

Entergy Nuclear Northeast Entergy Nuclear Operations, Inc. James A. FitzPatrick NPP P.O. Box 110 Lycoming, NY 13093 Tel 315 349 6024 Fax 315 349 6480

T. A. Sullivan Vice President, Operations-JAF

May 18, 2001 JAFP-01-0128

United States Nuclear Regulatory Commission Attn: Document Control Desk Mail Stop O-P1-17 Washington, D.C. 20555

Docket No. 50-333 Subject: LICENSEE EVENT REPORT: LER-01-004 (DER-01-01159)

> Failure to Meet Auxiliary Electrical Systems Technical Specifications **Requirements**

Dear Sir:

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

There are no commitments contained in this report.

Questions concerning this report may be addressed to Mr. Gordon Brownell at (315) 349-6360.

Very truly yours,

Acting) T. A. Sullivan

TAS:GB:las Enclosure

cc: USNRC, Region 1 **USNRC**, Project Directorate **USNRC** Resident Inspector **INPO Records Center**

JE22

NRC FC (6-1998	ORM 36	6			U.S. NUC	LEAR	REG	ULATORY	COMMIS	SSION	Esti	mated	d burden	OMB NO. 315 per response to	comply w	ith this	mano	S 06/30/2001 latory information	
(0.1002	,		See	SEE EVE reverse for its/characte	[,] required	numt	ber o				the I burd Nuc Pap Bud disp spor	licens len e lear f erwor get, ' lay a	ing proce estimate Regulator k Reduc Washingt currently and a	ess and fed back to the Records y Commission, V tion Project (31 on, DC 20503. valid OMB contr	to industry Managen Vashingtor 50-0104), If an in ol number	r. Forwar nent Bra n, DC 20 Office formation r, the NR	d cor anch 0555- of M n col C ma	incorporated into nments regarding (T-6 F33), U.S. 0001, and to the fanagement and lection does not ay not conduct or the information	
	Y NAME											CKET	NUMBE					AGE (3)	
Jame	5 A. FI	tzPatrick	NU	clear Pow	er Plant							05	0003:	53			•	OF 4	
TITLE (4)								The second s			<u>.</u>								
Failur	e to l	Meet Au	ixili	ary Elect	rical Sy	sten	ns '	Technic	al Spe	ecifica	atio	ns	Requi	rements					
EV	ENT DA	TE (5)		LER N	UMBER (6	5)		REP	ORT DA					OTHER FAC	ILITIES I			-	
MONTH	DAY	YEAR			EQUENTIAL NUMBER	REVIS NUM		MONTH	DAY	YEA	.R	FACILITY NAME			DOCKE				
		01			004			05	18	01		N/		AF.		05000 DOCKET NUMI			
03	20	01		01	004	00	J	05	10			N/.				05000			
OPERA		N	1	THIS	REPORT IS	SUB	MITT	ED PURSU	ANT TO) THE F	REQU	IREN	IENTS (OF 10 CFR §:	(Check d				
MOD	E (9)			20.2201(b)			20.2203	(a)(2)(v)			X 50.73(a)(2)(i)						(a)(2)(viii)		
POV		100	20.220			<u></u>	_	20.2203				50.73(a)(2)(ii)			50.73(a)(2)(x) 73.71		(a)(2)(x)		
LEVE			!	20.2203(a)(2)(i)		+	20.2203				50.73(a)(2)(iii)					>			
				20.2203(a)(2)(ii) 20.2203(a)(2)(iii)			20.2203 50.36(c)				50.73(a)(2 50.73(a)(2					OTHER Specify in Abstract belo			
		-		20.2203(a)(2)(iv)			50.36(c)		•••		50.73(a)(2)(vii)				or in NRC Form 366A				
			<u> </u>			LI	CEN	SEE CONT	ACT FO	R THIS	LER	-							
Mr. G	ordon	Brownel	l, Li	censing E	ngineer							TELI	EPHONE N	IUMBER (Include A (315	rea Code) 5) 349-1	6360			
				COMPLET	E ONE LIN	E FOR	EAC	н сомро	NENT F	AILURE	DES		BED IN 1	THIS REPORT (13)		<u>.</u>		
CAU	SE	SYSTEM	C	OMPONENT	MANUFAC	TURER		REPORTABLE TO EPIX		CAU	ISE	S	YSTEM	COMPONENT	MANU	FACTUF	RER	REPORTABLE TO EPIX	
						-													
			-																
	<u> </u>		SUP	PLEMENTAL	REPORT E	XPEC	TED	(14)	B\$1518532			<u>i</u>		PECTED	MONT	H DA	۱Y	YEAR	
	ES f yes, c	omplete E>	PEC	TED SUBMI	SSION DA	TE).			XNO				SUB	MISSION					
ABSTR	ACT (L	imit to 140)0 sp	baces, i.e., a	pproximate	ely 15	sing	le-spaced 1	ypewrit	ten line	es) (1	16)	<u> </u>						
Indep Subs	ende: equer	nt Powe itly, at 1	r Si 100	upply Inv) hours th	erter 71 le same	INV- day	3B , on	was ren ne of two	noved Eme	from rgeno	ser cy D	vice lies	e for s el Ger	or Operate cheduled n nerator (ED larch 20, 2	naintei)G) sul	nance bsyste	e. ems	s was	
deter	mined	that the	e pla	ant config	guration	of h	avir	ng both '	71INV	'-3B a	and	the	EDG	subsystem	i inope	rable	dic	l not meet	

