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NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

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

TITLE (4) INADEQUATE PROCEDURE CHANGE SAFETY EVALUATION REVIEW RESULTS IN THE USE OF SEISMIC MONITORS WITH MEASUREMENT RANGES NOT IN COMPLIANCE WITH THE TECHNICAL SPECIFICATIONS

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)
1 2	1 8	8 7	8 7	0 3 1	0 0	0 1	1 8	8 8	N/A	0 5 0 0 0
									N/A	0 5 0 0 0

OPERATING MODE (9): 5

POWER LEVEL (10): 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
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)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	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)
L. W. MOFFATT, NUCLEAR SAFETY SUPERVISOR	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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	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 December 18,1987 Crystal River Unit 3 was in the cold shutdown condition (Mode 5). The measurement range of the installed triaxial peak accelograph seismic monitors was discovered to be +/- 1.0 g. The plant Technical Specifications require that this range be +/- 2.0 g. The calibration range of the detectors was changed as a result of a procedure change made in June, 1979.

The cause of this event is personnel error in the performance of a safety evaluation for the procedure change made in 1979. The safety evaluation incorrectly identified this change as complying with the Technical Specifications.

All three affected accelographs have been replaced with detectors of the proper range. Since 1979, there have been several changes in the procedure review process which have reduced the probability of similar occurrences. A training module on the review of 10CFR50.59 safety evaluations has been developed.

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

EVENT DESCRIPTION

On December 18, 1987, Crystal River Unit 3 (CR-3) was in cold shutdown (Mode 5) following refueling operations. At approximately 0800, during a review of the triaxial peak accelograph channel check and associated vendor calibration data, the measurement range of the installed triaxial peak accelograph seismic monitors [MON] was discovered to be +/- 1.0 g. The monitors are installed on top of the reactor vessel head [AB, RPV], the "A" steam generator [AB, SG], and the borated water storage tank [BP, TK]. The plant Technical Specifications requires that these monitors have a +/- 2.0 g measurement range. Since the installed instruments represent a condition prohibited by the plant's Technical Specifications, this event is being reported in accordance with 10CFR50.73 (a)(2)(i)(B).

When the triaxial peak accelographs were installed, they were designed as +/- 2.0 g detectors to meet Technical Specifications. The monitors were calibrated so that 2 g was equal to full deflection of the detector. On June 23, 1979, a revision to the calibration procedure for the three triaxial peak accelographs was approved which changed the calibration to make 1 g equal to full deflection (making them 1g detectors). The Safety Evaluation for this procedure change incorrectly identified this change as complying with the Technical Specifications. These accelographs have been calibrated as 1.0 g detectors since that time. All of the original detectors have been replaced since that change, and the replacements were also 1.0 g detectors.

CAUSE

The cause of this event was personnel error by a utility non-licensed individual. An inadequate 10CFR50.59 safety evaluation review was performed for a procedure change in June, 1979. The change was made to the calibration procedure for the accelographs, calibrating them for a full deflection of +/-1.0 g. This change apparently was based upon an incorrect interpretation of material contained in the vendor manual.

EVENT ANALYSIS

The safety impact of this event is minimal. This event did not affect the operability or compromise the design basis of the Reactor Coolant System [AB] components to which the accelographs are attached. While the detectors were calibrated for +/- 1.0 g, there was no seismic event which even approached 1.0g.

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

CORRECTIVE ACTION

The accelographs were sent back to the manufacturer to have the necessary adjustments made to calibrate the detectors for +/- 2.0 g. Since startup from the Refuel VI Outage was rapidly approaching, three new accelographs were expedited and have been calibrated and installed on the reactor vessel head, the "A" steam generator,and the borated water storage tank.

Since the inadequate safety review performed on the accelograph calibration procedure, Florida Power Corporation has incorporated changes into its procedure review process which have significantly reduced the probability of similar events. When a procedure change is made, a printout of the commitments applicable to that procedure must be reviewed by the initiator to ensure the change does not compromise a commitment. This review must be repeated independently by designated Qualified Reviewers in the procedure review process. All Qualified Reviewers must go through the appropriate training and be certified by the Director Nuclear Plant Operations.

Greater emphasis is being placed on the adequacy of safety evaluations by both the Plant Review Committee and the Nuclear Safety Supervisor during the review of procedure changes and plant modifications. To further strengthen this emphasis, a training module on the review of 10CFR50.59 safety evaluations has been developed.

PREVIOUS SIMILAR EVENTS

There have been several previous similar events. The most recent was reported in LER 87-26.

Florida Power
CORPORATION

January 18, 1988
3F8801-12

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. 87-031

Dear Sir:

Enclosed is Licensee Event Report (LER) 87-031 which is submitted in accordance with 10 CFR 50.73.

Should there be any questions, please contact this office.

Sincerely,

E C Simpson

E. C. Simpson, Director
Nuclear Operations Site Support

WLR:mag

Enclosure

xc: Dr. J. Nelson Grace
Regional Administrator, Region II

Mr. T. F. Stetka
Senior Resident Inspector

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