

CATEGORY 1

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 FACIL: 50-400 Shearon Harris Nuclear Power Plant, Unit 1, Carolina 05000400
 AUTH.NAME AUTHOR AFFILIATION
 ELLINGTON, M. Carolina Power & Light Co.
 CLARK, B.H. Carolina Power & Light Co.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 99-007-00: on 990811, determined that CVIS ARMs high alarm setpoints were not within TS limit. Caused by not having procedure to verify if CVIS ARM high alarm setpoints were within TS requirements. Revised procedures. With 990910 ltr.

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NOTES: Application for permit renewal filed.

05000400

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Serial: HNP-99-139
10CFR50.73

SHEARON HARRIS NUCLEAR POWER PLANT UNIT 1
DOCKET NO. 50-400
LICENSE NO. NPF-63
LICENSEE EVENT REPORT 1999-007-00

Sir or Madam:

In accordance with 10CFR50.73, the enclosed Licensee Event Report is submitted. This report describes a condition which resulted in exceeding the requirements of Technical Specifications for Containment Ventilation Isolation Area Radiation Monitors.

Sincerely,

B. H. Clark
General Manager
Harris Plant

MSE/mse

Enclosure

- c: Mr. J. B. Brady (HNP Senior NRC Resident)
- Mr. R. J. Laufer (NRC-NRR Project Manager)
- Mr. L. A. Reyes (NRC Regional Administrator, Region II)

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LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1) Harris Nuclear Plant, Unit 1	DOCKET NUMBER (2) 05000400	PAGE (3) 1 OF 2
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TITLE (4)
Containment Ventilation Isolation Area Radiation Monitors Technical Specification Noncompliance

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
8	11	1999	1999	007	00	09	09	1999	FACILITY NAME	DOCKET NUMBER 05000
									FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
POWER LEVEL (10) 100	20.2201(b)	20.2203(a)(2)(v)	x	50.73(a)(2)(i)	50.73(a)(2)(viii)					
	20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)					
	20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71					
	20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER					
	20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below					
	20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)	or In NRC Form 366A					

LICENSEE CONTACT FOR THIS LER (12)

NAME Mark Ellington, Senior Analyst - Licensing	TELEPHONE NUMBER (Include Area Code) (919) 362-2057
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	x	NO					

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

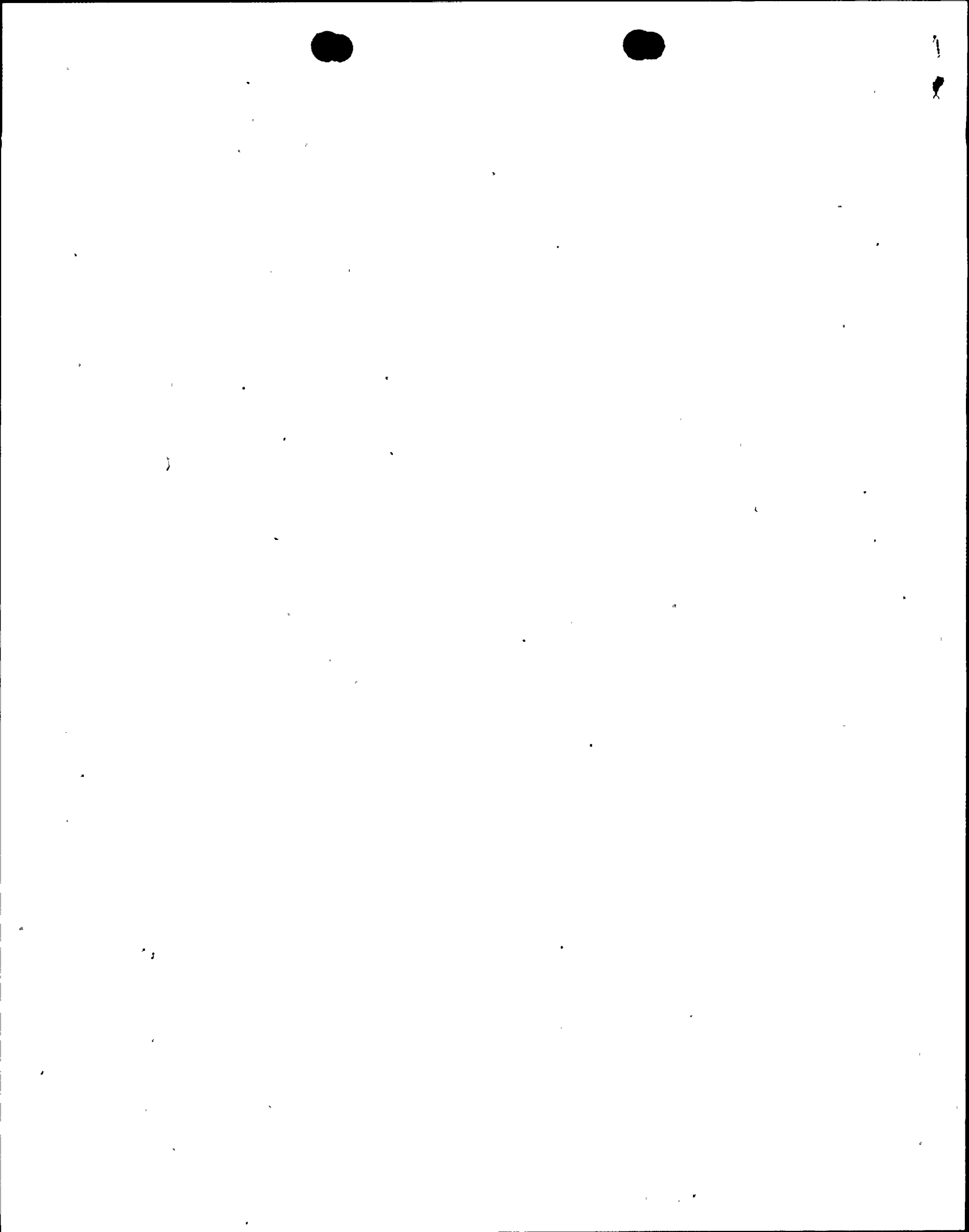
On August 11, 1999, with the Harris Nuclear Plant (HNP) at 100% power in Mode 1, HNP determined that containment ventilation isolation signal (CVIS) area radiation monitors (ARM) high alarm setpoints were not within the Technical Specifications (TS) limit of less than three times detector background at rated thermal power (TS 3.3.3.1, Table 3.3-6, Item 1.a.).

