

# CATEGORY 1

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9604010047      DOC.DATE: 96/03/25      NOTARIZED: NO      DOCKET #  
FACIL:50-335 St. Lucie Plant, Unit 1, Florida Power & Light Co.      05000335  
AUTH.NAME      AUTHOR AFFILIATION  
LAVELLE,S.      Florida Power & Light Co.  
BOHLKE,W.H.      Florida Power & Light Co.  
RECIP.NAME      RECIPIENT AFFILIATION

SUBJECT: LER 96-003-00:on 960224,containment particulate & gaseous monitor was OOS & resulted in condition prohibited by TS due to personnel error.CAPGM was placed back in svc.W/960325 ltr.

DISTRIBUTION CODE: IE22T      COPIES RECEIVED:LTR 1 ENCL 1      SIZE: 7  
TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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FPL

MAR 25 1996

L-96-70  
10 CFR 50.73

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D. C. 20555

Re: St. Lucie Unit 1  
Docket No. 50-335  
Reportable Event: 96-003  
Date of Event: February 24, 1996  
Containment Particulate and Gaseous Monitor  
Out of Service Resulting in a Condition  
Prohibited by Technical Specification  
Due to Personnel Error

The attached Licensee Event Report is being submitted pursuant to the requirements of 10 CFR 50.73 to provide notification of the subject event.

Very truly yours,

A handwritten signature in cursive script, appearing to read "W. H. Bohlke".

W. H. Bohlke  
Vice President  
St. Lucie Plant

WHB/SL

Attachment

cc: Stewart D. Ebnetter, Regional Administrator, USNRC Region II  
Senior Resident Inspector, USNRC, St. Lucie Plant

9604010047 960325  
PDR ADOCK 05000335  
S PDR

A 10015

IFR 2  
11

**LICENSEE EVENT REPORT (LER)**

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 60.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20566-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

ST LUCIE UNIT 1

DOCKET NUMBER (2)

05000335

PAGE (3)

1 OF 6

TITLE (4)

Containment Particulate and Gaseous Monitor Out of Service Resulting in a Condition Prohibited by Technical Specifications Due to Personnel Error

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
2	24	96	96	003	00	3	25	96		05000
										05000

OPERATING MODE (9)	2	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
POWER LEVEL (10)	2%	20.2201(b)	20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	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	Specify in Abstract below or in NRC Form 366A			
		20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)					
		20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)					

LICENSEE CONTACT FOR THIS LER (12)

NAME

Sean Lavelle, Licensing Department

TELEPHONE NUMBER (include Area Code)

(407) 467-7160

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

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On February 22, 1996, at 1355, with St. Lucie Unit 1 in Mode 3, a health physics (HP) technician drew an air sample of the Unit 1 containment atmosphere. The sample was obtained from the containment atmosphere particulate and gaseous monitor (CAPGM). Upon completing the sampling, the technician did not reopen the valve to the monitor as required by procedure.

On February 24, 1996, with Unit I in Mode 2, a chemistry technician noticed the monitor's process flow meter reading low. A chemistry supervisor verified the isolation of the monitor and reopened the inlet valve to the sample pump. The flow returned to normal and the monitor was declared Operable.

The primary cause of this event was personnel error attributed to the HP technician for not following procedure. In addition, the flow fault indicator did not illuminate and operator logs with low flow entries were not questioned. During the time the monitor was out of service the reactor cavity sump level and flow monitoring system was Operable, and 24 hour sampling of the containment atmosphere was ongoing.

Corrective actions for this event : 1) The CAPGM was placed back in service. 2)The HP technician was disciplined and counseled on plant policy on procedural compliance. 3)The operations department enhanced the review of operator logs, for both units, to include a written explanation for any reading outside its normal value.4) HP is incorporating sign offs to both units' procedures.5) HP supervision has reviewed this event with all HP technicians emphasizing the severity of this event and management expectations. 6) Engineering will determine set point range for the low flow switch. 7) Chemistry procedure will be revised to include a calibration and functional test of the flow switch.

LICENSEE EVENT REPORT (LER)  
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ST. LUCIE UNIT 1	05000335	96	003	00	2 OF 6

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

**DESCRIPTION OF THE EVENT**

On February 22, 1996, at 1355, with Unit 1 in Mode 3, a health physics (HP) technician sampled the containment atmosphere in preparation for a containment entry following the manual trip of the unit. In accordance with the HP procedure (HPP-22), the sample was taken from the containment atmosphere particulate and gaseous monitor (CAPGM) (EIS:IL) which monitors particulate and gaseous radioactivity. The sample is obtained (see page 6 FIGURE 1) by connecting, via quick disconnect fittings, a removable air sample collection device, then opening valves on both sides of the sample collection device (valves 2 and 6) and throttling the inlet valve (valve 3) to the monitor sample pump. After the sample is gathered the valves (valves 2 and 6) to the sample collection device are closed, the inlet valve (valve 3) to the monitor sample pump is reopened. In this event, valve number 3 was not reopened as required by procedure, and flow to the monitor sample pump was reduced to approximately 15% of the normal design flow.

