Florida
Power
CORPORATION
Crystal River Unit 3
Docket No. 50-302

May 26, 1995

3F0595-04

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

Subject: Licensee Event Report (LER) 95-004-01

Dear Sir:

Please find the enclosed Licensee Event Report (LER) 95-004-01. This supplement is submitted in accordance with 10 CFR 50.73. It provides a comprehensive corrective action plan and cause for the reporting delay, as well as additional information relative to a non-reportable habitability envelope breach involving floor drains.

Sincerely,

G. L. Boldt
Vice President
Nuclear Production

GLB/JAF:ff

Attachment

xc: Regional Administrator, Region II
Project Manager, NRR
Senior Resident Inspector

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NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HOURS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
CRYSTAL RIVER UNIT 3 (CR-3)	0 5 0 0 0 3 0 2	1 OF 0 5

TITLE (4)

Personnel Error Causes Control Complex Habitability Envelope Breach Resulting in Operation outside Design basis

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 3	2 1	9 5	9 5	— 0 0 4	— 0 1	0 5	2 6	9 5	N/A	0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (CHECK ONE OR MORE OF THE FOLLOWING) (11)									
	1		20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)		
POWER LEVEL (10)	1 0 0		20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)		
			20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)		
			20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)				
			20.405(a)(1)(iv)	X	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)				
			20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)				

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
J. A. Frijouf, Nuclear Regulatory Specialist	9 0 4 5 6 3 - 4 7 5 4

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	

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 March 21, 1995, Florida Power Corporation's (FPC) Crystal River Unit 3 (CR-3) was in MODE ONE (POWER OPERATION), operating at 100% reactor power and generating 882 megawatts. At approximately 0200 and again at approximately 0530, while conducting normal rounds, an auxiliary building operator heard a local alarm initiate on a CR-3 control complex habitability envelope (HE) door, indicating the door ajar. In both instances, within 1 minute of the alarm annunciation, the operator closed the door. Following the 0530 discovery, the operator documented the discrepancies on a Precursor Card. During the normal Precursor Card review, a Problem Report was generated which was evaluated as reportable, since this event may have placed CR-3 outside the design basis. The event was reported to the Nuclear Regulatory Commission at 1143 on March 21, 1995 via the Emergency Notification System and was recorded as Event #28564. This LER is submitted to report a condition outside the design basis of the plant in accordance with 10 CFR 50.73(a)(2)(ii)(B). The cause of both the event and the reporting delay was personnel error. A comprehensive corrective action plan has been established. This LER also provides additional information relative to a non-reportable HE breach involving floor drains.

EVENT DESCRIPTION:

On March 21, 1995, Florida Power Corporation's (FPC) Crystal River Unit 3 (CR-3) was in MODE ONE (POWER OPERATION), operating at 100% reactor power and generating 882 megawatts. At approximately 0200, while conducting normal rounds, an auxiliary building operator heard a local alarm on CR-3 control complex habitability envelope [NA](HE) door [NA,DR] C-301 initiate and not reset, indicating the door did not fully close. Alarms had been recently installed as part of our action to increase personnel awareness of the safety significance of the control room habitability doors in maintaining an acceptable post accident occupancy environment for the control room operators. Within 1 minute of hearing the alarm, the operator closed door C-301. The operator was unable to locate the person who had not properly closed the door. Later, at approximately 0530, while conducting another normal round, the operator again heard the local alarm door for C-301 annunciate. Within 1 minute the door was closed; again the person using the door was not seen nor identified. At that time, the operator documented the discrepancy using a Precursor Card.

At approximately 0830, during the daily Precursor evaluation meeting, FPC personnel determined that the event described on the Precursor card deserved escalated attention, and a Problem Report was issued. Subsequent operability and reportability evaluations were conducted involving the Shift Manager and FPC engineering personnel. At 1118, FPC determined that this event may have placed CR-3 outside the design basis. The event was reported to the Nuclear Regulatory Commission at 1143 on March 21, 1995 via the Emergency Notification System per the requirements of 10 CFR 50.72 and was recorded as Event #28564.

