



**Florida  
Power**

CORPORATION  
Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72

July 13, 2000  
3F0700-07

U.S. Nuclear Regulatory Commission  
Attn.: Document Control Desk  
Washington, D.C. 20555-0001

Subject: Licensee Event Report (LER) 50-302/00-002-00

Dear Sir:

Please find attached Licensee Event Report (LER) 50-302/00-002-00. This LER discusses an inadequately revised Improved Technical Specifications Bases that resulted in exceeding a Limiting Condition For Operation. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

If you have any questions concerning this submittal, please contact Mr. Sid Powell, Manager, Nuclear Licensing, at (352) 563-4883.

Sincerely,

D. L. Roderick  
Director  
Nuclear Plant Operations

DLR/rlm

Attachment

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

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# LICENSEE EVENT REPORT (LER)

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), 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. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

FACILITY NAME (1)

CRYSTAL RIVER UNIT 3

DOCKET NUMBER (2)

05000302

PAGE (3)

1 OF 5

TITLE (4)

Inadequate Identification Of Components Required For Operability Results In Exceeding A Limiting Condition For Operation.

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
03	03	94	00	-- 002 --	00	7	13	00	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)		99.9	20.2201(b)		20.2203(a)(2)(v)		X		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
			20.2203(a)(2)(iii)		50.36(c)(1)				50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iv)		50.36(c)(2)				50.73(a)(2)(vii)	

## LICENSEE CONTACT FOR THIS LER (12)

NAME

Robert L. McLaughlin, Sr. Regulatory Specialist

TELEPHONE NUMBER (Include Area Code)

(352) 795-6486

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

## 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 15 single-spaced typewritten lines) (16)

On June 13, 2000, Florida Power Corporation's (FPC) Crystal River Unit 3 (CR-3) was in MODE 1 (POWER OPERATION) at 99.9 percent RATED THERMAL POWER. Prior to performing a maintenance activity, FPC personnel recognized that certain electrical buses required to be operable by Improved Technical Specifications (ITS) were not clearly identified. The activity would have removed a breaker from service that provides one source of emergency electrical power to the pressurizer heaters. FPC conducted an evaluation to determine if a Limiting Condition for Operation (LCO) of ITS had previously been exceeded. The evaluation determined that an ITS LCO had been exceeded one time in 1994. Various tools used by the work control process to identify equipment required for operability did not clearly reflect the relationship between the electrical buses and the pressurizer heater emergency power supply. There was no reduction in protection of the public health and safety. Corrective actions include a revision to the ITS Bases, a change to the CR-3 Configuration Management System and a revision to an operating procedure.

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CRYSTAL RIVER UNIT 3		05000302		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 5
				00	-- 002 --	00	

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

On June 13, 2000, Florida Power Corporation's (FPC) Crystal River Unit 3 (CR-3) was in MODE 1 (POWER OPERATION) at 99.9 percent RATED THERMAL POWER. Prior to performing a maintenance activity, FPC personnel recognized that certain electrical buses required to be operable by Improved Technical Specifications (ITS) were not clearly identified. The maintenance activity would have removed a 480 volt breaker [BRK] from service that provides one source of emergency electrical power to the pressurizer heaters [PZR, EHTR]. ITS 3.4.8, Pressurizer, provides the Limiting Conditions for Operation (LCO) and Required Actions necessary to maintain the pressurizer OPERABLE and is applicable in MODES 1, 2, and 3. ITS LCO 3.4.8 Condition B requires that a minimum capacity for emergency power supply to the pressurizer heaters be maintained. If it is not, restoration must be made within seventy two hours to remain in compliance with ITS. The applicability of ITS LCO 3.4.8 Condition B to this breaker and similar pressurizer emergency power sources had not previously been recognized.