On February 24, 1996, with Unit 1 in Mode 2, a chemistry technician noticed the monitor's process flow meter reading low. A chemistry supervisor and the technician verified that valve number 3 was throttled and flow was being impeded. They opened the valve fully and flow returned to expected value. The control room was notified of the inoperable monitor and it was declared out of service from the time the HP technician took his sample on February 22 until its return to service at 1210 on February 24, 1996. The flow fault switch did not provide indication because it was adjusted to illuminate on zero flow. An evaluation was initiated to determine if the monitor was Operable at the reduced flow during the time valve number 3 was throttled.

**CAUSE OF THE EVENT**

The root cause of the event was personnel error by the HP technician. The technician did not follow the procedure which instructed and cautioned him to reopen valve number 3. The technician did not have the procedure with him while taking the sample.

There were three contributing factors that impeded the identification of the monitor being inoperable. First, the lack of sign offs in the procedure contributed to the technician performing the evolution without the procedure in hand. Second, the flow fault indicator switch did not illuminate in the control room, and third, the low flow readings taken on the operator logs while the monitor was inoperable were not questioned by the operators recording them nor the licensed operators reviewing them.

**LICENSEE EVENT REPORT (LER)**  
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

**ANALYSIS OF THE EVENT**

This event is reportable under 10 CFR 50.73 (a)(2)(I) as "any operation or condition prohibited by the plant Technical Specifications". The containment atmosphere particulate and gaseous monitor was inoperable. An evaluation determined the reduced flow through the monitor would cause the particulate monitor to err in a nonconservative manner. The isokinetic nozzles are sized for a specific flow rate. There is a linear relationship between the detector efficiency and the sample flow rate when the filter speed is held constant. With the sample flow speed reduced to 15% of normal, the detector efficiency is reduced by 85%. The gaseous channel was also determined inoperable due to the inability to conclude that the reduced flow through the gas monitor was sufficient to accurately detect an increase in gas activity. The reduced flow rate was at the low end of the flow meter scale. An indication from a flowmeter operating at this extreme end of the scale cannot be used.

The inoperable monitor did not meet Technical Specification 3.4.6.1 "Reactor Coolant System Leakage". This Technical Specification requires that the CAPGM and the reactor cavity sump level and flow monitoring system (RCSLFMS) (EIIIS:IJ) be operable. The unit entered Mode 2 during the time the monitors were inoperable. In accordance with Technical Specification 3.0.4., entry into an operational mode shall not be made when the conditions of a Limiting Condition for Operation are not met.

The Technical Specification required action for the inoperable monitor are 1) the RCSLFMS be operable. 2) appropriate grab samples are obtained and analyzed at least once per 24 hours and; 3) a reactor coolant system (RCS) water inventory balance be performed at least once per 8 hours during steady state operation.

In this event the RCSLFMS was Operable. Additionally containment atmosphere was sampled every 24 hours per procedural guidance (HPP-23) for entries into containment during the unit shutdown. The RCS water inventory balance was performed once per 24 hours in accordance with operations daily surveillances (AP-1-0010125, Check Sheet 2) and the results were within Technical Specification limits. The 8 hour action requirement for RCS water inventory balance was not adhered to since it was not known that the containment monitor was out of service and the unit was not continually at steady state operation.

In the unlikely event of a RCS leak the control room operators would have been alerted to this condition by an increasing trend in the reactor cavity sump level monitor, by an increase in activity on the daily samples of containment atmosphere, and an increase in leakage on the RCS water inventory balance. Based on the above conditions, the health and safety of the public were not affected by this event.

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TEXT CONTINUATION

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

**CORRECTIVE ACTIONS**

1. The containment atmosphere particulate and gaseous radioactivity monitor was placed back in service.
2. The HP technician was disciplined and counseled in plant policy on procedural compliance.
3. The operations department enhanced the review of both units operator logs to include a written explanation for any reading outside its normal values.
4. Health physics is incorporating sign offs, in both units' procedures, for manipulation of plant equipment that involves lengthy and or complicated steps.
5. Health physics supervision has reviewed this event with all HP technicians emphasizing the severity of this event and management expectations for procedural compliance.
6. Engineering will determine the appropriate set point range for the low flow switch
7. Chemistry procedure 1-C-67 will be revised to include a calibration and functional test of the flow switch to ensure there is no set point drift.

