

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9004030116 DOC. DATE: 90/03/23 NOTARIZED: NO DOCKET #
 FACIL: 50-400 Shearon Harris Nuclear Power Plant, Unit 1, Carolina 05000400
 AUTH. NAME AUTHOR AFFILIATION
 RICHEY, R.B. Carolina Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION
 Document Control Branch (Document Control Desk)

SUBJECT: Responds to NRC 900227 ltr re violations noted in Insp Rept 50-400/90-02.

DISTRIBUTION CODE: IE01D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 2
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES: Application for permit renewal filed. 05000400

	RECIPIENT ID CODE/NAME	COPIES LTTR	ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	ENCL
	PD2-1 PD	1	1	BECKER, D	1	1
INTERNAL:	ACRS	2	2	AEOD	1	1
	AEOD/DEIIB	1	1	AEOD/TPAD	1	1
	DEDRO	1	1	NRR SHANKMAN, S	1	1
	NRR/DLPQ/LPEB10	1	1	NRR/DOEA DIR 11	1	1
	NRR/DREP/PEPB9D	1	1	NRR/DREP/PRPB11	2	2
	NRR/DRIS/DIR	1	1	NRR/DST/DIR 8E2	1	1
	NRR/PMAS/ILRB12	1	1	NUDOCS-ABSTRACT	1	1
	OGC/HDS1	1	1	REG-FILE-02	1	1
	RES MORISSEAU, D	1	1	RGN2 FILE 01	1	1
EXTERNAL:	LPDR	1	1	NRC PDR	1	1
	NSIC	1	1			

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 25 ENCL 25

R
I
D
S
/
A
D
D
S

R
I
D
S
/
A
D
D
S

CP&L

Carolina Power & Light Company

P. O. Box 165 • New Hill, N. C. 27562

R. B. RICHEY
Manager
Harris Nuclear Project

MAR 23 1990

Letter Number: HO-900059 (0)

Document Control Desk
United States Nuclear Regulatory Commission
Washington, DC 20555

NRC-707

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400
LICENSE NO. NPF-63
REPLY TO A NOTICE OF VIOLATION

Gentlemen:

In reference to your letter of February 27, 1990, referring to I.E. Report RII: 50-400/90-02, the attached is Carolina Power and Light Company's reply to violations "A" and "B" identified in Enclosure 1.

It is considered that the corrective actions taken/planned are satisfactory for resolution of the item.

Thank you for your consideration in this matter.

Very truly yours,



R. B. Richey, Manager
Harris Nuclear Project

MGW:dgr

Enclosure

cc: Mr. R. A. Becker (NRC)
Mr. S. D. Ebnetter (NRC - RII)
Mr. J. E. Tedrow (NRC - SHNPP)

9004030116 900323
PDR ADOCK 05000400
Q PDC

MEM/HO-9000590/1/OS1

TEO/
11

ATTACHMENT TO CP&L LETTER OF RESPONSE TO NRC I.E.

REPORT RII: 50-400/90-02 VIOLATIONS "A" AND "B"

Reported Violation:

- A. Technical Specification (TS) 6.8.1.a requires that written procedures be established and implemented covering procedures outlined in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

Regulatory Guide 1.33, Appendix A, Paragraph 8.B requires that written procedures be provided for surveillance tests.

Operations Surveillance Test OST-1039, Calculation of Quadrant Power Tilt Ratio, provides the steps necessary to manually calculate the quadrant power tilt ratio. Step 7.1 of this procedure requires that detector currents be recorded from all operable power range channels at the Nuclear Instrument cabinets.

Contrary to the above, on December 28, 1989, procedure OST-1039 was not properly implemented in that the detector currents required by step 7.1 were improperly recorded and a subsequent review by two senior licensed shift foremen failed to identify the improperly performed TS surveillance.

This is a Severity Level IV violation (Supplement I).

- B. Technical Specification 4.2.4.1 requires that the quadrant power tilt ratio shall be calculated at least once per 12 hours when the alarm is inoperable.

Contrary to the above, after receiving the upper and lower quadrant power tilt alarms and subsequently bypassing the NI-44 channels, from 6:55 a.m. on December 28, 1989, through 2:25 a.m. on December 30, 1989, the quadrant power tilt ratio was not calculated at least once per 12 hours when the alarm was inoperable.

This is a Severity Level IV violation (Supplement I).

Denial or Admission and Reason for the Violation:

The violations are correct as stated.

On December 28, 1989, initial power ascension for cycle three operation was in progress. When the reactor power level reached approximately 55%, annunciators alarmed, indicating a potential flux tilt in the reactor. The shift operators performed a manual calculation of the QPTR per OST-1039, and the calculated value was 1.018, within the 1.02 limit of TS 3.2.4.

As identified in Violation "A," the detector currents recorded in OST-1039 were incorrect. A review of the recorded values determined that the operator must have read the incorrect scale on the meter, causing his currents to be high by a factor of two. This had no effect on his calculated value of QPTR, however, since QPTR is a ratio of the maximum to normalized average of the four detectors, so the error cancels out when the ratio is determined. Reviews of the calculation performed by the shift foremen failed to detect the error.

With QPTR determined to be within limit, and with the annunciators alarming intermittently, the situation was discussed by Operations and Instrument and Control personnel. It was decided that power range channel N-44 was causing the intermittent alarm. Initial calibrations of the power range nuclear instrumentation would be performed for cycle three when equilibrium Xenon conditions at a 75% power level were established, as per TS 4.3.1.1. It was expected that these scheduled calibrations would correct N-44, and clear the intermittent alarms.

Operations personnel then bypassed the N-44 channel input to the QPTR annunciators in order to clear the intermittent alarm, and to ensure that any flux tilt on the remaining three channels would be detected by the alarm. However, neither the N-44 channel nor the QPTR alarm were declared inoperable. Subsequent reviews of the event have determined that all four power range channel inputs must be available to consider the QPTR alarm operable, except as provided in TS 3.3.1, Table 3.3-1, Action 2.c., which provides compensating action for inoperable power range nuclear instrument channel. Since N-44 was not declared inoperable, TS 4.2.4.1 was applicable and, as identified in Violation "B," TS 4.2.4.1 was not complied with, in that QPTR was not determined to be within limit each 12 hours when the alarm was inoperable. This condition existed from 1600 on December 28, 1989, until 0225 on December 31, 1990, when the calibrations of channel N-44 were completed. These calibrations, as anticipated, did correct the spurious alarm, so no actual flux tilt had occurred.

Corrective Steps Taken to Avoid Further Violations:

Personnel who were involved with the QPTR calculations and who made the operability determination on the QPTR alarm were counseled.

Additional guidance will be included in the QPTR annunciator response procedure to indicate the appropriate actions to take to comply with TS requirements.

This event will be reviewed by licensed operators.

Date When Full Compliance Will Be Achieved:

Review of the event by licensed operators will be completed by May 7, 1990. Procedure changes will be completed by June 1, 1990.

Reference: Licensee Event Report 90-002-00

