

REPORT OF ABNORMAL OCCURRENCE AND/OR INCIDENT

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 2955

FILE: INCIDENT REPORT FILE

FROM: Florida Power & Light Co. Miami, Fla. 33101 A. D. Schmidt		DATE OF DOC 3-14-75	DATE REC'D 3-18-75	LTR XX	TWX	RPT	OTHER
TO: Mr. E. Case		ORIG 1 signed	CC	OTHER	SENT AEC PDR <u>XX</u>		SENT LOCAL PDR <u>XX</u>
CLASS	UNCLASS XXX	PROP-INFO	INPUT	NO CYS REC'D 1	DOCKET NO: 50-251		

DESCRIPTION: Ltr reporting Abnormal Occurrence
AO-50-251/75-3 on 3-4-75 re steam generator protection
system channel II-Low steam line pressure comparator
failure.....

ENCLOSURES:

~~Do Not Remove~~
ACKNOWLEDGED

PLANT NAME: Turkey Pt. Unit 4

FOR ACTION/INFORMATION **DHL 3-18-75**

- | | | | |
|-------------------------|----------------------------|-----------------------------|-------------------------|
| BUTLER (L)
W/ Copies | SCHWENCER (L)
W/ Copies | ZIEMANN (L)
W/ Copies | REGAN (E)
W/ Copies |
| CLARK (L)
W/ Copies | STOLZ (L)
W/ Copies | DICKER (E)
W/ Copies | LEAR (L)
W/ 3 Copies |
| PARR (L)
W/ Copies | VASSALLO (L)
W/ Copies | KNIGHTON (E)
W/ Copies | SPELS
W/ Copies |
| KNIEL (L)
W/ Copies | PURPLE (L)
W/ Copies | YOUNGBLOOD (E)
W/ Copies | W/ Copies |

INTERNAL DISTRIBUTION

- | | | | | |
|---|---|--|--|--|
| REG FILE
- NRC PDR
OGC, ROOM P-506A
GOSSICK/STAFF
- CASE
GIAMBUSSO
BOYD
MOORE (L)
DEYOUNG (L)
SKOVHOLT (L)
GOLLER (L) (Ltr)
P. COLLINS
DENISE
REG OPR
- FILE & REGION (2)
- T.R. WILSON (3)
STEELE | TECH REVIEW
- SCHROEDER
MACCARY
KNIGHT
PAWLICKI
SHAO
** STELLO
** HOUSTON
** NOVAK
- ROSS
- IPPOLITO
TEDESCO
LONG
LAINAS
- BENAROYA
- VOLLMER | DENTON
** GRIMES
GAMMILL
KASTNER
BALLARD
SPANGLER

ENVIRO
MULLER
DICKER
KNIGHTON
YOUNGBLOOD
REGAN
PROJECT LDR

HARLESS | LIC ASST
R. DIGGS (L)
H. GEARIN (L)
E. GOULBOURNE (L)
P. KREUTZER (E)
J. LEE (L)
M. MAIGRET (L)
S. REED (E)
M. SERVICE (L)
S. SHEPPARD (L)
M. SLATER (E)
H. SMITH (L)
S. TEETS (L)
G. WILLIAMS (E)
V. WILSON (L)
R. INGRAM (L) | A/T IND.
BRAITMAN
SALTZMAN
MELTZ

PLANS
MCDONALD
CHAPMAN
DUBE (Ltr)
E. COUPE
PETERSON
HARTFIELD (2)
- KLECKER
EISENHUT
WIGGINTON
- F. WILLIAMS
- HANAUER |
|---|---|--|--|--|

EXTERNAL DISTRIBUTION

- | | | |
|---|--------------------------------|---|
| - 1 - LOCAL PDR <u>Homestead, Fla.</u> | - NATIONAL LABS _____ | 1 - PDR-SAN/LA/NY |
| - 1 - TIC (ABERNATHY) (1)(2)(10) | 1 - W. PENNINGTON, Rm E-201 GT | 1 - BROOKHAVEN NAT LAB |
| - 1 - NSIC (BUCHANAN) | 1 - CONSULTANTS | 1 - G. ULRIKSON, ORNL |
| 1 - ASLB | NEWMARK/BLUME/AGBABIAN | 1 - AGMED (RUTH GUSSMAN)
Rm B-127 GT |
| 1 - Newton Anderson | | 1 - J. D. RUNKLES, Rm E-201
.GT |
| - 5 - ACRS SENT TO LIC ASST R. Ingram 3-18-75 | | |
| ** SEND ONLY TEN DAY REPORTS | | |

27

1910	1911	1912	1913	1914
...