**ADDITIONAL INFORMATION**

1) Component Failures

NONE

2) Previous Similar Events

LER 335-92-001 "Fuel Handling Building Ventilation Monitor Out of Service Resulting in a Condition Prohibited by Technical Specifications Due to a Personnel Error"  
This event was attributed to a chemistry technician not restarting the fuel handling building stack monitor sample pump after taking a sample.

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		96	-- 003	-- 00	

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

**ADDITIONAL INFORMATION**

2) Previous Similar Events (Continued)

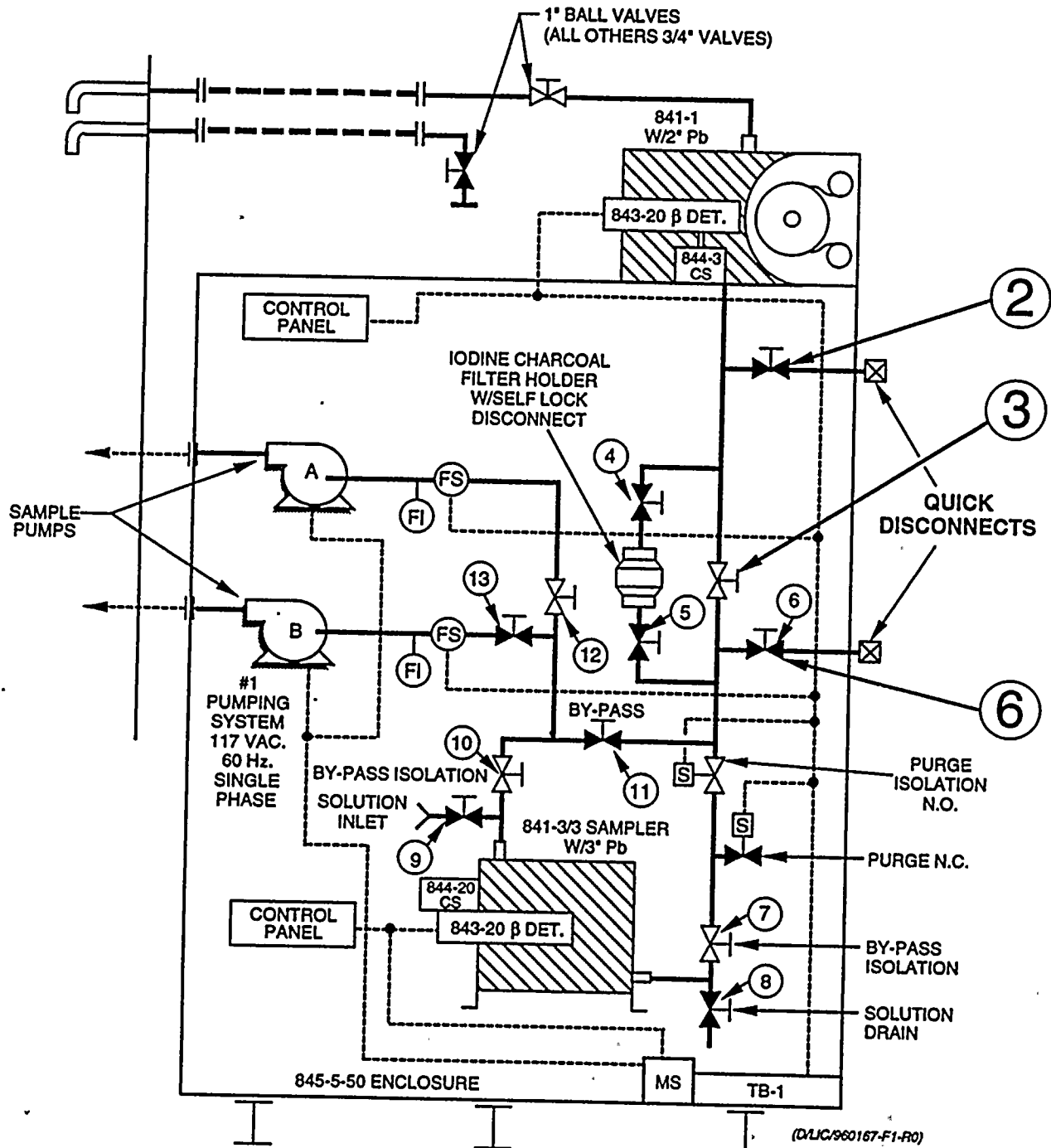
LER 335-92-003 "Containment Atmosphere Particulate and Gaseous Radioactivity Monitors Out of Service Resulting in a Condition Prohibited by Technical Specification Due to Personnel Error" his event was attributed to the control room licensed operator leaving the containment isolation valve on the monitor closed after surveillance testing.

In House Event 94-73 "Unit 1 Containment Radiation Monitor Out of Service Due to a Mispositioned Valve" This event occurred due to a HP technician leaving valve number 3 closed due to inadequate labeling after a plant change modification was made.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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**Figure 1**