James A. FitzPatrick Nuclear Power Plant 268 Lake Road P.O. Box 41 Lycoming, New York 13093

315-342-3840



Michael J. Colomb Site Executive Officer

February 10, 1998 JAFP-98-0055

United States Nuclear Regulatory Commission Attn: Document Control Desk Mail Station P1-137 Washington, D.C. 20555

Subject: Docket No. 50-333 LICENSEE EVENT REPORT: LER-97-012-01

> Drywell Personnel Airlock Outer Door Seals Local Leak Rate Test Not **Properly Performed**

Dear Sir:

This supplement report is submitted in accordance with 10 CFR Part 50.73(a)(2)(i)(B), "Any operation or condition prohibited by the plant's Technical Specifications."

The purpose of this supplement is to reflect the results of the root cause evaluation of this event completed on January 31, 1998.

Questions concerning this report may be addressed to Mr. Richard A. Plasse, Jr. at (315) 349-6793

Very truly yours,

MICHAEL J. COLOME

MJC:RAP:las Enclosure

USNRC, Region 1 CC: **USNRC** Resident Inspector **INPO** Records Center

> 9802240069 98021 PDR ADOCK 05000333 PDR

IE221



NRC FORM (4-95)	366 LICE	<b>NSEE E</b> See revers digits/cha	U.S. NUCL VENT REI e for required racters for ea	PORT (: I number o ch block)	LATORY	COMM	SSION	ESTIMAT MANDATI REPORTI LICENSIN COMMEN RECORD COMMISI REDUCTI BUDGET	A ED BUF ORY IN ED LES IG PRO ITS REG IS MANAC SION, WI ION PRO WASHIN	PPROVED BY ON EXPIRES RDEN PER RES IFORMATION CC SONS LEARNED CESS AND FED ARDING BURDEN I SEMENT BRANCH ASHINGTON DC 2 JUECT (3150-010- 4GTON DC 20503	48 NO. 31 04/30/90 PONSE TC DLLECTION ARE INC BACK TO ESTIMATE T 0555-0001, A 0555-0001, A 0, OFFICE	50-0104 REQUEST DRPORATE INDUSTR' DTHE INFI NUCLEAI ND TO TH OF MAN	WITH 50.0 1 D INTO FORW DRMATION R REGULAT E PAPERW AGEMENT
FACILITY NAM	E (1)	nang at antion of telephone						DOCKET	NUMBER	R (2)		PA	GE (3)
James A.	FitzPatric	k Nuclea	r Power Pl	ant					05	000333		01 (	OF 06
TITLE (4) Drywell F	ersonnel	Airlock (	Duter Door	Seals Lo	cal Lea	k Rate	Test	Not Pr	operl	y Performe	d		
EVENT	DATE (5)	L L	ER NUMBER	(6)	REPO	DRT DAT	E (7)	FACILITY	O'	THER FACILIT	TES INVO	LVED (8	) MBER
MONTH D	AY YEAR	YEAR	NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	N/A				05	000
12 1	A 97	97	012	01	02	10	98	FACILITY	NAME		DC	CKET NUM	IBER
12	- 51		012	01			100	N/A				05	000
MODE (9	NG N	20.220	D1(b)	ATTED PUR	20.2203	(a)(2)(v)	REQUI	X	50.73	(a)(2)(i)	teck one c	50.73	(11) a)(2)(viii)
POWER		20.220	03(a)(1)		20.2203	(a)(3)(i)			50.73	(a)(2)(ii)		50.73(	a)(2)(x)
LEVEL (1	0) 25	20.220	03(a)(2)(i)		20.2203	8(a)(3)(ii)			50.73	(a)(2)(iii)		73.71	
		20.22	03(a)(2)(ii)		20.2203	3(a)(4)			50.73	(a)(2)(iv)		OTHE	R
		20.22	03(a)(2)(iii)		50.36(c	)(1)			50.73	(a)(2)(v)	or	or in NRC Form 366A	
		1		LICENSE	ECONT	CT FOR	THIS	ER (12)			energeneter and		
CAUSE	SYSTEM	COMPONEN	IT MANUFACT	JRER REPO TO N	RTABLE VPRDS	-	CAUSE	SY	STEM	COMPONENT	MANUFA	CTURER	REPORTA TO NPR
	S	JPPLEMEN	TAL REPORT	EXPECTER	D (14)				EXP	ECTED	MONTH	DA	Y YE
YES (If yes, I	complete EXI	PECTED SU	JBMISSION DA	ATE).		X NO			DA	MISSION TE (15)			
On 12/1 B Leak T labeled. F Appendix tested). T accordan the airloc opened w valve has seals sind percent w The mis probable possible subseque Correct	4/97, while est of Airlo Further revi J, Type B fechnical S ce with the k door sea when conta resulted in ce 11/24/96 with the rea slabeling of cause of the to identify the ently review ive actions	e performi cks", a lic iew detern local leak pecification Primary Is be test inment ini- n invalid p 6. At the t incorred in the error which of t ved the in- include:	ng a restora ensed opera mined the in k rate test (L on (TS) 6.20 Containmen ed prior to re tegrity is req performance ime of disco e switch in F the course was inattent wo mechani stallation	ation valve ator disco correctly I LRT) on 1 requires t Leakage e-establish uired. Bas of the TS overy, the RUN. of valve r ion to deti cs involve	e lineup vered th labeled the oute primary e Rate T hing cor sed on a 6.20 re plant with eplacem ail on th ed erred	of an C hat a lo valve h r perso contai resting ntainme a histor equired as perf hent ma e part ) and c	Dperatical lead and responded a nment a Progra ant interical re Type orming aintena of the on the	ions Su k rate f sulted ir access leakag am. Se egrity an eview, it B LLR g a read ance du mecha part of	arveilla test va h an ir door ( e rate ction 6 has t T on t toor st aring a nic wh the in	ance Test Pr alve (16LLR mproperly pe (i.e. the oute testing to b 6.4.2 of the hin seven da been determ he personne artup with p a refueling on to installed to dependent li	rocedure T-930) we erformed er door s be accom program ays after ined that el airlock ower at utage or the label abel ver	ST-39 vas inco 10CFI eals we plished the air t the minouter of approx 11/15 (it is n fier wh	A, "Typ prrectly R50, ere not d in es that locks a islabele door mately /96. The ot no