Specifications (T.S.) Section 3.0.E LCO Action Statement requiring the plant to be in Cold Shutdown within 24 hours. On March 21, 2001 at 0054 hours, the 24 hour LCO was exited following the return to service of 71INV-3B. At the time, the reactor mode switch was in the RUN position with the plant operating at approximately 100 percent power.

The cause for the event was inadequate guidance within the T.S. and T.S. Bases.

Corrective actions include the issuance of a T.S. Interpretation and implementation of Improved Technical Specifications.

NRC	FORM	366A
(6-19	98)	

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2)	LE	R NUMBER (6)		PAGE (3)
	05000333	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2	OF	4
James A. FitzPatrick Nuclear Power Plant		01	004	00			

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

EIIS Codes []

EVENT DESCRIPTION

On March 19, 2001 at 0400 hours, reactor operators entered a 7 day Limiting Condition for Operation (LCO) per Technical Specifications (T.S.) Section 3.9.F.2 for scheduled maintenance on Low Pressure Coolant Injection (LPCI) motor operated valve (MOV) Independent Power Supply (IPS) Inverter 71INV-3B [EF]. Subsequently, On March 19, 2001 at 1100 hours, operators entered a 14 day LCO per T.S. Section 3.9.B.3 for the removal of one of two Emergency Diesel Generator subsystems [EK] for scheduled inspection and surveillance testing. On March 20, 2001, at 1430 hours, it was determined that the plant configuration of having both 71INV-3B and an EDG subsystem inoperable in the same safety division did not meet the design basis Loss-of-Coolant Accident (LOCA) analysis assumptions. Reactor operators entered T.S. Section 3.0.E LCO Action Statement requiring the plant to be placed in Cold Shutdown within 24 hours. On March 21, 2001 at 0054 hours, 71INV-3B was returned to an operable status and the 24 hour LCO condition was exited. At the time, the reactor mode switch was in the RUN position with the plant operating at approximately 100 percent power.

T.S. Section 3.0.E states, in part, "When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and devices are OPERABLE, or likewise satisfy the requirements of this specification....".

Initially, on March 19, 2001, reactor operators declared LPCI MOV IPS Inverter 71INV-3B and one EDG subsystem inoperable, but did not declare the B LPCI subsystem inoperable, based on the following conclusions for meeting T.S. Section 3.0.E:

- 1. The normal power source for the LPCI MOV bus associated with the LPCI MOV IPS is the 115 KV offsite power supply when the inverter is out of service and the MOV bus is powered from the alternate source.
- 2. The emergency power source for the LPCI MOV bus is the LPCI IPS.
- 3. The normal and emergency power source for the LPCI pumps are the 115 KV offsite power supply and the EDG subsystems.
- 4. When the affected LPCI MOV bus is energized from either its normal or emergency power source as described in 1 and 2 above, the motor operated valves associated with the LPCI MOV bus remain operable.
- 5. The LPCI pumps are operable when powered from either the normal (115 KV) or emergency power (EDG) source.

