



**Florida  
Power**  
CORPORATION

May 23, 1990  
3F0590-15

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

Subject: Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72  
Licensee Event Report No. 90-007

Dear Sir:

Enclosed is Licensee Event Report (LER) 90-007 which is submitted in accordance with 10 CFR 50.73.

Should there be any questions, please contact this office.

Sincerely,

G. L. Boldt  
Vice President, Nuclear Production

WLR:mag

Enclosure

xc: Regional Administrator, Region II  
Senior Resident Inspector

9005310322 900523  
PDR ADOCK 05000302  
S PDC

## LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

CRYSTAL RIVER UNIT 3

DOCKET NUMBER (2)

0 5 0 0 0 3 0 2

PAGE (3)

1 OF 0 3

TITLE (4) Inadequate Implementation of Control Complex Habitability Study Leads to Breach of Habitability Envelope and Inoperability of Both Trains of Emergency Ventilation System

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	4	23	9	0	9	0	0	7	0	0	0	5	2	3	9	0	N/A	0 5 0 0 0
OPERATING MODE (9)		6		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)														
POWER LEVEL (10)		0 0 0		20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)								
				20.406(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)								
				20.406(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)								
				20.406(a)(1)(iii)		X 50.73(a)(2)(i)		50.73(a)(2)(viii)(A)										
				20.406(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)										
				20.406(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(ix)										

LICENSEE CONTACT FOR THIS LER (12)

NAME

W. A. STEPHENSON, 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 NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

On January 12, 1990 Crystal River Unit Three was in OPERATIONAL MODE ONE (POWER OPERATION) at 98% RATED THERMAL POWER. During a walkdown of the control complex ventilation system, a utility engineer discovered that a door between the control complex and turbine building had been removed for modification work. On April 23, 1990, following extensive research and interpretation, it was determined that this was an operation prohibited by Technical Specifications because it allowed excessive leakage into the control complex habitability envelope, rendering both trains of the Control Complex Emergency Ventilation System inoperable.

This event was caused by inadequate implementation of the Control Complex Habitability Study, which had been performed in response to NUREG 0737, Item III.D.3.4.

The door was replaced within about eight hours of discovery by the utility engineer. Development of corrective action to preclude recurrence is not complete, but will include placement of appropriate warning signs on all habitability envelope doors, and the development and implementation of a program to control all control complex habitability envelope penetrations.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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			
		9 0	— 0 0 7	— 0 0	0 2	OF	0 3

TEXT (If more space is required, use additional NRC Form 386A's) (17)

EVENT DESCRIPTION

On January 12, 1990, Crystal River Unit Three was in OPERATIONAL MODE ONE (POWER OPERATION) at 98% RATED THERMAL POWER. During a walkdown of the Control Complex Ventilation System [VI], a utility engineer discovered that a door [VI,DR] between the control complex [NA] and the turbine building [NM] had been removed for modification work. The engineer questioned whether this door was a part of the control complex habitability envelope and whether its removal during power operation was allowed. No Technical Specification exists for the Control Complex Habitability Envelope. The door was replaced within about eight hours of removal.

On April 23, 1990, following extensive research and interpretation on this issue, it was determined that removing this door rendered both trains of the Control Complex Emergency Ventilation System inoperable. Technical Specifications require that with both trains of the Control Complex Emergency Ventilation System inoperable either one train be restored to operability within one hour or the plant be placed in Operational Mode Three (HOT STANDBY) within the following six hours. This door was removed for about eight hours without complying with this specification. This constitutes an activity prohibited by Technical Specifications and, as such, is being reported pursuant to 10CFR50.73.a.2.i.B.

CAUSE

NUREG 0737, Item III.D.3.4, required that each plant perform a Control Room Habitability Study. Crystal River Unit Three performed this study and submitted a report to the NRC on June 30, 1987. This report contained calculations of control complex habitability envelope leakage based on the assumption that each door and other penetration remained intact. No guidance for operating the plant within these assumptions was implemented into plant procedures or Technical Specifications. Therefore, the cause of this event was inadequate implementation of the Control Complex Habitability Study.

EVENT EVALUATION

No redundant equipment was available to perform the safety function of this system. If an accident involving a large radioactive release had occurred during the time that the door was removed, operator radiation doses might have exceeded those calculated in the FSAR. Similarly, if a large chemical release had occurred during the time that the door was removed, the chemical concentrations in the control complex atmosphere might have exceeded those calculated in the FSAR. It is unlikely that either of these events would have resulted in the inability of the operators to perform their functions. No such accidents occurred; therefore, there was no impact on the health and safety of the public.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
CRYSTAL RIVER UNIT 3	0   5   0   0   0   3   0   2	9   0	—   0   0   7	—   0   0	0   3	OF 0   3	

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

The Control Complex Emergency Ventilation System was in normal standby status throughout this event. No compensatory measures were taken because the door had been re-installed before a determination of the operability of the Control Complex Emergency Ventilation System was made.

CORRECTIVE ACTION

The door was replaced as soon as possible after the engineer began questioning its impact on control complex habitability. The door was removed for a total of about eight hours.

Signs will be posted on all control complex habitability envelope doors. These signs will contain warnings about the special nature of the doors and state what actions must be taken before performing work on the doors or maintaining them open. A program to control all control complex habitability envelope penetrations will be developed.

PREVIOUS SIMILAR EVENTS

No previous events involving degradation of the control complex habitability envelope were found.