NRC FORM 366A (4-95) LICENSEE E TEXT	VENT REPORT (I CONTINUATION	LER)	J.S. NUCLEAR F	REGULATO	RY COM	MISSION
FACILITY NAME (1)	DOCKET		LER NUMBER	(6)	PAC	BE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		-
James A. FitzPatrick Nuclear Power Plant	05000333	97 012 01		02 0	06	
TEXT (If more space is required, use additional copies of NRC Form	366A) (17)	Adventure analysis			41	

EIIS Codes are in [ ].

## EVENT DESCRIPTION

On December 14, 1997, while performing a restoration valve lineup of an Operations Surveillance Test Procedure, ST-39A, "Type B Leak Test of Airlocks", a licensed operator discovered that a local leak rate test valve (16LLRT-930) was incorrectly labeled. Further review determined the incorrectly labeled valve had resulted in an improperly performed 10CFR50, Appendix J, Type B local leak rate test (LLRT) on the outer personnel access door (i.e. the outer door seals were not tested). Technical Specification (TS) 6.20 requires primary containment leakage rate testing to be accomplished in accordance with the Primary Containment Leakage Rate Testing Program. Section 6.4.2 of the program requires that the airlock door seals [BD] [AL] be tested prior to re-establishing containment integrity and within seven days after the airlocks are opened when containment integrity is required. Based on a historical review, it has been determined that the mislabeled valve resulted in invalid performance of the TS 6.20 required Type B LLRT on the personnel airlock outer door seals since November 24, 1996. At the time of discovery, the plant was performing a reactor startup with power at approximately 25 percent with the mode switch in RUN.

The mislabeling occurred while performing a valve replacement during a refueling outage on November 15, 1996. The exact sequence and cause of the mislabeling error could not be positively confirmed as the mechanical maintenance installer has no specific recollection of the valve replacement activity.

