

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8704130236 DOC. DATE: 87/04/06 NOTARIZED: NO DOCKET #
 FACIL: 50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250
 AUTH. NAME AUTHOR AFFILIATION
 SALAMON, G. Florida Power & Light Co.
 WOODY, C. D. Florida Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-010-00: on 870306, reactor manually tripped due to loss of turbine load. Caused by dirt-induced grooves in stub shaft of control oil sys. Turbine control, lube & seal oil piping will be replaced. W/870403 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD2-2 LA	1 1	PD2-2 PD	1 1
	McDONALD, D	1 1		
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	1 1
	ACRS WYLIE	1 1	AEOD/DOA	1 1
	AEOD/DSP/ROAB	2 2	AEOD/DSP/TAPB	1 1
	NRR/ADT	1 1	NRR/DEST/ADE	1 0
	NRR/DEST/ADS	1 0	NRR/DEST/CEB	1 1
	NRR/DEST/ELB	1 1	NRR/DEST/ICSB	1 1
	NRR/DEST/MEB	1 1	NRR/DEST/MTB	1 1
	NRR/DEST/PSB	1 1	NRR/DEST/RSB	1 1
	NRR/DEST/SCB	1 1	NRR/DLPQ/HFB	1 1
	NRR/DLPQ/QAB	1 1	NRR/DOEA/EAB	1 1
	NRR/DREP/EPB	1 1	NRR/DREP/RAB	1 1
	NRR/PMAS/ILRB	1 1	NRR/PMAS/PTSB	1 1
	REG FILE 02	1 1	RES SPEIS, T	1 1
	RGN2 FILE 01	1 1		
EXTERNAL:	EG&G GROH, M	5 5	H ST LOBBY WARD	1 1
	LPDR	1 1	NRC PDR	1 1
	NSIC HARRIS, J	1 1	NSIC MAYS, G	1 1

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER				
Turkey Point Unit 3	0 5 0 0 0 2 5 0	8 7	— 0 1 0	— 0 0	0 2	OF	0 3	

TEXT (If more space is required, use additional NRC Form 365A's) (17)

EVENT

On March 6, 1987, at 2140, with Unit 3 at approximately 95% power, the reactor was manually tripped following a loss of turbine load. At 2138 on March 6, 1987, with the control rods under manual control, a planned load reduction had commenced to investigate turbine vibration. At 2140, the Generator Motoring Trip alarm actuated. The actuation of this alarm indicated that turbine stop valves or control valves in addition to the reheat stop valves or intercept valves had gone shut, resulting in steam flow to the turbine being secured and therefore a loss of generated power. This alarm also indicates that if the conditions causing the alarm persist for 30 seconds, a generator trip would occur. At this time the operators noticed that the indicated turbine electrical load had dropped from approximately 698 MW to 0 MW, without any decrease in reactor power, due to the control rods being under manual control, and no trip conditions being present. In anticipation of a generator trip and subsequent reactor/turbine trip, the Reactor Control Operator (RCO) tripped the reactor. Subsequent to the event, the unit was stabilized in hot standby.

CAUSE OF EVENT

The immediate cause of the manual reactor trip was loss of turbine electrical load, due to turbine governor control oil pressure system malfunction. Grooves worn into the turbine stub shaft (see LER 250-86-039) in concert with stub shaft motion relative to the impeller oil sleeve following the minor load change resulted in a rapidly fluctuating impeller oil pressure change. This resulted in actuation of the auxiliary governor anticipatory overspeed protection of dumping control oil pressure and loss of turbine load.

ANALYSIS OF EVENT.

A post trip review was performed to assess the proper operation of the safety related equipment. The post trip review established that the transient behavior of pertinent plant parameters for the reactor coolant system (RCS) and steam generators responded as expected for a transient of this kind. Specifically, the RCS pressures and temperatures were determined to have followed an expected pattern based on the conditions leading up to the transient. Other than the manual reactor trip, there were no manual or automatic Reactor Protection System or Engineered Safety Features actuations. Based on the above, the health and safety of the public were not affected.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Turkey Point Unit 3	0 5 0 0 0 2 5 0	8 7	- 0 1 0	- 0 0	0 3	OF	0 3

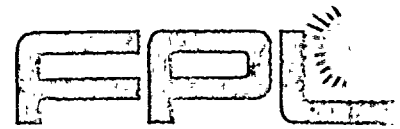
TEXT (If more space is required, use additional NRC Form 366A's) (17)

CORRECTIVE ACTION

- 1) A post-trip review was completed and no abnormal operating conditions associated with the trip were identified.
- 2) The impeller stub shaft and oil sleeve will be replaced during the current Unit 3 refueling outage.
- 3) The governor control block will be overhauled during the current Unit 3 refueling outage.
- 4) The turbine control oil, lube oil, and seal oil piping will be cleaned during the present refueling outage for Unit 3 and the 1988 refueling outage for Unit 4.
- 5) An Event Response Team was formed and will continue to evaluate possible further corrective actions for the turbine control oil system.

ADDITIONAL INFORMATION

Turbine Governor Manufacturer: Westinghouse. Serial #13-A-2893
Similar occurrences: LER 250-87-009, LER 250-86-039.



APRIL 03 1987

L-87-151
10 CFR 50.73

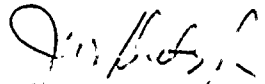
U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Re: Turkey Point Unit 3
Docket No. 50-250
Reportable Event: 87-10
Date of Event: March 6, 1987
Manual Reactor Trip Following Loss of
Electrical Load Due to Malfunctioning Turbine Governor

The attached License Event Report is being submitted pursuant to the requirements of 10 CFR 50.73 to provide notification of the subject event.

Very truly yours,


C. O. Woody
Group Vice President
Nuclear Energy

COW/SDF/gp

cc: Dr. J. Nelson Grace, Regional Administrator, Region II, USNRC
Senior Resident Inspection, USNRC, Turkey Point Plant

TE22
11

