REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8006110358 DOC.DATE: 80/06/05 NOTARIZED: NO DOCKET #
FACIL:50-261 H. B. Robinson Plant, Unit 2, Carolina Power and Ligh 05000261
AUTH.NAME AUTHOR AFFILIATION
STARKEY,R.B. Carolina Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
Region 2, Atlanta, Office of the Director

SUBJECT: LER 80-012/03L-0:on 800506,while operating at 93% power, nuclear instrumentation runback occurred.Control fuses blew on NIS power range detector N-42.Caused by faulty NIS circuit from detector N-42.Failed detector replaced.

DISTRIBUTION CODE: A002S COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 1+2
TITLE: Incident Reports

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
ACTION:	05 BC ORB #1	4	4			
INTERNAL:	01 REG FILE	1	1	02 NRC PDR	1	1
	09 I&E	2	2	11 MPA	3	3
	15 NOVAK/KNIEL	1	1	16 EEB	1	1
	17 AD FOR ENGR	1	1	18 PLANT SYS BR	1	1
	19 I&C SYS BR	1	1	20 AD PLANT SYS	1	1
	22 REAC SAFT BR	1	1	23 ENGR BR	1	1
	24 KREGER	1	1	25 PWR SYS BR	1	1
	26 AD/SITE ANAL	1	1	27 OPERA LIC BR	1	1
	28 ACDENT ANLYS	1	1	29 AUX SYS BR	1	1
	AD/ORP-DOR	1	1	AEOD	10	10
	BERLINGER,C.	3	3	DOUG MAY-TERA	1	1
	HANAUER,S.	1	1	JORDAN,E./IE	1	1
EXTERNAL:	03 LPDR	1	1	04 NSIC	1	1
	29 ACRS	16	16			

JUN 12 1980

TOTAL NUMBER OF COPIES REQUIRED: LTTR 60 ENCL 60

NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: ① (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1	LICENSEE CODE: S C H B R 2 ②	LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 ③	LICENSE TYPE: 4 1 1 1 0 ④	CAT: ⑤	
CON'T 0 1	REPORT SOURCE: L ⑥	DOCKET NUMBER: 0 5 0 0 0 2 6 1 ⑦	EVENT DATE: 0 5 0 6 8 0 ⑧	REPORT DATE: 0 6 0 5 8 0 ⑨	

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

0 2 During normal operation at 93% power at 1326 hours on May 6, 1980, a nuclear
0 3 instrumentation runback was observed. During this operational condition the control
0 4 power fuses blew on NIS power range detector N-42 and a runback to 28% power was
0 5 observed. Indication revealed a faulted condition in the NIS circuit from detector
0 6 N-42. With the detector in a faulted condition the redundancy of inputs to the high
0 7 flux, overtemperature ΔT and overpower ΔT was reduced below the minimum degree of
0 8 redundancy as set forth in Technical Specification table 3.5-2. This event is reportable pursuant to Technical Specification 6.9.2.b.(2).

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	I A ⑪	B ⑫	B ⑬	I N S T R U ⑭	E ⑮	Z ⑯

⑰ LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 0	—	0 1 2	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS ㉒	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
C ⑱	Z ⑲	Z ⑳	Z ㉑	0 0 0 0	Y ㉓	Y ㉔	N ㉕	W 1 2 0 ㉖

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ㉗

1 0 The detector was removed from service consistent with OWP NI-2 which requires the
1 1 associated bistables to be tripped. This restored the required redundancy at 1425
1 2 hours on May 6, 1980. The failed detector was replaced May 17, 1980 and the plant
1 3 returned to routine operation. The failure was attributed to a defective detector
1 4 and the exact cause is under investigation. No further action beyond the investigation is considered necessary at this time.

	FACILITY STATUS	% POWER	OTHER STATUS ㉚	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION ㉜
1 5	E ㉘	0 9 3 ㉙	NA	A ㉛	Operator Observation

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY ㉟	LOCATION OF RELEASE ㊱
1 6	Z ㉝	Z ㉞	NA	NA

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION ㊴
1 7	0 0 0 ㊲	Z ㊳	NA

PERSONNEL INJURIES

	NUMBER	DESCRIPTION ㊶
1 8	0 0 0 ㊵	NA

LOSS OF OR DAMAGE TO FACILITY ㊸

	TYPE	DESCRIPTION
1 9	Z ㊷	NA

8006110358

PUBLICITY

	ISSUED	DESCRIPTION ㊺	NRC USE ONLY
2 0	N ㊹	NA	

R. B. Starkey, Jr.

(803) 383-4524

917-926

SUPPLEMENTAL INFORMATION FOR LER 80-12

I. Cause Description and Analysis

On May 6, 1980, at 1326 hours during normal operation at 93% power a Nuclear Instrumentation System (NIS) runback to 44% power was observed. The control operator observed the NIS indication and all appeared normal. Radial tilt was calculated and determined normal. During the runback operators observed bistable status lights on NIS detector N-42 to be flashing and giving erratic indications. However after stabilizing, indication was normal. At 1415 hours while increasing load another NIS runback to 55% power occurred. N-42 relays were chattering and I&C personnel observed erratic indications on the N-42 drawer. These indications revealed a problem in the N-42 circuitry. At 1418 hours with the unit at 60% power, control power fuses blew on detector N-42 tripping the associated bistables. In conjunction, a third runback to 28% power occurred. Detector N-42 was removed from service at 1425 hours per Operating Work Procedure NI-2. This required the bistables associated with N-42 to be in the trip position. Normal plant operation was resumed at this time. The minimum degree of redundancy for the NIS power range channels as set forth in Table 3.5-2 of the Technical Specifications was not maintained during the time the detector was apparently malfunctioning prior to the trip of its bistables and its removal from service.

A reactor trip will result from a trip of 2 out of 4 NIS channels. When the N-42 detector failed in the untripped position 3 channels remained operable and would not have prevented the function of the NIS trip. However, the minimum NIS degree of redundancy was not maintained. At 1425 hours when the detector control power fuses blew, the NIS bistables on N-42 went to the tripped position and the proper degree of redundancy was restored.

II. Corrective Action

The detector was removed from service with its associated bistables in the tripped mode. This restored the minimum degree of redundancy. Detector N-42 was replaced on May 17, 1980 and after testing was returned to service May 22, 1980, at 2038 hours.

III. Corrective Action To Prevent Further Occurrences

The failure of the detector is still under investigation. The detector was installed about one and one-half months prior to its failure. With the exception of the failure investigation, no further corrective action is considered necessary.