During the ongoing TS Surveillance Review Project, a member of HNP plant staff questioned the process for ensuring that CVIS ARM high alarm setpoints did not exceed TS required values. The applicable system engineer compared the CVIS ARM high alarm setpoint values with the TS requirements and determined that the TS limit was exceeded. The main control room was notified and the containment purge system was isolated to containment as required by TS 3.3.3.1.

Cause of this TS violation:
HNP did not have a procedure requirement to verify CVIS ARM high alarm setpoints were within the requirements of TS.

Corrective actions include:

- Revise the plant procedure for startup testing following a refueling outage to verify CVIS ARM high alarm setpoints are within TS limits.
- Revise the plant procedure that implements the digital channel operational test to verify CVIS ARM high alarm setpoints are within TS limits.



LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
Harris Nuclear Plant, Unit 1	05000400	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 2
		1999	-- 007	-- 00	

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

I. DESCRIPTION OF EVENT

On August 11, 1999, with the Harris Nuclear Plant (HNP) at 100% power in Mode 1, HNP determined that containment ventilation isolation signal (CVIS) area radiation monitors (ARM) high alarm setpoints were not within the Technical Specifications (TS) limit of less than three times detector background at rated thermal power (TS 3.3.3.1, Table 3.3-6, Item 1.a.).

During the ongoing TS Surveillance Review Project, a member of HNP plant staff questioned the process for ensuring CVIS ARM high alarm setpoints did not exceed TS required values. The applicable system engineer compared the CVIS ARM high alarm setpoint values with the TS requirements and determined that the TS limit was exceeded. The main control room was notified and the containment purge system was isolated to containment as required by TS 3.3.3.1.

TS 3.3.3.1, Table 3.3-6, Item 1a requires the CVIS ARM Alarm/Trip setpoint to be less than or equal to three times detector background at Rated Thermal Power during modes 1, 2, 3 and 4. The setpoints had been set conservatively at approximately two times background to account for variations in background. However, the setpoints were not being checked periodically. Therefore, as background radiation decreased during core design changes a corresponding setpoint reduction was not made which resulted in the setpoints not being within the applicable TS requirements. HNP has estimated that the CVIS ARM have exceeded the TS limits since the beginning of cycle 8 in June 1997. Changes in core design made during refueling outage 7 reduced the background radiation levels in containment which caused the CVIS ARM high alarm setpoints to be greater than three times background.

II. CAUSE OF EVENT

HNP did not have a procedure requirement to verify CVIS ARM high alarm setpoints were within the requirements of TS.

III. SAFETY SIGNIFICANCE

The CVIS ARM were capable of initiating a containment ventilation isolation. While the alarm setpoints were not within the TS limits, they were well below the expected radiation levels following a design basis accident. Additionally, the containment ventilation isolation generated by a safety injection signal was not affected by the condition described in this LER. The function to isolate containment ventilation following a fuel handling accident in containment was not affected because the applicable alarm setpoints are set at 150 mR/hr in mode 6 per TS.

This report is being submitted pursuant to the criteria of 10CFR50.73(a)(2)(i) for any operation or condition prohibited by the plant's Technical Specifications.

IV. CORRECTIVE ACTIONS

1. Revise the plant procedure for startup testing following a refueling outage to verify CVIS ARM high alarm setpoints are within TS limits.
2. Revise the plant procedure that implements the digital channel operational test to verify CVIS ARM high alarm setpoints are within TS limits.

V. SIMILAR EVENTS

The CVIS ARM are the only TS radiation monitors that have an alarm based on background radiation. HNP has not previously reported a condition where TS were violated based on changing radiation background levels in containment.



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