NRC FORM 366A (6-1998)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)				PAGE (3)		
	05000333	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3	OF	4	
James A. FitzPatrick Nuclear Power Plant		01	004	00				

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

EVENT DESCRIPTION (cont.)

However, following a plant configuration review on March 20, 2001, it was concluded that, given a postulated Loss-of Coolant Accident/Loss-of-Offsite Power (LOCA/LOOP), this configuration could result in a single Core Spray System [BM] pump available for low pressure emergency core cooling for some accident scenarios involving certain pipe break locations. This condition is not consistent with the assumptions in the LOCA analysis.

CAUSE OF EVENT

The cause for this event was inadequate guidance within the current T.S. and T.S. Bases for operator actions when placing a LPCI MOV Independent Power Supply in an inoperable condition. [Cause Code D]

Current T.S. Section 3.9.F.2.c (Action Statement) requires an inoperable independent power supply be isolated from its associated LPCI MOV bus, and this bus be manually switched to its alternate power source. T.S. should further require that any inoperable IPS subsystem make the associated LPCI subsystem inoperable.

EVENT ANALYSIS

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

The LPCI MOV IPS System provides an independent power source for the operation of three motor operated valves in each of the two redundant Residual Heat Removal System – Low Pressure Coolant Injection [BO] loops and two motor operated valves in each of the two Reactor Water Recirculation System [AD] loops. The power supply system includes two separate and independent uninterruptable power supplies, each consisting of a rectifier/charger, a battery, an inverter, and associated MOV bus. If a LPCI auto-initiation signal occurs, the LPCI MOV IPS is disconnected from the AC emergency power system and both MOV IPSs supply power to the MOV buses through the inverters. In the event that the IPS is not available, the LPCI MOV bus can remain energized by an alternate power source.

The safety significance of having both the LPCI MOV IPS Inverter 71INV-3B and the EDG subsystem inoperable concurrently was determined to be low. This conclusion was based on:

- 1. The short duration of the event (37 hours and 54 minutes);
- The operability of the EDG subsystem in the opposite safety division to provide emergency power to its associated ECCS loads (A General Electric evaluation of representative BWR/4 plant concluded that one core spray pump will provide adequate core cooling to preclude exceeding peak cladding temperature for a design basis recirculation line break); and

NRC	FORM	366A
16-19	FORM 98)	

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)				PAGE (3)		
	05000333	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4	OF	4	
James A. FitzPatrick Nuclear Power Plant		01	004	99				

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

EVENT ANALYSIS (cont.)

3. The fact that, during the event, one emergency diesel generator within the inoperable EDG subsystem remained capable of supporting certain loads (i.e. one core spray pump and one residual heat removal pump) to the 10600 bus.

EXTENT OF CONDITION

The lack of Technical Specifications guidance, as addressed in the Cause of Event section of the LER, has been addressed and will be corrected with JAF's conversion from current T.S. to the Improved Technical Specifications. ITS implementation team reviews identified no similar T.S. LCO discrepancies.

CORRECTIVE ACTION

- 1. Operations management has communicated the details of this event to Senior Reactor Operators.
- 2. FitzPatrick has submitted a T.S. amendment application for conversion from current technical specifications to the Improved Technical Specifications (ITS) consistent with Improved Standard Technical Specifications (NUREG-1433, Revision 1). ITS and associated ITS Bases provide detailed guidance for operability considerations when dealing with LPCI Independent Power Supply subsystems and components, and on dealing with simultaneous system inoperabilities. ITS implementation is scheduled for the second guarter 2002.
- 3. A T.S. Interpretation has been generated to provide clarification to T.S. Section 3.9.F, <u>LPCI MOV</u> Independent Power Supplies.

ADDITIONAL INFORMATION

- A. Previous Similar Events: NONE
- B. Failed components: NONE
- C. Applicability to NEI 99-02, Rev. 0, "Regulatory Assessment Performance Indicator guideline."

This event is not reportable as a Safety System Functional Failure in accordance with NEI guidance.