

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9004100060 DOC.DATE: 90/03/30 NOTARIZED: NO DOCKET #  
 FACIL:50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251  
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 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 90-002-00:on 900228,post-accident containment vent  
 inoperable due to Unit 3 LLRT.

W/9 ltr.

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	EDISON,G	1 1		
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	AEOD/DSP/TPAB	1 1	AEOD/ROAB/DSP	2 2
	DEDRO	1 1	NRR/DET/ECMB 9H	1 1
	NRR/DET/EMEB9H3	1 1	NRR/DET/ESGB 8D	1 1
	NRR/DLPQ/LHFB11	1 1	NRR/DLPQ/LPEB10	1 1
	NRR/DOEA/OEAB11	1 1	NRR/DREP/PRPB11	2 2
	NRR/DST/SELB 8D	1 1	NRR/DST/SICB 7E	1 1
	NRR/DST/SPLB8D1	1 1	NRR/DST/SRXB 8E	1 1
	REG FILE 02	1 1	RES/DSIR/EIB	1 1
	RGN2 FILE 01	1 1		
EXTERNAL:	EG&G STUART,V.A	4 4	L ST LOBBY WARD	1 1
	LPDR	1 1	NRC PDR	1 1
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FPL

P.O. Box 14000, Juno Beach, FL 33408-0420

MAR 30 1990

L-90-112  
10 CFR 50.73

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

Gentlemen:

Re: Turkey Point Unit 4  
Docket No. 50-251  
Reportable Event: 90-002  
Date of Event: February 28, 1990  
Post Accident Containment Vent Inoperable

The attached Licensee Event Report is being provided pursuant to the requirements of 10 CFR 50.73 for notification of the subject event.

Very truly yours,

*K. N. Harris*  
K. N. Harris  
Vice President  
Turkey Point Plant Nuclear

KNH/DRP/JEK/rat

cc: Stewart D. Ebnetter, Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, Turkey Point Plant

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PDR ADOCK 05000251  
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## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)										DOCKET NUMBER (2)										PAGE													
Turkey Point Unit 4										0 5 0 0 0 2 5 1										1 OF 1													
TITLE (4)																																	
Post Accident Containment Vent Inoperable Due To Unit 3 LLRT																																	
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 NUMBERS																		
									Turkey Point Unit 3						0 5 0 0 0 2 5 1																		
0 2	2 8	9 0	9 0	0 0 2	0 0 0	3 3	0 9	0							0 5 0 0 0 2 5 1																		
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Check one or more of the following) (11)																															
1		20.402(b)										20.408(c)										80.736(12)(m)										73.711(b)	
POWER LEVEL (10)		20.406(a)(1)(i)										80.38(a)(1)										80.736(12)(n)										73.711(c)	
1 0 1 0		20.406(a)(1)(ii)										80.38(a)(2)										80.736(12)(o)										OTHER (Specify in Abstract below and in Test NRC Form 365A)	
		20.406(a)(1)(iii)										80.736(12)(i)										80.736(12)(p)											
		20.406(a)(1)(iv)										80.736(12)(j)										80.736(12)(q)											
		20.406(a)(1)(v)										80.736(12)(k)										80.736(12)(r)											
		20.406(a)(1)(vi)										80.736(12)(l)										80.736(12)(s)											
LICENSEE CONTACT FOR THIS LER (13)																																	
NAME										TELEPHONE NUMBER																							
David R. Powell, Regulation & Compliance Supervisor										3 0 5 2 4 6 1 - 6 5 1 5																							
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (14)																																	
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC									
SUPPLEMENTAL REPORT EXPECTED (15)															EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR														
X YES (If yes, complete EXPECTED SUBMISSION DATE)															NO		0 7	3 1	9 0														
ABSTRACT (Limit to 1600 spaces, i.e., approximately fifteen single-space typewritten lines) (16)																																	

The Unit 4 post accident containment vent (PACV) is allowed to be inoperable 7 days pursuant to Technical Specification 4.4.6.b. Contrary to the Technical Specification, with Unit 4 in Mode 1 the PACV was inoperable for 13 days. On February 15, 1990, during a Unit 3 refueling outage, local leak rate tests (LLRT) were scheduled on containment penetrations. Clearance tags (for closure) were installed on two normally open valves (HV-1 and HV-2) and remained on the two valves until after the completion of the LLRT on Unit 3 PACV penetration 16. This occurred because of a non-cognitive personnel error. The LLRT on penetration 16 was completed on February 26. The Unit 4 PACV system was returned to service on February 28 when HV-1 and HV-2 were reopened. This was within 6 minutes of discovery. Cautions concerning the effect of the Unit 3 LLRT on Unit 4 PACV operability have been added to the Unit 3 PACV penetration 16 LLRT procedure. The occurrence is reportable in accordance with 10 CFR 50.73 (a) (2) (i) (B).

# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED ONE NO 3190-0104  
EXPIRES 8 31 91

NUC Form 288A  
(8-83)

PAC NAME (1)

DOCKET NUMBER (2)

LER NUMBER (3)

PAGE (4)

YEAR

SEQUENTIAL NUMBER

REVISION NUMBER

0 8 0 0 0 2 5 1 9 0 - 0 0 2 - 0 0 0 2 OF 0 4

Turkey Point Unit 4

## I. EVENT DESCRIPTION

On February 15, 1990, Unit 4 was in Mode 1 and Unit 3 was in Mode 6 preparing to move fuel as part of the refueling outage. Fuel movement was to begin in 3 days. Certain local leak rate tests (LLRT) were scheduled prior to fuel movement. On February 15, an LLRT, under control of OP 13404.1, "Local Leak Rate Tests," was scheduled for completion. To complete this test, two normally open valves (HV-1 and HV-2) (EIIS: BB, Component: FCV) had to be closed. The fact that the Unit 3 penetration was out of service for the LLRT was noted in the Unit 3 equipment out of service (EOOS) log. However, there were no indications in the common EOOS log that the two normally open valves (HV-1 and HV-2) for the Unit 3 test were required to be open for the post accident containment vent (PACV) system (EIIS: BB) for Unit 4 to be in service. On February 18, 1990 the refueling process began, requiring refueling integrity, and therefore LLRT testing could not proceed. The refueling process was completed on February 22 and the LLRT on penetration P-16 (EIIS: BD) was subsequently completed on February 26. The technician responsible for releasing the clearance tag series for the LLRT of penetration P-16 signed that release on February 28. That same day, prior to the removal of the tags and return of the system to its normal in-service configuration, a quality assurance review of the PACV lineup found HV-1 and HV-2 closed and the Unit 4 system out of service. Technical Specification 3.4.6.b requires that the post accident containment vent be operable for a unit in Mode 1 operation. Review of the EOOS logs revealed the Unit 4 PACV was out of service for 13 days which is longer than the Technical Specification 3.4.6.b limit of 7 days.

The system was returned to service within 6 minutes of discovery of the Unit 4 PACV out of service by opening HV-1 and HV-2.

## II. EVENT CAUSE

The clearance order (3-90-02-115-R) for the penetration P-16 isolation valve LLRT was completed and verified on February 15, 1990. The EOOS log sheet noted that the Unit 3 penetration P-16 was out of service. The Technical Specification Time Limit column of the EOOS log for Unit 3 had the notation to return the PACV to operation prior to Unit 3 entry from Mode 5 to Mode 4. The cause of the event was personnel error with the following contributing factors.

FACILITY NAME (1)

DOCKET NUMBER (2)

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NUMBER

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Turkey Point Unit 4

0 8 0 0 0 2 5 1 9 0 - 0 0 2 - 0 0 0 1

TEXT IF MORE THAN 1000 WORDS USE ADDITIONAL NRC Form 200A (1/17)

1. There was no notation in the Unit 3 or Common EOOS log of the Technical Specification requirement for PACV operability of Unit 4 in Mode 1.
2. There was no indication in the controlling procedure of the impact of the Unit 3 clearance on the operability of the Unit 4 PACV system.
3. A review of the system prints should have allowed personnel to understand the affect of the clearance on the other unit.

The refueling operations precluded the completion of the LLRT and the clearance removal authorization was therefore delayed until after fuel unloading was complete. The lack of information about the Unit 4 requirements resulted in the clearance remaining in effect beyond the 7 days allowed by Technical Specifications 3.4.6.b.

### III. EVENT SAFETY ANALYSIS

The isolation of a valve in the containment hydrogen control systems was addressed as part of an analysis conducted in 1986. That analysis provided that suitable redundancy existed between the PACV system and a hydrogen recombiner connection such that a failure of either to operate could be compensated for by the operation of the other.

Either a hydrogen recombiner, standard portable refueling HEPA/charcoal filter or the PACV can be lined up to containment penetrations P-16 and P-51. HV-1 and HV-2 are contained in the lines leading to the common PACV only and are not part of the lineup for the hydrogen recombiner connection. HV-2 is common to both Unit 3 and Unit 4. HV-1 is only part of the Unit 4 lineup.

The recombiner connection is not isolated by the closure of HV-1 and HV-2. The recombiner connection is redundant to the PACV and can be used to control post accident hydrogen concentrations by the installation of a portable HEPA/charcoal filter.

HV-1 and HV-2 were returned to normal open position. The as-found condition of HV-1 and HV-2 being closed is mitigated by the capability to install a hydrogen recombiner or HEPA/charcoal filter on the recombiner connection and the procedural control for manual operation of the PACV system in 3/4-EOP-FR-2.1, "Response to High Containment Pressure," for high containment pressure.

# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Turkey Point Unit 4	0 5 0 0 0 2 5 1 9 0	0 0 2	0 0	0 4	OF 0	

TEXT IN THIS SPACE IS REQUIRED FOR ADDITIONAL NRC Form 2554 (1-77)

In the past the manipulation of HV-2, was assumed to be possible while placing the PACV into service. During the evaluation of the system and its operation for this LER the post accident dose levels were questioned. A supplemental Licensee Event Report will be provided with the result of an evaluation of those dose levels.

This condition does not reduce the degree of protection provided to the health and safety of plant personnel or the public.

## IV. CORRECTIVE ACTIONS

1. Operating procedure 13404.1, "Local Leak Rate Tests," has been revised to provide cautions concerning the effect the Unit 3 LLRT has on Unit 4 PACV operability. The Unit 4 LLRT for penetration 16 has no effect on the Unit 3 PACV operability. This revision should result in the use of the common EOOS log for the Unit 3 LLRT.
2. The Senior Reactor Operators involved have been cautioned about the care necessary in their review of clearances.

## V. ADDITIONAL INFORMATION

No other incidents involving the isolation of the PACV similar to that outlined in this LER are known to have occurred at Turkey Point during the past 24 months.