10CFR50.73

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November 30, 1989

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Virgil C. Summer Nuclear Station
Docket No. 50/395
Operating License No. NPF-12
LER 89-018

Gentlemen:

Attached is Licensee Event Report No. 89-018 for the Virgil C. Summer Nuclear Station. This report is submitted pursuant to the requirements of 10CFR50.73(a)(2)(i).

Should there be any questions, please call us at your convenience.

Very truly yours,

O. S. Bradham

DCH/OSB:lbs
Attachment

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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Virgil C. Summer Nuclear Station	0 5 0 0 0 3 9 5	1 OF 0 4

TITLE (4)
Inadequate Procedures Result in Non-Compliance with Radiation Monitor Surveillance

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 NAMES	DOCKET NUMBER(S)
										0 5 0 0 0
1 0	3 0	8 9	8 9	— 0 1 8	— 0 0	1 1	3 0	8 9		0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
1	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
1 0 0	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
W. R. Higgins, Supervisor, Regulatory Compliance	8 0 3 3 4 5 - 4 0 4 2

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
D	I L			N							

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

Technical Specification 3/4.3.3.9, "Radioactive Gaseous Effluent Monitoring Instrumentation," Table 4.3-9 Notations require the performance of an Analog Channel Operational Test (ACOT) which verifies that a "low flow" condition on Plant Vent Radiation Monitor (RM-A3) and Reactor Building Purge Radiation Monitor (RM-A4) will cause Control Room alarm annunciation.

On October 27, 1989, a Shift Engineer questioned why, upon stopping both sample pumps on RM-A3 (a no flow condition), a control room alarm did not occur. As a result, a "Request for Regulatory Interpretation" was written to clarify the surveillance intent with respect to the "low flow" condition.

Upon further investigation it was determined that the Surveillance Test Proceoure (STP) did not adequately test all of the "low flow" conditions,as sensed by the components available in the design of radiation monitors, that could cause an alarm in the Control Room. Therefore, the surveillance for the "low flow" function was not being performed satisfactorily per Technical Specification requirements.

On October 31, 1989, at 1730, Radiation Monitors RM-A3 and RM-A4 were declared inoperable due to inadequate surveillance testing on the Sampler Flow Rate Monitor portion of the Radiation Monitor.

The calibration and ACOT procedures were revised to address the required low flow switches. The switches were then calibrated and successfully tested per the ACOT procedures on November 10, 1989.

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

PLANT IDENTIFICATION:

Westinghouse - Pressurized Water Reactor

EQUIPMENT IDENTIFICATION:

Radiation Monitoring System EIIS-IL

IDENTIFICATION OF EVENT:

Inadequate procedures led to incomplete surveillance testing of radiation monitors.

EVENT DATE:

October 31, 1989

REPORT DATE:

November 31, 1989

This report was initiated by Off-Normal Occurrence Report 89-104.

CONDITION PRIOR TO EVENT:

Mode 1 - 100% Reactor Power

DESCRIPTION OF EVENT:

Technical Specification 3/4.3.3.9, "Radioactive Gaseous Effluent Monitoring Instrumentation," Table 4.3-9 Notations require the performance of an Analog Channel Operational Test (ACOT) which verifies that a "low flow" condition on Plant Vent Radiation Monitor (RM-A3) and Reactor Building Purge Radiation Monitor (RM-A4) will cause Control Room alarm annunciation.

On October 27, 1989, a Shift Engineer questioned why, upon stopping both sample pumps on RM-A3 (a no flow condition), a control room alarm did not occur. As a result, a "Request for Regulatory Interpretation" was written to clarify the surveillance intent with respect to the "low flow" condition. The investigation pursuant to the request yielded the following:

1. A low flow alarm was operable and was being surveilled satisfactorily per Surveillance Test Procedure (STP) 360.036.

2. The low flow alarm and STP only related to low flow conditions as indicated by high differential pressure (high D.P.) sensed across a filter (i.e., clogged filter).

3. The design of the radiation monitors also provided for an alarm from a low D.P. switch to indicate low differential pressure across the filter (i.e., loss of flow).

4. The low D.P. switch was not addressed in the calibration procedure nor in the ACOT procedure for RM-A3.

5. These same circumstances also existed for RM-A4.

Based on the above information, it was determined that the STP did not adequately test all the "low flow" conditions,as sensed by the components available in the design of radiation monitors,that would cause an alarm in the Control Room. Therefore, the surveillance for the "low flow" function was not being performed per Technical Specification requirements.

On October 31, 1989, at 1730, radiation monitors RM-A3 and RM-A4 were declared inoperable due to inadequate surveillance testing on the "Sampler Flow Rate Monitor" portion of the radiation monitor.

CAUSE OF EVENT:

This event occurred due to inadequate procedures. The calibration procedures did not acknowledge the low D.P. switch available on the radiation monitors and the ACOT procedure was written based on methodology that only created a high D.P. condition. Therefore, procedurally, the radiation monitors appeared to be meeting the surveillance requirements.

ANALYSIS OF EVENT:

RM-A3 and RM-A4 are non-safety related and non-seismic qualified radiation monitors; their function is to provide analysis of normal releases and to provide back-up control of administrative releases from waste gas decay tanks or Reactor Building purge operations. These radiation monitors are not taken into consideration in the accident analysis. Therefore, the loss of RM-A3 or RM-A4 would not compromise safe plant operation or the safety of the public.

IMMEDIATE CORRECTIVE ACTION:

1. Declared both RM-A3 and RM-A4 monitors inoperable and applied appropriate Technical Specification action statements.

2. Reviewed Technical Specifications for any other affected radiation monitors.

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

3. The calibration and ACOT procedures for RM-A3 and RM-A4 were revised to address both the high and low D.P. switches. The switches were then calibrated and successfully tested per the ACOT procedures on November 10, 1989.

ADDITIONAL CORRECTIVE ACTION:

Radiation monitors RM-A3 and RM-A4 were verified to be the only radiation monitors affected by this event. A modification request (MRF 20781) that relocates the "low flow" sensor to a flow orifice has been approved for RM-A3 and RM-A4. This modification would enhance the flow detection method such that a more precise setpoint can be utilized to detect a broader range of possible degraded flow conditions. This modification will be prioritized with other plant modification request and scheduled for implementation at a later date.

PRIOR OCCURRENCES:

None.