

September 9, 1998 3F0998-06

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

Subject:

LICENSEE EVENT REPORT 50-302/98-007-01

Reference:

Licensee Event Report 50-302/98-007-00, dated July 21, 1998

Dear Sir:

Please find enclosed a supplement to Licensee Event Report (LER) 50-302/98-007-00. LER 50-302/98-007-01 discusses additional missed system pressure tests on American Society of Mechanical Engineers (ASME) Code Class 3 components. This report is being submitted pursuant to 10CFR50.73.

Sincerely

C. G. Pardee

Director

Nuclear Plant Operations

CGP/pmp Enclosure

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

for C.G. Parder

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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On June 23, 1998, Florida Power Corporation's (FPC) Crystal River Unit 3 (CR-3) was in MODE 1 (POWER OPERATION) at 100 percent RATED THERMAL POWER. During an ongoing review of maintenance work packages required to close out the second ten year Inservice Inspection interval, FPC identified thirty-two American Society of Mechanical Engineers (ASME) Code Class 3 components that did not receive a system pressure test prior to being returned to service. The components were subsequently pressure tested satisfactorily. FPC determined this was a result of personnel error during the development of the maintenance work packages. The ASME Code, Section XI Repair and Replacement Program and the process to develop work packages, Compliance Procedure CP-113B, "Work Request Evaluation and Planning," will be evaluated for enhancements to ensure compliance with ASME Code, Section XI testing requirements. Changes will be made to the process, as appropriate, by September 30, 1998. Two similar events were previously reported by FPC.

NRC FORM 366A (6-1998) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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

DESCRIPTION

On June 23, 1998, Florida Power Corporation's (FPC) Crystal River Unit 3 (CR-3) was in MODE 1 (POWER OPERATION) at 100 percent RATED THERMAL POWER. During an ongoing review of maintenance work packages required to close out the second ten year Inservice Inspection Interval, FPC identified that twenty-seven repaired or replaced American Society of Mechanical Engineers (ASME) Code Class 3 components were returned to service without having a system pressure test performed, as required by ASME Code, Section XI. The components were in the following ASME Code Class 3 systems:

DJ Diesel Generator Jacket Cooling

RW Nuclear Services and Decay Heat Seawater

CH Chilled Water, Appendix R

SW Nuclear Service Closed Cycle Cooling Water

SF Spent Fuel Cooling

The extent of condition review of work requests for ASME Code Class 3 components, for the second inspection interval, was completed on August 28, 1998. The review identified five additional ASME Code Class 3 components in the DJ, RW, and SW system that did not receive a system pressure test prior to being returned to service.

CR-3 Technical Specification Section 4.0.5 (b) (which was in effect until December 20, 1993) and Improved Technical Specification (ITS) Sections 5.6.2.8 and 5.6.2.9, require ASME Code Class 1, 2, and 3 components to be inspected and tested in accordance with the applicable ASME Code, Section XI, as referenced in 10CFR50.55a. Thirty-two ASME Code Class 3 components did not receive a system pressure test prior to being returned to service between 1987 and 1998.

FPC determined this issue represents a condition that was prohibited by Technical Specifications and is reportable pursuant to 10CFR50.73.

EVALUATION

The components identified to not have been appropriately tested were limited to ASME Code Class 3 components with bolted connections. The components received a functional leak check when they were placed back into service following repair or replacement and were found to be acceptable. The components were subsequently satisfactorily pressure tested in accordance with ASME Code, Section XI. Failing to perform the Code system pressure test on these components did not adversely affect the ability of the components to perform their intended function. Therefore, there was no increased risk to the health and safety of the public.

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CAUSE

The cause for not performing the required Code system pressure testing was personnel error. Maintenance work packages are generated by the Work Control Planners. The Planners determine if the work package involves an ASME Code Class 1, 2, or 3 component. When a Code Class component is involved, the package is reviewed by engineering to determine the testing required per ASME Code, Section XI. In some cases, the Work Control Planners did not forward the work package to engineering for an ASME Code, Section XI review. For the remaining cases, engineering did not properly recognize and specify required ASME Code, Section XI testing. Therefore, the maintenance work packages did not include the requirement to perform the ASME Code, Section XI examinations, and the tests were not performed.

IMMEDIATE CORRECTIVE ACTIONS

ASME Code, Section XI pressure tests were subsequently performed on the components with satisfactory results. The components are currently in compliance with the requirements of ASME Code Section XI. No additional immediate corrective actions were necessary.

ACTIONS TO PREVENT RECURRENCE

The computer program database fields used to develop and plan the work requests have been modified. The database fields now include the Code Class designation for components and approval by ISI Programs for work packages associated with Class 1, 2, and 3 components.

The following corrective actions will be implemented.

- The ASME Code, Section XI Repair and Replacement Program and the process to develop work packages, Compliance Procedure CP-113B, "Work Request Evaluation and Planning," will be evaluated for enhancements to ensure compliance with ASME Code, Section XI testing requirements. Changes will be made to the process, as appropriate, by September 30, 1998.
- FPC will provide ASME Code, Section XI training for the personnel that develop and review work packages by September 30, 1998.