The sequence of events leading up to and immediately following the discovery of the improperly performed surveillance test is presented below:

- 1994 (approx.) LLRT valves in the drywell entrance are given temporary labels by plant operators. Photographs show that these temporary labels were placed on the correct valves.
- 2 of the 3 LLRT valves in the drywell entrance are replaced by mechanical maintenance under WRs 95-3853-00 and 95-3854-00. As part of the valve replacement work the temporary labels were replaced with permanent labels. A permanent plant label for valve 16LLRT-930 (airlock outer door seals test connection valve) is incorrectly installed on the airlock emergency makeup air connection valve at the completion of this maintenance. The other 2 LLRT valves were properly labeled. In addition, the mechanical maintenance installer incorrectly replaced the air lock emergency makeup air connection valve (an identical valve) instead of one of the LLRT valves (16LLRT-930) as planned. Due to the fact that the valves were identical, the improper valve replacement did not result in any further plant impact.
- The configuration label coordinator incorrectly performed an independent verification of the installation of the 3 permanent plant labels utilizing drawing DSK-16G ("LLRT Connections"). Contributing to this error was the absence of the airlock emergency makeup air connection valve (which was not an LLRT connection) on drawing DSK-16G. (see figure 1)

NRC FORM 386A (4 95)

NRC FORM 366A			U.S. NUCLEAR REGULATOR	Y COMMISSION				
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION								
	FACILITY NAME (1)	DOCKET	LER NUMBER (6)	PAGE (3)				
James A. FitzPa	trick Nuclear Power Plant	05000333	YEARSEQUENTIAL NUMBERREVISION NUMBER97012	03 OF 06				
TEXT (If more space	is required, use additional copies of NRC Form 366A)	(17)	A	u				
EVENT DESCR	(cont'd.)							
11/24/96	The airlock volume and door seal integrity. The outer door seals te 11/15/96 on 16LLRT-930. The ai completed satisfactorily.	s are tested pr st is actually in irlock volume te	rior to establishing primary on avalid due to the labelling er est and inner door seals tes	containment ror of st are				
12/1/96	The airlock volume and door seals are tested prior to establishing primary containment integrity. The outer door seals test is actually invalid due to the labelling error of 11/15/96 on 16LLRT-930. The airlock volume test and inner door seals test is completed satisfactorily.							
12/11/96	Airlock door seals (inner and oute when primary containment is require to the labelling error of 11/15/96.	Airlock door seals (inner and outer) are tested following airlock doors being opened when primary containment is required. The outer door seals test is actually invalid due to the labelling error of 11/15/96. The inner door seals test is satisfactory.						
1/27/97	Airlock door seals (inner and oute containment integrity following a invalid due to the labelling error o	er) are tested plant outage. of 11/15/96. Th	prior to establishing primary The outer door seals test is ne inner door seals test is s	actually atisfactory.				
1/29/97	Airlock door seals (inner and oute when primary containment is required to the labelling error of 11/15/96.	er) are tested uired. The out The inner doo	following airlock doors being er door seals test is actually or seals test is satisfactory.	g opened y invalid due				
5/29/97	Airlock door seals (inner and out containment integrity following a invalid due to the labelling error o	er) are tested plant outage. of 11/15/96. Th	prior to establishing primary The outer door seals test is he inner door seals test is s	actually atisfactory.				
12/7/97	A routine ASME Section XI visua seals while the door is opened for	I examination is or a forced outa	s performed satisfactorily or age.	n outer door				
12/10/97	The inner seal on the outer door the forced outage. A subsequen seal is satisfactorily performed. establishing primary containment test is actually invalid due to the	is subsequentl t ASME Sectio Airlock door se integrity follow labelling error	y replaced after being dam n XI visual inspection of the eals are tested satisfactorily ving the outage. The outer of 11/15/96.	aged during e replaced prior to door seals				

NRC FORM 366A

U.S. NUCLEAR REGULATORY COMMISSION

# LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

FACILITY NAME (1)	DOCKET		LER NUMBER	(6)	PA	AGE (	(3)
	05000222	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		OF	06
James A. FitzPatrick Nuclear Power Plant	05000333	97	012	01	04		

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

#### EVENT DESCRIPTION (cont'd.)

12/14/97

Airlock door seals are tested satisfactorily following airlock doors being opened when primary containment is required. The outer door seals test is actually invalid due to the labelling error of 11/15/96. Plant operator questions valve 16LLRT-930 (airlock outer door seals test connection valve) labeling while verifying the test restoration lineup. Further research concludes that the airlock emergency makeup air valve is mislabeled as valve 16LLRT-930. Valve 16LLRT-930 is not labeled at this time. DER 97-1753 is initiated. Valve 16LLRT-930 label is immediately corrected with a temporary label.

12/15/97 Airlock outer door seals are tested satisfactorily using the correct test connection.

