

**Florida
Power**
CORPORATION

October 23, 1985
3F1085-12

Director of Nuclear Reactor Regulation
Attention: Mr. John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
NUREG 0737, Item II.F.2
Inadequate Core Cooling Instrumentation
Implementation Letter Report

Dear Sir:

Florida Power Corporation (FPC) is submitting this implementation report on the above subject in accordance with NRC letter dated September 6, 1983 (3N0983-02), Enclosure 3.

Requirement (1) Notification that the system installation, functional testing, and calibration is complete and test results are available for inspection.

Response (1) The Inadequate Core Cooling System consists of the Saturation Margin Meters, Core Exit Thermocouples, Reactor Vessel Inventory Tracking System, and the Reactor Coolant Pump Void Trend Monitoring System.

The Saturation Margin Meters were installed prior to Refuel III and are fully operational. A pressure-temperature display has been added to the Safety Parameter Display System (SPDS) which depicts the saturation curve as part of the overall SPDS. The SPDS was installed in Refuel V (completed August 1985). Sixteen Core Exit Thermocouples were rerouted through Class 1E qualified isolation devices to the computer. The computer is the primary display and receives all 52 thermocouples. The sixteen thermocouples also connect to Class 1E recorders from the isolation devices. The recorders are considered to be the backup display.

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The Reactor Coolant Inventory Tracking System (RCITS) is a trending system comprised of the reactor head differential pressure level measurement and the hot leg differential pressure level measurement. The reactor head level measurement is made between the decay heat drop line and the top of the reactor head. The reactor coolant system hot leg level measurement is made between the decay heat drop line and the top of the hot leg (candy cane). These systems were installed in Refuel V. The Reactor Coolant Pump Void Trend Monitoring System (RCPVTM) utilizes the reactor coolant pump power monitors to trend changes in power to detect void trends. This system was installed in Refuel V. These systems are recorded on the main control board. This instrumentation was calibrated and functionally tested to the extent possible while the plant was cold.

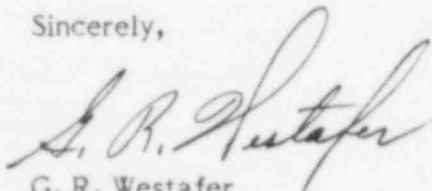
- Requirement (2) Summary of licensee conclusions based on test results, e.g.:
- (a) the system performs in accordance with design expectations and within design error tolerances; or
 - (b) description of deviations from design performance specifications and basis for concluding that the deviations are acceptable.

- Response (2)
- (a) The Saturation Margin Meters and Core Exit Thermocouples perform as expected and within design tolerances. The RCITS cannot feasibly be tested under the condition where all reactor coolant pumps are not operating; therefore, the design expectations and design error tolerances cannot be checked. The RCPVTM cannot be checked under normal conditions. It is impractical to purposely void the pumps to perform this test.
 - (b) The systems installed are consistent with the designs as submitted. The performance and deviations for the RCITS and the RCPVTM monitors are unknown because the systems are only operational during accident conditions and, therefore, not functionally testable.

As stated in NRC order dated December 10, 1982 (3N1281-04), NRC review and approval is required prior to the use of these systems as a basis for operator decisions or actions. As required by NRC order, instrumentation has been installed in Refuel V and we are now awaiting NRC approval and guidance as to how this system is to be used to support operator actions.

- Requirement (3) Description of any deviations of the as-built system from previous design descriptions with any appropriate explanation.
- Response (3) The Inadequate Core Cooling Instrumentation has been installed as designed.
- Requirement (4) Request for modification of Technical Specifications to include all ICC instrumentation for accident monitoring.
- Response (4) FPC does not see a need for Technical Specifications for this instrumentation.
- Requirement (5) Request for NRC approval of the plant-specific installation.
- Response (5) FPC hereby requests that the NRC approve the CR-3 ICC instrumentation installation.
- Requirement (6) Confirm the EOPs used for operator training will conform to the technical content of NRC approved EOP guidelines (generic or plant specific).
- Response (6) Emergency procedures are in preparation and are scheduled for completion by December 31, 1985. These procedures will provide guidance to the operators regarding the use of this instrumentation.

Sincerely,



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

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