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Florida Power
CORPORATION

January 17, 1986
3F0186-20

Dr. J. Nelson Grace
Regional Administrator, Region II
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
101 Marietta Street NW, Suite 2900
Atlanta, GA 30323

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
IE Inspection Report No. 85-42

Dear Sir:

Florida Power Corporation provides the attached as our response to the subject inspection report.

Sincerely,

G. R. Westafer
Manager, Nuclear Operations
Licensing and Fuel Management

Attachment

Westafer(F01)C3-1

Official Copy

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FLORIDA POWER CORPORATION
RESPONSE
INSPECTION REPORT 85-42

VIOLATION 85-42-03

10 CFR Part 50, Appendix B, Criterion V as implemented by the approved Florida Power Corporation (FPC) Operational Quality Program, paragraph 1.7.1.5, requires that procedures or drawings include adequate instructions for work affecting quality.

Contrary to the above, as of December 28, 1984, a plant modification procedure (MAR 81-06-12-01) was inadequate in that it failed to establish proper oil levels in a turbine bearing oil reservoir of the steam driven emergency feedwater pump which resulted in bearing damage to the turbine.

This is a Severity Level IV violation (Supplement I).

RESPONSE

1) FLORIDA POWER CORPORATIONS POSITION

Florida Power Corporation (FPC) accepts the violation in that field change notice (FCN #3) to MAR 81-06-12-01 did not establish correct oil reservoir level marks on the sightglass for the governor end bearing of the emergency feedwater pump (EFP) turbine. The same FCN was used to establish oil level marks for the coupling end of the EFP turbine, and those marks are correct.

2) APPARENT CAUSE OF VIOLATION

FCN #3 modified the original MAR by providing a method to establish the oil level by external rather than internal measurement. This method was determined to be preferable since it was non-invasive and minimized the period of pump unavailability. The method included: 1) measuring the internal diameter of an oil slinger ring taken from stock, 2) calculating the distance from the center of the turbine shaft on which the slinger ring rides to the desired oil level on the ring and then 3) measuring externally from the shaft centerline to establish the oil level. The acceptability of this method was verified with the turbine manufacturers representative. The method resulted in the correct level mark being established for the coupling end bearing reservoir but an incorrect level mark for the governor end bearing reservoir.

The reason for the violation is that neither the technical manuals, drawings, nor vendor representative provided information that the oil slinger rings used in the turbine could vary in size. In fact, subsequent disassembly of the turbine has proven that the slinger ring in the governor end of the turbine is smaller in diameter than the ring in the coupling end. The ring in the coupling end is the same diameter as the ring held in stock.

3) CORRECTIVE ACTIONS

The sightglass on the governor end bearing reservoir was recalibrated by removing the bearing housing, filling the reservoir, measuring the oil level internally (relative to the oil slinger ring) and marking the sightglass accordingly.

The governor end bearing has been replaced.

The coupling end oil level was confirmed to be correct by removing the bearing housing and visually inspecting the oil level relative to the oil slinger ring.

4) ACTION TAKEN TO PREVENT RECURRENCE

Sightglass calibration instructions have been input into the CR-3 drawing system as drawing CR3-M-209A.

Maintenance Procedure MP-162 "Disassembly and Reassembly of Emergency Feedwater Pump Turbine Bearings", has been revised to include sightglass calibration instructions.

In addition, an advisory was issued on January 10, 1986 to all engineering personnel to make them aware of this experience such that similar situations in the future may be treated appropriately.

5) DATE OF FULL COMPLIANCE

Florida Power Corporation was in full compliance on November 15, 1985, after reestablishing the proper oil level.