

February 9, 2000 3F0200-07

U.S. Nuclear Regulatory Commission

Attn.: Document Control Desk Washington, D.C. 20555-0001

Subject: Licensee Event Report (LER) 50-302/00-001-00

Dear Sir:

Please find attached Licensee Event Report (LER) 50-302/00-001-00. This LER discusses a Surveillance Requirement that was not performed within the required time frame of Improved Technical Specifications. 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 Engineering and Projects

DLR/rlm

Attachment

xc: Regional Administrator, Region II

Senior Resident Inspector NRR Project Manager

NRC FORM	A 366	U.S. N	UC	LEAR RE	GULATORY COM	1MISSION				APPRO	VED BY OMB N	O. 3150-0104 E	XPIRES	06/30/20	01			
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On January 12, 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. FPC personnel discovered that a Surveillance Requirement (SR) was not performed within the required time frame of Improved Technical Specifications (ITS). ITS 3.6.3, "Containment Isolation Valves (CIVs)," provides the Conditions and Required Actions necessary to maintain the CIVs OPERABLE. ITS SR 3.6.3.3 requires verification every 31 days that each containment isolation manual valve and blind flange located outside containment is closed. Makeup and Purification Valve MUV-520 became a CIV as a result of a plant modification installed during Refuel 11 but was not added to the CIV surveillance procedure until January 11, 2000. The cause was a weakness in the technical review process. MUV-520 was verified to be in the correct position. There was no decrease in protection of the health and safety of the public.

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	CRYSTAL RIVER UNIT 3	05000302	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 6		
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

DESCRIPTION

On January 12, 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. FPC personnel discovered that a Surveillance Requirement (SR) was not performed within the required time frame of Improved Technical Specifications (ITS). ITS 3.6.3, "Containment Isolation Valves (CIVs)[BD, ISV]," provides the Conditions and Required Actions necessary to maintain the CIVs OPERABLE. ITS SR 3.6.3.3 requires verification that each containment isolation manual valve and blind flange located outside containment required to be closed during accident conditions is closed. This Surveillance Requirement is satisfied by a system walkdown on a 31 day frequency. Surveillance Procedure SP-341, "Monthly Containment Isolation Valve Operability Check," is used to perform this Surveillance Requirement.

On January 11, 2000, FPC revised SP-341, adding a requirement to verify that Makeup and Purification System vent and drain valve MUV-520 [CB, VTV] was closed and capped. When a question arose as to how the SR had been met prior to this revision, a determination was made on January 12, 2000, that MUV-520 had not been previously surveilled. An investigation revealed that MUV-520 became a CIV as a result of a plant modification installed during the Refuel 11 outage, which ended in November, 1999. MUV-520 should have been surveilled by December 9, 1999, but was not surveilled until January 11, 2000. The failure to perform the Surveillance Requirement is a condition prohibited by ITS and is reportable pursuant to 10CFR50.73(a)(2)(i)(B).

EVALUATION

The containment consists of the concrete reactor building (RB)[NH], its steel liner, and the penetrations through this structure. The structure is designed to contain water and steam, as well as radioactive material that may be released from the reactor core following a Design Basis Accident (DBA). The DBAs that result in a challenge to containment from high pressures and temperatures are a loss of coolant accident (LOCA), a steam line break, and a rod ejection accident (REA). A release of significant fission product radioactivity within containment can occur from a LOCA or REA. In the safety analyses of DBAs involving release of fission product radioactivity, it is assumed that the containment is OPERABLE so that the release to the environment is controlled by the rate of containment leakage.

The containment isolation valve safety function is to control containment leakage during a DBA. As part of the containment boundary, containment isolation valve OPERABILITY supports leak tightness of the containment. The normally closed isolation valves are considered OPERABLE when manual valves are closed, check

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valves have flow through the valve secured, blind flanges are in place, and closed systems are intact. The OPERABILITY requirements for containment isolation valves provide assurance that the containment leakage rate assumed in the safety analyses will not be exceeded.

SR 3.6.3.3 requires verification that each containment isolation manual valve and blind flange located outside containment, and required to be closed during accident conditions, is closed. The SR helps to ensure that post accident leakage of radioactive fluids or gases outside the containment boundary is within design limits. It involves verification, through a system walkdown, that those valves outside containment and capable of being mispositioned are in the correct position. A 31 day frequency for performing the Surveillance Requirement is specified in ITS.

MUV-520 is a small (3/4 inch) manual valve with a threaded cap. Although the Surveillance Requirement for MUV-520 was not performed during the period December 9, 1999, to January 11, 2000, it was found in the correct position when verified (closed and capped). The threaded cap and a second normally closed 3/4 inch manual valve in that line further reduces the potential for containment leakage if the valve had been mispositioned. Therefore, FPC concludes this condition did not represent a reduction in the public health and safety. Also, the identified condition does not represent a Safety System Functional Failure.

CAUSE

The primary cause of the problem was a weakness in the technical review process. The impact of the modification on SP-341 was also not appropriately implemented by FPC personnel during the technical review.

IMMEDIATE CORRECTIVE ACTIONS

MUV-520 was verified to be in the correct position with the threaded cap installed. An extent of condition review was conducted on the plant modification installed during Refuel 11 involving containment penetrations to determine if other problems occurred. No other deficiencies were noted.

ACTIONS TO PREVENT RECURRENCE

This modification was designed under Nuclear Engineering Procedure NEP-210, "Modification Approval Records." NEP-210 was replaced in March, 1999 by NEP-210A, "Enhanced Modification Approval Records," which strengthens this process by

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identifying and appropriately assigning technical reviewers. Lessons learned from this event will be communicated to engineering and operations personnel to improve the awareness of the requirements.

PREVIOUS SIMILAR EVENTS

LER 99-006-00	Procedure Revision Causes Improved Technical Specification Surveillance Requirements To Be Implemented Improperly
LER 98-013-00	Procedural Inadequacy Caused By Personnel Error Results In Missed Surveillance Requirements
LER 96-018-01	Inadequate Containment Penetration Surveillance Procedures Result In Technical Specification Violation.

ATTACHMENTS

Attachment 1 - Abbreviations, Definitions, and Acronyms

Attachment 2 - List of Commitments

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ATTACHMENT 1

ABBREVIATIONS, DEFINITIONS, AND ACRONYMS

10CFR Title 10 of the Code of Federal Regulations

CIV Containment Isolation Valve

CR-3 Crystal River Unit 3

DBA Design Basis Accident

FPC Florida Power Corporation

ITS Improved Technical Specifications

LER Licensee Event Report

LOCA Loss of Coolant Accident

MUV Makeup and Purification Valve

NOS Nuclear Operations Support

NUPOST Nuclear Operations Procedure Observations and Suggestions Tracking

SP Surveillance Procedure

RB Reactor Building

REA Rod Ejection Accident

SR Surveillance Requirement

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

List of Commitments

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