

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)

CRYSTAL RIVER UNIT 3

DOCKET NUMBER (2)

0 5 0 0 0 3 0 2

PAGE (3)

1 OF 03

TITLE (4)

LOSS OF ALL AUXILIARY BUILDING EXHAUST FANS

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	6	15	84	84	012	00	07	1384	N/A		0 5 0 0 0	
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)												
OPERATING MODE (9)			20.402(b)			20.405(e)			60.73(a)(2)(iv)			73.71(h)
POWER LEVEL (10)			20.405(a)(1)(i)			60.36(e)(1)			60.73(a)(2)(v)			73.71(e)
0 9 9			20.405(a)(1)(ii)			60.36(e)(2)			60.73(a)(2)(vi)			OTHER (Specify in Abstract below and in Text, NRC Form 366A)
			20.405(a)(1)(iii)			X 60.73(a)(2)(i)			60.73(a)(2)(viii)(A)			
			20.405(a)(1)(iv)			60.73(a)(2)(ii)			60.73(a)(2)(viii)(B)			
			20.405(a)(1)(v)			60.73(a)(2)(iii)			60.73(a)(2)(ix)			

LICENSEE CONTACT FOR THIS LER (12)

NAME W. K. Bandhauer, Nuclear Safety Supervisor

TELEPHONE NUMBER

AREA CODE

9 0 4 7 9 5 - 6 4 8 6

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
A	L D	T B G	X 9 9 9	No					
B	V F D M P	J 0 7 3	No						

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)

On June 15, 1984, an Instrument Air supply line to the dampers for the Auxiliary Building Exhaust Fans (AHF-14A,B,C,D) was broken. The suction and discharge dampers for AHF-14A,B,C,D failed closed and the fans were secured to prevent damage. Technical Specification 3.7.8.1 requires two independent pairs of exhaust fans and four filter systems to be operable. This failure rendered both pairs of exhaust fans inoperable, hence, the limiting condition for operation as specified in Technical Specification 3.7.8.1 could not be met and Technical Specification 3.0.3 was applied. In addition, the Instrument Air line supplied opening air to the Reactor Building exhaust fan dampers. With these dampers closed the flow path for the hydrogen purge system required by Technical Specification 3.6.4.2 was inoperable.

The Instrument Air supply line was subsequently repaired and the exhaust fans were returned to service prior to starting a load reduction required by Technical Specification 3.0.3.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104  
EXPIRES 8/31/85

FACILITY NAME (1)  CRYSTAL RIVER UNIT 3	DOCKET NUMBER (2)  0 5 0 0 0 3 0 2	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 4	— 0 1 2	— 0 0	0 2	OF	0 3

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

**EVENT DESCRIPTION**

On June 15, 1984, Crystal River Unit 3 was in steady state operation at 99% reactor power and generating 870 MWe. Contract workers were moving materials into the ventilation area of the Auxiliary Building (NF) 143' elevation for a plant modification. At 1436, while carrying a large support structure into the ventilation area, an Instrument Air supply line (LD) was inadvertently struck by the support structure, thus rupturing the instrument air line. The instrument air line supplied air to the suction and discharge dampers (VF, DMP) for AHF-14A,B,C, and D (VF, FAN). These dampers closed when supply air was lost. Control Room operators were not automatically alerted to the event until notified by a technician working in the area of the air line rupture. A flow switch, (VF, FS) AH-31-DPS, should have closed to cause an alarm. When the dampers closed, it is suspected the dampers did not fully close allowing some continued air flow. Upon notification the Control Room operator promptly secured the operating pair of exhaust fans to prevent fan damage. The supply fans to the Auxiliary Building were tripped by an interlock when the exhaust fans were secured. All doors (NF, DR) into the Auxiliary Building were closed.

The ruptured instrument air supply line was repaired at 1520 and fans AHF-14A and C were restarted. Approximately 40 minutes elapsed from the time the exhaust fans were secured until they were returned to service.

The Instrument Air supply line also supplied opening air to the Reactor Building exhaust fan (VA, FAN) dampers (VA, DMP). Loss of these fan dampers did not cause any operational problems because the system was secured (the containment purge valves (BB, ISV) were locked closed) at the time of failure.

**SAFETY CONSIDERATIONS**

The Auxiliary Building ventilation system is not a safety-related system. It is designed to provide suitable ambient conditions for personnel and equipment, and to mitigate the effects of post accident conditions in the Auxiliary Building. The exhaust fans provide a negative pressure within the Auxiliary Building relative to areas outside the building. This assures all leakage of air will be into the building and all air discharges will be filtered and monitored through the exhaust filter (VF, FLT) and fan system. An interlock (VF, IEL) between the supply and exhaust fans serves to stop the supply fans when the exhaust fans are stopped, preventing pressurization of the Auxiliary Building and subsequent unmonitored discharge of potentially contaminated air. The supply fans stopped as designed, leaving unpressurized release through building openings as the only release path. All doors to the Auxiliary Building were immediately closed thus restricting the release path. The potential release was judged to be well below the release limits and reporting limits.

The containment purge system (BB) is designed to maintain the hydrogen concentration within containment below the flammable limit during post-LOCA conditions. This system is normally secured during plant operation at power and was secured when this event occurred.

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TEXT (If more space is required, use additional NRC Form 365A's) (17)

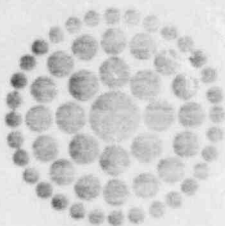
CORRECTIVE ACTION

The 3/8 inch instrument air supply line was repaired and the Auxiliary Building exhaust fans were declared operable at 1520 on June 15, 1984.

A work request was issued to determine why the low air flow alarm was not activated by the closing of the suction and discharge dampers for AHF-14A,B,C, and D.

PREVIOUS SIMILAR EVENTS

This is the third occurrence where all four fans were inoperable. The first occurrence was on October 18, 1983 and the second occurrence was on March 22, 1984. The causes of the previous two occurrences were unrelated to the cause of this event.



**Florida  
Power**  
CORPORATION

July 13, 1984  
3F0784-09

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

Subject: Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72  
Licensee Event Report No. 84-012-00

Dear Sir:

Enclosed is Licensee Event Report (LER) No. 84-012-00 which is submitted in accordance with 10 CFR 50.73.

Should there be any questions, please contact this office.

Sincerely,

G. R. Westafer  
Manager, Nuclear Operations  
Licensing and Fuel Management

AEF/feb

Enclosure

cc: Mr. James P. O'Reilly  
Regional Administrator, Region II  
Office of Inspection & Enforcement  
U.S. Nuclear Regulatory Commission  
101 Marietta Street N.W., Suite 2900  
Atlanta, GA 30323

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