1915

1915	1916	1917	1918	1919
...

1920

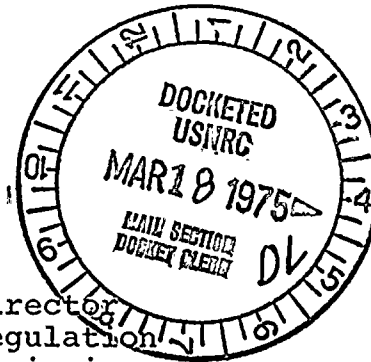
1921

1922

1923

Regulatory Docket File

March 14, 1975



Mr. Edson G. Case, Acting Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Case:

ABNORMAL OCCURRENCE NO. 251-75-3
MARCH 12, 1975
OCCURRENCE DATE: MARCH 4, 1975
TURKEY POINT UNIT NO. 4

STEAM GENERATOR PROTECTION SYSTEM
CHANNEL II - LOW STEAM LINE PRESSURE COMPARATOR FAILURE

A. CONDITIONS PRIOR TO OCCURRENCE

The reactor was in steady-state power operation at 100% reactor power. Steam Generator Protection System Channel II was in the tripped mode to perform a periodic functional test on this channel.

B. DESCRIPTION OF OCCURRENCE

During the performance of the periodic functional test, the test signal input did not trip Channel II low steam line pressure comparator (PC-4-474A) as the signal was decreased below the expected trip setpoint (equivalent to 600 psig). After the test signal was reduced significantly below the expected trip setpoint, the comparator tripped.

C. CAUSE OF OCCURRENCE

Extensive tests of the comparator revealed a failed capacitor in the -15V d.c. instrument power supply. Failure of this capacitor allowed an a.c. signal to be superimposed on the internal d.c. signal in the comparator. This caused the failure of the comparator to trip at the expected setpoint value equivalent to 600 psig.

D. ANALYSIS OF OCCURRENCE

The incidents analyzed and presented in the Turkey Point Unit Nos. 3 and 4 Final Safety Analysis Report assume conservative

2955



100

100

100

100

100

100

100

100

Mr. Edson G. Case, Acting Director
Page Two
March 14, 1975

values for instrument error in measuring pressure, time delays associated with tripping functions, and maximum trip setpoints assumed for analysis. In these analyses, actuation of one out of two redundant protection channels or any two out of three redundant protection channels will initiate the necessary protective actions.

Functional tests of the two redundant steam generator protection system channels III and IV demonstrated that both of these protection channels were operable.

Review, analyses, and evaluation of reactor operating conditions during this occurrence concluded that the reactor was protected at all times by two redundant operable protection channels. Therefore, neither reactor safety nor the health and safety of the public were jeopardized by this occurrence.

E. CORRECTIVE ACTION

The faulty comparator was replaced with a calibrated spare comparator. Functional tests performed after the spare comparator was installed, demonstrated that the comparator performance was satisfactory.


There was no evidence of generic failure.

F. FAILURE DATA

Review of operating and failure reports show that on September 6, 1974, during the performance of a periodic functional test on No. 3C Steam Generator, the failure of low-low level comparator (LC-3-495A) was identified. Refer to A.O. 250-74-10 for further details.

The failed low steam line pressure comparator, PC-4-474A, was manufactured by Hagan Controls Corporation. Single Comparator, A.C. Output, Model No. 4111082-001.

Very truly yours,


A. D. Schmidt
Vice President
Power Resources

VTC/cpc

cc: Mr. Norman C. Moseley
Jack R. Newman, Esquire