The untimely generation of the Problem Report and the 10 CFR 50.72 report was caused by a misunderstanding of the requirements. This misunderstanding was the result of a lack of adequate criteria to address inadvertent breaches in the HE. Interim guidance has been provided to the operations staff stressing appropriate action when a breach in the HE is detected.

No explicit Improved Technical Specification (ITS) condition associated with a degraded HE currently exists. Such breaches are evaluated as a design basis issue. Therefore, this LER is submitted to report a condition outside the design basis of the plant in accordance with 10 CFR 50.73(a)(2)(ii)(B).

At 1411, On May 9, 1995, contract Security personnel reported outward flow of air from two 4 inch floor drains in the Heating, Ventilating, & Air Conditioning (HVAC) equipment room within the control complex HE. Subsequent engineering evaluations determined that the breaches did <u>not</u> constitute a condition outside the design basis since the total cross-sectional area of the breaches did not exceed the established margin. This event is being included as voluntary additional information.

EVENT EVALUATION

Relative to door C-301, no redundant barrier was available to perform the safety function. If an accident involving a large radioactive release had occurred during the time that the breach existed, with worst case meteorological conditions and no mitigating effects, operator radiation doses might have slightly exceeded those calculated in the FSAR. Similarly, if a large chemical release had occurred during the time that the breach was in place, the chemical concentrations in the control complex atmosphere might have slightly 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. Core damage frequency calculations for SO_2 tank rupture have shown a core damage frequency of 8.13×10^{-8}/year, which fits into the "non-risk significant" region of the NEI PSA (Nuclear Energy Institute Probabilistic Safety Analysis) Application Guide. Therefore there was no impact on the health and safety of the public.

CAUSE

The cause of this event was personnel error by unidentified person or persons for failure to assure the HE door was closed after passing through it. The cause of the delay in generating the Problem report and providing the 10 CFR 50.72 report was caused by a misunderstanding of the requirements based on a lack of adequate criteria to address inadvertent breaches in the HE.

IMMEDIATE CORRECTIVE ACTION

1. For both instances, the door was closed within 1 minute.
2. The operator initiated a precursor card to address the concern.
3. As related to the additional information about the floor drains, water was added to the floor drains establishing their loop seals.

ADDITIONAL CORRECTIVE ACTIONS

1. Repairs to door C-301 were initiated and completed.
2. Personnel were reminded that compliance with HE requirements is an important obligation from both a safety and compliance perspective.
3. A shiftly check of the doors will be added as part of the operator rounds.

4. Roving fire watch personnel will check each HE door to assure its closure on an approximate hourly schedule. This effort will discontinue when the concerns associated with door closures has been addressed as determined by plant management.

ACTIONS TO PREVENT RECURRENCE

1. Replacement doors are being designed, procured, and installed.

2. The HE design analysis will be reviewed and if meaningful enhancements are identified, they will be implemented.

3. HE doors will be inspected on a periodic basis to help assure they retain the ability to perform their design function.

4. Additional guidance from Engineering will be provided to Operations personnel and Shift Managers relative to the current design basis requirements of the HE, thereby enhancing the timeliness of reportability decisions and actions associated with the HE.

5. A change to ITS is under review for proposal to the NRC. This change will specifically address the HE and will include required action and completion times applicable when the HE is breached.

PREVIOUS SIMILAR EVENTS

There have been three previous reportable events involving HE breaches. LERs 90-007-00 involved HE door removal, LER 94-010-00 involved blocking open a HE door, and LER 95-001-00 addressed a HE total breach exceeding 32 square inches.

ATTACHMENT

Attachment 1 Abbreviations and Acronyms

ATTACHMENT 1

Abbreviations and Acronyms

FPC	Florida Power Corporation
CR-3	Crystal River Unit 3
MODE ONE	POWER OPERATION
HE	Habitability envelope
ITS	Improved Technical Specifications
HVAC	Heating, Ventilating & Air Conditioning
FSAR	Final Safety Analysis Report
NEI	Nuclear Energy Institute
PSA	Probabalistic Safety Analysis