, the Performance Supervisor discovered that 1B HPI pump was not properly vented prior to performance of the PT. The 1B HPI pump was not retested after the discovery of the Technical Specification violation. The pump met the acceptance criteria for the PT, therefore, Performance Management deemed a retest unnecessary. This incident is reportable pursuant to 10CFR50.73(a)(2)(1)(B).

Cause of Occurrence

The root cause of this event was determined to be personnel error due to the Performance Technician's failure to follow procedures regarding venting of the 1B HPI pump prior to testing. The Performance Technician was qualified to perform the procedure by the Employee Training and Qualification System. He understood the requirement to vent the non-operating pumps prior to testing. He failed to contact his supervisor when the procedure did not match his supervisor's instructions. This was a cognizant error on his part.

A contributing cause to this incident was the Performance Supervisor instructing the Performance Technician to start the PT with the 1A HPI pump. This instruction was contrary to the instructions of the procedure. The Performance Supervisor failed to properly assess plant conditions and procedure requirements prior to giving instructions to the Performance Technician.

A second contributing cause of this incident was the failure of the PT procedure to properly interface with maintenance on HPI pumps. The procedure did not ensure that the HPI pumps were properly vented no matter what order the pumps were tested in.

A review of the past three years revealed no other incidents in which a Technical Specification which required pump venting prior to testing, was not performed. As this event did not involve an equipment failure, it is not NPRDS reportable. In addition, no radioactive material releases, radiation exposures or personnel injuries occurred as a result of this incident. The health and safety of the public was not affected.

CORRECTIVE ACTIONS

Supplemental corrective action was to:

- o Pull the Performance Technician's related Employee Training and Qualification System (ETQS) task qualification and re-train to ETQS standards;
- o Counsel the Performance Supervisor to be more cognizant of plant conditions and procedure requirements prior to assigning tasks;

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

- o Review this incident with all Test Supervisors to emphasize the need for additional caution when performing Performance Tests in conjunction with maintenance activities.
- o Cover this incident in crew meetings with all Performance Technicians;
- o Counsel all Performance Technicians to emphasize the necessity to consult supervision whenever they may question a procedure step.

Planned corrective actions are to:

- o Revise the Performance Test procedure to provide guidance for the venting of non-operating HPI pumps in the sections of the procedure where each pump is tested;
- o Issue a self-study training package to all Performance personnel to make them cognizant of the Performance Test procedure change.

ANALYSIS OF OCCURRENCE:

Even though the 1B HPI pump was not properly vented prior to being tested, it did successfully pass the performance test. All HPI pumps remained operable throughout this time frame. There were no unplanned safety system actuations and no limits were exceeded.

There were no exposures, radiation releases or injuries associated with this event.

This event is not considered to be safety significant since the initiating cause is an isolated occurrence. It is concluded that the health and safety of the public were not affected by this event.

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HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

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August 15, 1988

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

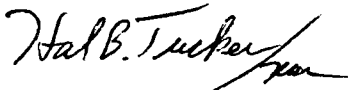
Subject: Oconee Nuclear Station  
Docket No. 50-269, -270, -287  
LER 269/88-11

Gentlemen:

Pursuant to 10CFR 50.73 Sections (a)(1) and (d), attached is Licensee Event Report (LER) 269/88-11 concerning the failure to properly vent a High Pressure Injection pump prior to testing.

This report is being submitted in accordance with 10CFR 50.73(a)(2)(1)(B). This event is considered to be of no significance with respect to the health and safety of the public.

Very truly yours,



Hal B. Tucker

PJN/372/bhp

Attachment

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