## CAUSE OF THE EVENT

The cause for this failure to properly perform the TS required surveillance test was a loss of configuration control of the correct test valve, 16LLRT-930. Based on review of plant records and photographs of field walkdowns, it appears the mislabeling of 16LLRT-930 occurred during planned maintenance on November 15, 1996. The maintenance mechanic, however, has no specific recollection of the maintenance activity or the labeling he performed of the LLRT test valves for the personnel airlock. The reason for the mislabeling event is not known, but it is assumed to be a human performance error. The independent verification of the valve labeling performed by the configuration label coordinator was inadequate in that he failed to identify that the correct component had not been properly labeled. The root cause evaluation confirmed the maintenance mechanic and label coordinator failed to identify and verify the correct test valve, resulting in improper labeling and maintenance on the wrong valve which resulted in a loss of configuration control.

### ANALYSIS

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)B, which requires licensees to report "any operation or condition prohibited by the plant's Technical Specifications." The TS required type B LLRT surveillance test for the outer personnel access door was improperly performed (i.e. the outer door seals were not tested) due to a mislabeling event on its associated test valve.

This event was not safety significant. A review of surveillance tests on the airlock seals indicated proper testing of the inner door seals with no significant increase in leakage through the inner door seals during the period of outer door seals missed surveillances. A review of surveillance tests conducted on the airlock volume during the period, which tests the outer door seals also, indicated proper sealing with no significant leakage from the airlock volume. The tests on the inner door seals and on the airlock volume were performed within TS acceptance criteria. The inner seal on the outer door was satisfactorily inspected using ASME Section XI visual inspection criteria on 12/7/97. The seal was replaced due to damage during the forced outage. A subsequent ASME Section XI visual inspection of the replaced seal performed on 12/10/97 was completed satisfactorily.

NRC F	FORM 366A		U.S. NUCLEAR REGULATO	RY COMMISSION						
(4-95)	LICENSEE EVENT	REPORT (I	LER)							
		NUATION		PAGE (3)						
	FACILITY NAME (1)	DOCKET	YEAR SEQUENTIAL REVISION NUMBER NUMBER	TAGE (0)						
Jame	es A. FitzPatrick Nuclear Power Plant	05000333	97 012 01	05 OF 06						
TEXT	T (If more space is required, use additional copies of NRC Form 366A) (	17)								
COR	RRECTIVE ACTIONS									
1.	The maintenance mechanic and the configuration error have been counseled. (Completed Januar	i label coordi y 13, 1998)	nator responsible for the m	slabeling						
2.	Operations personnel removed the incorrect labe correct 16LLRT-930 valve. (Completed December	I and installe er 15, 1997)	d and verified a temporary	label on the						
3.	Operations personnel verified correct labeling for emergency access hatch). (Completed January	Operations personnel verified correct labeling for the LLRT connection on the other airlock (i.e. emergency access hatch). (Completed January 13, 1998)								
4.	The missed surveillance test on the personnel airlock outer door seals contained in ST-39A was properly performed. (Completed December 15, 1997)									
5.	Plant personnel will be briefed on the details of the January 15, 1998)	Plant personnel will be briefed on the details of the event and the lessons learned. (Completed January 15, 1998)								
6.	Plant drawing DSK-16g will be updated to reflect the presence of the emergency makeup air connection valve and provide additional clarification to the LLRT connections. (Completed January 23, 1998)									
7.	The Aut. ority completed a comprehensive root of The following additional corrective actions were it	ause evaluat dentified to p	tion of this event on Januar prevent recurrence of a simi	y 31,1998. Iar event:						
	a. Reinforce the management expectation to maintenance worker is responsible to ens (Scheduled Completion Date February 20	o mechanical sure they are ), 1998)	I maintenance personnel that working on the correct con	at each nponent.						
	<ul> <li>Review all labeling errors during the last verified by the individuals involved in this</li> </ul>	two years, a event. (Sch	nd a sampling of labels inst neduled Completion Date M	alled and arch 15, 199						
AD	DITIONAL INFORMATION									
A.	Failed Component - None									
B	Previous Similar Events: LERs 97-006, 95-014,	95-012, 94-0	003, 93-016, 93-011 descrit	bed events in						

B. Previous Similar Events: LERs 97-006, 95-014, 95-012, 94-003, 93-016, 93-011 described events in which TS required surveillance tests were missed. However, the causes for those previous occurrences were not similar; therefore, the corrective actions taken would not have precluded this event.



R