NRC Form 366							U.S. NU		DRY COM	MISSION
(9-83)		LIC	ENSEE EV	ENT RE	PORT	(LER)		APPROVED OMR EXPIRES: 8/31/88	NO 3 50-0	104
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EVENT DATE (5)	LER NUMBE	R (6)	REPORT D	ATE (7)		OTHER	FACILITIES INVOL	VED (8)		
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NRC Form 366 (9-83) LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104 EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)		
		YEAR SEQUENTIAL REVISION NUMBER NUMBER			
Callaway Plant Unit 1	0 5 0 0 4 8	3 8 6 - 0 3 5 - 0 0	0 2 OF 0 4		

Introduction

NRC Form 366A

At 1144 CDT on 9/28/86, a Containment Purge Isolation (CPI) signal and a Control Room Ventilation Isolation (CRVI) occurred after the Containment Atmosphere Gaseous Radioactivity Monitors were taken out of bypass prior to initiating a containment mini-purge. The required Engineered Safety Features (ESF) equipment performed as designed. The plant was in Mode 1, Power Operation, at 100% power and normal operating temperature and pressure at the time of the event. This Licensee Event Report is being submitted pursuant to 10 CFR 50.73(a)(2)(iv) to report the unplanned ESF actuations.

Description of Event

At approximately 1142 CDT on 9/28/86, the reactor operator was making preparations to perform a containment mini-purge. As part of these preparations, Containment Atmosphere Gaseous Radioactivity Monitors GT-RE-31 and GT-RE-32⁽¹⁾ were taken out of bypass at approximately 1143 CDT. Subsequent to these actions, a CPI signal and a CRVI occurred at 1144 CDT. Proper actuation of the required ESF equipment was verified per plant procedures and an investigation initiated to identify the cause. The Control Room Ventilation System was restored to its normal line-up at 1428 CDT.

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Analysis of the Event

A review of the plant computer alarm printout indicated that the isolation signals were from GT-RE-32. Prior to the actuation the Control Room process radioactivity display monitor (RM-11) indicated that the containment radioactivity levels were below the high alarm setpoint for GT-RE-32. Subsequent investigation revealed the ESF bistable setpoint for GT-RE-32 to be sufficiently close to the actual containment radioactivity levels to cause the CPI and CRVI actuations. Although the values are the same, it is important to note that the ESF bistable setpoint value is not available for Control Room indication and it is physically independent from the RM-11 high alarm setpoint. See the attached block diagram.

Per Technical Specification (T/S) 3.3.3.1, Radiation Monitoring for Plant Operations, the ESF actuation setpoints of GT-RE-31 and GT-RE-32 may be increased to twice the maximum concentration activity in containment during a containment mini-purge. The ESF actuation setpoint was increased to twice the maximum concentration in containment and a containment mini-purge was successfully initiated at 1510 CDT.

LICENSEE EVENT	REPORT (LER)	TEXT CONTINUATION
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U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OM8 NO. 3150-0104 EXPIRES: 8/31/88

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Root Cause

AC Form 366A

Based on the as-found ESF trip bistable setting and the containment radioactivity levels which were found to exist immediately following the actuations, the most probable cause of the actuations was an apparent random iluctuation in the radioactivity level which exceeded the ESF actuation setpoint.

Corrective Actions and Actions to Prevent Lecurrence

Health Physics Technical Procedure HTP-ZZ-02012, Gaseous Radwaste Release Permit (Containment Purge), ensures GT-RE-31 and GT-RE-32 are taken out of bypass prior to initiating a containment mini-purge. HTP-ZZ-02012 has been changed so that before the monitors are taken out of bypass, the ESF actuation setpoints are increased to the Offsite Dose Calculation Manual (ODCM) calculated setpoint or twice the maximum concentration activity in containment, whichever is smaller, if the RM-11 actuation setpoints are not a factor of two greater than the gaseous radioactivity levels.

Evaluation of Safety Significance

Since there was no containment purge in progress and the required ESF equipment performed as designed, this event was not a threat to the safety of the plant or public.

Previous occurrences: LER 85-008-00, LER 86-020-00

Footnote

(1) IEEE Standard 805-1983 System - IK IEEE Standard 803A-1983 Component - RE



NRC FORM 366A (9-83)



Callaway Plant

October 28, 1986

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

ULNRC-1394

Gentlemen:

DOCKET NUMBER 50-483 CALLAWAY PLANT UNIT 1 FACILITY OPTRATING LICENSE NPF-30 LICENSEE EVENT PEPORT 86-035-00 ESF ACTUATIONS AFTER CONTAINMENT RAD MONITOR TAKEN OUT OF BYPASS

The enclosed Licensee Event Report is submitted pursuant to 10 CFR 50.73(a)(2)(iv) concerning Engineered Safety Features Actuations which occurred after a Containment Atmosphere Gaseous Radioactivity Monitor was taken out of bypass.

G. L. Randolph Manager, Callaway Plant

- A-1477

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TPS/JWK/drs Enclosure

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cc: Distribution attached

cc distribution for ULNRC-1394

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