

## 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 04						
TITLE (4) Declaration of Unusual Event Due to Toxic Gas Release Near Site																				
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)							
1	0	2	7	8	4	8	4	0	2	1	0	0	1	2	0	7	8	4	N/A	0 5 0 0 0
OPERATING MODE (9) 1										THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)						73.71(b)				
POWER LEVEL (10) 0 9 2		20.402(b)				20.405(c)				50.73(a)(2)(iv)				73.71(e)						
		20.406(a)(1)(i)				50.36(c)(1)				50.73(a)(2)(v)				X OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
		20.406(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vi)				Voluntary						
		20.406(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(vii)(A)										
		20.406(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(vii)(B)										
		20.406(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)										
LICENSEE CONTACT FOR THIS LER (12)																				
NAME W. K. Bandhauer, Nuclear Safety Supervisor										TELEPHONE NUMBER 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	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	
B	G	B	S	E	A	L	S	1	5	0	N									
SUPPLEMENTAL REPORT EXPECTED (14)																EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)										NO		0 6		3	0	8	5			

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

At 1355 on October 27, 1984, the Crystal River Unit 3 Nuclear Shift Supervisor was notified by Crystal River Unit 1 & 2 personnel of a leak from a sulfur dioxide tank on the Unit 1 & 2 premises. Because of the proximity of the leaking tank to Unit 3, an Unusual Event was declared at 1400 on October 27, 1984. As a precaution in the event of a wind shift, some personnel were evacuated and control complex ventilation was placed in the emergency recirculation mode. The Unusual Event was terminated at 1846 on October 27, 1984, upon notification from Unit 1 & 2 personnel that the leak had been stopped. Crystal River Unit 3 continued to operate normally during the event. This report is submitted voluntarily.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

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

INITIATING EVENT

At 1355 on October 27, 1984, Crystal River Unit 1 & 2 personnel informed the Crystal River Unit 3 Nuclear Shift Supervisor of a leaking sulfur dioxide tank on the Unit 1 & 2 premises (located just west of the Unit 3 site--see Figure 1). An Unusual Event was declared due to the proximity of the leaking tank to the Unit 3 site, coupled with the hazard presented by sulfur dioxide gas. This situation meets the criterion of "Toxic gas ... near or on-site but not entering the facility", which is Condition 4b. for an Unusual Event as stated in Emergency Plan Implementing Procedure EM-202, "Duties of the Emergency Coordinator". Sulfur dioxide is technically classified however, as an irritant and not a toxin.

EVENT DESCRIPTION

The Unit 3 Control Complex Ventilation System (VI) was immediately placed in the emergency recirculation mode as a precautionary measure. Personnel access to the west side of the Unit 3 site was restricted as a precautionary measure even though the wind was from the southeast (140 degrees), tending to blow the sulfur dioxide gas northwest and away from Unit 3. Additionally, the Turbine Building Ventilation System (VK) fans located on the west side of the Turbine Building were secured.

During the course of this event the wind direction slowly and steadily shifted westerly from 140 degrees to 310 degrees. Between 1500 and 1530 the winds approached 225 degrees, tending to blow the gas toward the Unit 3 site and causing sulfur dioxide odors to be noted in the Unit 3 Turbine Building. Consequently, at 1530 non-essential personnel were evacuated from the Unit 3 site. The evacuation consisted primarily of contract construction personnel and had no effect on the operation of the plant. The installed Toxic Gas Monitoring System sulfur dioxide channel rose from 0.01 parts per million (ppm) prior to the event to a peak of 3.45 ppm at 1530 measured in the control complex outside air suction duct. Abnormal Procedure AP-513, "Toxic Gas Monitor Actuation", was followed when the monitor alarmed at 2.00 ppm; however, this was merely a verification process, as the Control Complex had been placed in the emergency recirculation mode immediately on declaration of an Unusual Event.

At 1846 on October 27, 1984, Unit 3 was notified that the sulfur dioxide leak had been stopped. This was accomplished by discharging the sulfur dioxide tank contents up the Unit 1 stack for processing and release via the installed precipitators. When the sulfur dioxide tank was emptied, the leak stopped and the Unusual Event was terminated. All ventilation systems were restored to normal status and normal plant access was restored.

SAFETY CONSIDERATIONS

No safety systems at Crystal River Unit 3 were compromised and the health and safety of the public were maintained during this event. The peak sulfur dioxide reading during the event was 3.45 ppm, which is below the short-term threshold of toxicity for sulfur dioxide (5.00 ppm per the Chemistry and Physics Handbook).

## 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 8 4 — 0 2 1 — 0 0	LER NUMBER (8)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
					0 3	OF 0 4

TEXT (If more space is required, use additional NRC Form 385A's) (17)

CORRECTIVE ACTION

In response to this event, Florida Power Corporation has initiated a task force to investigate this release and to determine appropriate measures necessary to preclude future occurrences of this and similar events. A supplement to this report will be made when the results of the task force evaluation are available. These are expected to be available by June 30, 1985.