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PREVIOUS SIMILAR EVENTS

FPC has previously submitted two other reports regarding missed ASME Code, Section XI pressure testing.

LER 87-018-01 Discussed system hydrostatic tests (hydros) performed between 1980 through 1986 that were not performed in accordance with the Technical Specification required edition of the ASME Code, Section XI.

LER 90-013-00 Discussed a decay heat closed cycle cooling system heat exchanger drain valve that was not tested in accordance with the ASME Code.

ATTACHMENTS

Attachment 1 - Abbreviations, Definitions, and Acronyms

Attachment 2 - Commitments

Attachment 3 - Listing of Components of Missed Pressure Tests

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ATTACHMENT 1

ABBREVIATIONS, DEFINITIONS, AND ACRONYMS

10CFR Title 10 of the Code of Federal Regulations

CR-3 Crystal River Unit 3

FPC Florida Power Corporation

LER Licensee Event Report

ASME American Society of Mechanical Engineers

ITS Improved Technical Specifications

DJ Diesel Generator Jacket Cooling

RW Nuclear Services and Decay Heat Seawater

CH Chilled Water, Appendix R

SW Nuclear Service Closed Cycle Cooling Water

SF Spent Fuel Cooling

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

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ATTACHMENT 2

RESPONSE SECTION	COMMITMENT	DUE DATE
Action to Prevent Recurrence	The ASME Code, Section XI Repair and Replacement Program and the process to develop work packages Compliance Procedure CP-113B, "Work Request Evaluation and Planning," will be evaluated for enhancements to ensure compliance with ASME Section XI testing requirements. Changes will be made to the process, as appropriate, by September 30, 1998.	September 30, 1998
Action to Prevent Recurrence	FPC will provide ASME Code, Section XI training for the personnel that develop and review work packages.	September 30, 1998

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ATTACHMENT 3

Component	Description	System	Date Test Missed	Date Tested
RW-146	2" valve on heat exchanger DCHE-1A	RW	12/11/96	4/3/98
DJV-27	EDG radiator outlet check valve	DJ	1/11/94	4/13/94
RWV-147	2" valve on DCHE-1B	RW	3/11/97	3/24/97
DJP-2	Diesel Generator lube oil pump	DJ	3/30/92	5/2/94
RWEJ-1	Expansion Joint, Discharge Canal	RW	2/24/93	9/30/97
SWHE-1B	SW heat exchanger	SW	9/8/89	9/13/91
RWV-99	SWHE-1B drain plug	RW	8/15/95	6/25/97
RW-26	14" 90 degree elbow, SW heat exchanger. RW supply side	RW	12/15/96	2/18/97
RW-70	24" 90 degree elbow, DC heat exchanger discharge	RW	11/29/95	1/18/97
RWEJ-9	heat exchanger SWHE-1D inlet	RW	12/14/95	2/18/97
SWEJ-2	Suction SWP-1B	SW	6/22/96	2/10/98
RWEJ-10	heat exchanger SWHE-1D outlet	RW	5/28/96	5/31/96
RW-17-TI	RW temperature indicator	RW	3/21/96	11/3/97
RW-26-TI	RW temperature indicator	RW	8/25/95	2/10/97
DJP-4	Emergency Diesel Generator lube oil pump	DJ	8/26/91	12/19/91
RWP-3A	RW pump	RW	3/25/96	10/29/97
CHEJ-8	Expansion joint	CH	4/28/89	1/18/97
CHEJ-4	Expansion joint	CH	3/10/89	4/1/89
RWV-109	SDP-7 discharge check valve	RW	2/25/94	6/3/96
RWP-2B	SW pump	RW	5/23/94	3/18/97
RWP-2A	SW pump	RW	3/23/96	3/25/96
RWV-38	RWP-2A discharge check valve	RW	3/28/91	7/20/95
SWP-1C	SW pump	SW	6/11/91	3/23/93
RWV-103	heat exchanger SWHE-1D drain plug	RW	8/8/95	2/14/97
RW-96	heat exchanger SWHE-1D vent plug	RW	7/31/95	2/14/97
SFV-34	pump SFP-1A/B discharge crosstie	SF	9/7/93	3/5/96
RW-97	heat exchanger SWHE-1A drain plug	RW	2/1/97	9/12/97
DLP-5	Emergency Diesel Generator Standby Circulating Pump	DJ	9/30/97	8/21/98
DJP-4	Emergency Diesel Generator Standby Jacket Coolant Pump	DJ	6/10/98	7/2/98
RW-148	2" stainless steel ball valve	RW	8/6/97	8/27/98
SWV- 292	heat exchanger AHHE-29B outlet	SW	8/12/97	8/27/98
DJP-3	Emergency Diesel Generator Standby Jacket Coolant Pump	DJ	11/5/97	8/21/98
	System Abbreviations			
DJ	Diesel Generator Jacket Cooling			
DIM	Nuclear Services and Decay Heat Seawater			

DJ	Diesel Generator Jacket Cooling
RW	Nuclear Services and Decay Heat Seawater
CH	Chilled Water, Appendix R
SW	Nuclear Service Closed Cycle Cooling Water
SF	Spent Fuel Cooling