FPC conducted an evaluation to determine if ITS LCO 3.4.8 Condition B had been exceeded. The evaluation determined that breakers supplying one train of emergency electrical power to the pressurizer heaters had been removed from service with CR-3 in MODE 1 from February 28, 1994, to March 5, 1994, a period of six days. The seventy two hour restoration requirement was exceeded on March 3, 1994. This was a condition prohibited by ITS and is reportable pursuant to 10CFR50.73(a)(2)(i)(B).

**EVALUATION**

The pressurizer maintains primary system pressure during steady state operation and limits the pressure changes caused by reactor coolant thermal expansion and contraction during normal load transients. The pressurizer heaters are used to maintain pressure in the Reactor Coolant System [AB](RCS) so reactor coolant in the loops is subcooled and thus in the preferred state for heat transport to the once through steam generators [SB, SG](OTSGs). A minimum required available pressurizer heater capacity also ensures that the RCS can be maintained at hot standby conditions. Inability to control the system pressure and maintain subcooling under conditions of natural circulation flow in the primary system could lead to loss of single phase natural circulation and decreased capability to remove core decay heat.

Pressurizer heater power supply design provides the capability to supply, from either the offsite power sources or the emergency power sources (when offsite power is not available), sufficient heater capacity and associated controls. The minimum heater capacity and associated controls are connected to the emergency buses in a manner to provide redundant power supply capability. The intent is to ensure the ability to maintain the reactor coolant in a subcooled condition with natural circulation for an undefined, but extended, time period after a loss of offsite power. A loss of pressurizer heaters with a loss of offsite power is not in itself a significant concern for RCS pressure control. RCS pressure control is within the capability of and would be maintained by the Makeup and Purification System [CB](MU) in

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

the event of a loss of pressurizer heaters. This method of RCS pressure control is proceduralized in Emergency Operating Procedure EOP-09, "Natural Circulation Cooldown." Therefore, FPC concludes this temporary inability to energize one train of emergency electrical power to the pressurizer heaters did not represent a reduction in the public health and safety. This event is not a Safety System Functional Failure.

**CAUSE**

The various tools used by the work control process to identify equipment required for operability did not clearly reflect the relationship between the electrical buses and the ITS 3.4.8 pressurizer heater emergency power supply.

**IMMEDIATE CORRECTIVE ACTIONS**

The removal from service of the 480 volt breaker noted above was delayed until contingencies could be established. ITS 3.4.8 Condition B was entered when the breaker was taken out of service. In addition, the appropriate Operating Procedure has been revised to caution operators to consider ITS 3.4.8 when removing this equipment from service.

**ACTIONS TO PREVENT RECURRENCE**

The appropriate tools used by the work control process to identify equipment required for operability will be enhanced to clearly reflect the relationship between the electrical buses and the ITS 3.4.8 pressurizer heater emergency power supply. This will include a revision to ITS 3.4.8 Bases and to the Configuration Management Information System. These actions will be completed in accordance with CR-3's Corrective Action Program.

**PREVIOUS SIMILAR EVENTS**

None

**ATTACHMENTS**

Attachment 1 - Abbreviations, Definitions, and Acronyms  
Attachment 2 - List of Commitments

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**TEXT** (If more space is required, use additional copies of NRC Form 366A) (17)**ATTACHMENT 1****ABBREVIATIONS, DEFINITIONS, AND ACRONYMS**

10CFR	Title 10 of the Code of Federal Regulations
CR-3	Crystal River Unit 3
EOP	Emergency Operating Procedure
FPC	Florida Power Corporation
ITS	Improved Technical Specifications
LCO	Limiting Condition for Operation
LER	Licensee Event Report
LOCA	Loss of Coolant Accident
MU	Makeup and Purification System
OTSG	Once Through Steam Generator
RCS	Reactor Coolant System

Note: Improved Technical Specifications terms appear in capitalization in the text of the LER. EIS Codes appear in square brackets. Defined terms / acronyms / abbreviations appear in parentheses when first used.

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

**ATTACHMENT 2**

**List of Commitments**

RESPONSE SECTION	COMMITMENT	DUE DATE
	No regulatory commitments are made in submittal.	