PREVIOUS SIMILAR EVENTS

This is the first event concerning entry into an Unusual Event based on sulfur dioxide gas releases near the Crystal River Unit 3 site.

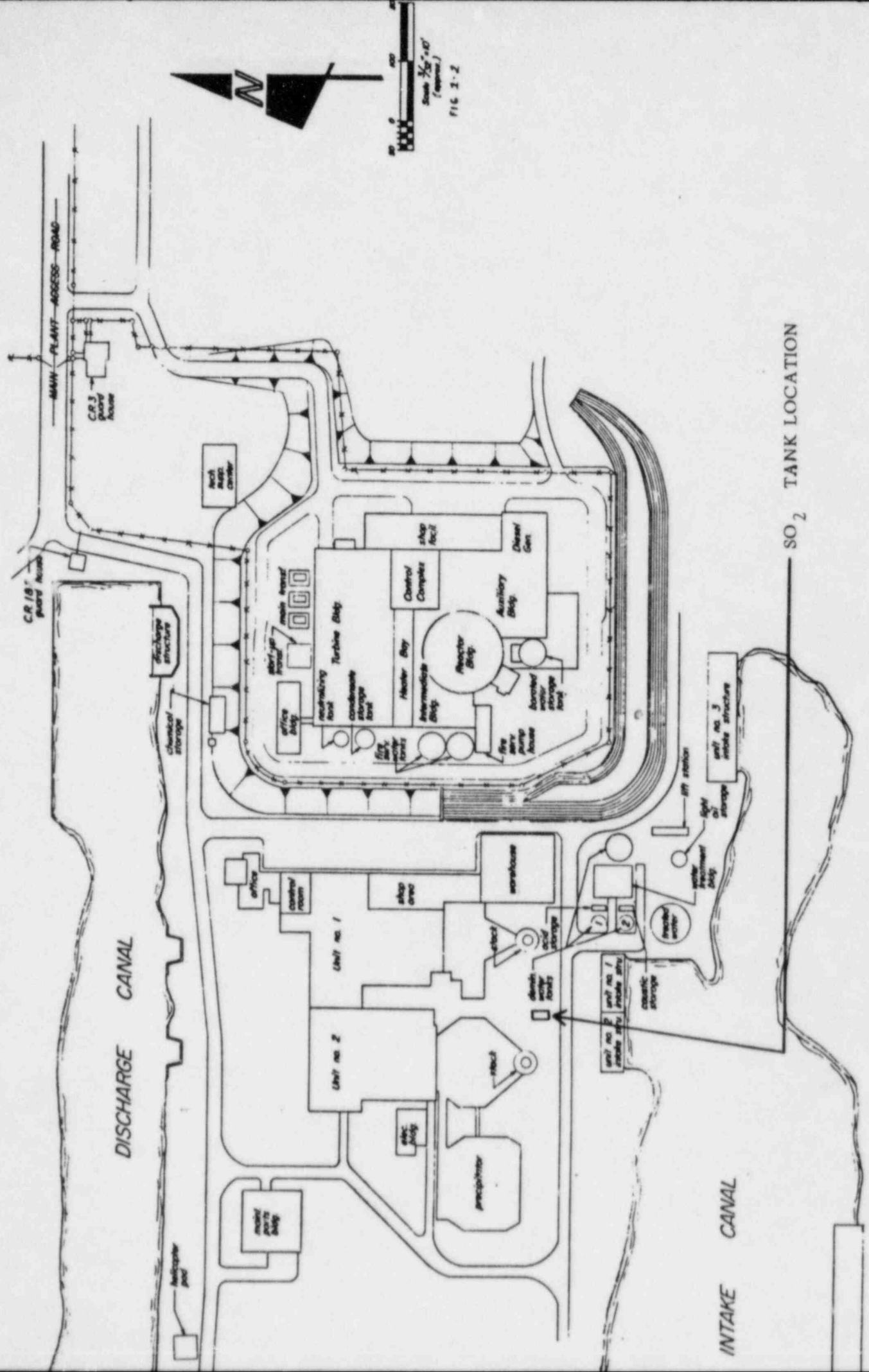
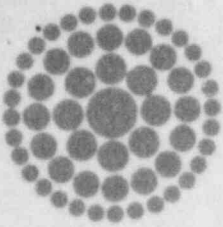


Figure 1



**Florida  
Power**  
CORPORATION

December 7, 1984  
3F1284-02

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. 84-021-00

Dear Sir:

Enclosed is Licensee Event Report (LER) No. 84-021-00 which is submitted voluntarily by Florida Power Corporation.

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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