



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W.
 ATLANTA, GEORGIA 30303

Report No.: 50-302/84-16

Licensee: Florida Power Corporation
 3201 34th Street, South
 St. Petersburg, FL 33733

Docket No.: 50-302

License No.: DPR-72

Facility Name: Crystal River 3

Inspection at Crystal River site near Crystal River, Florida

Inspectors:	<u>John F. Stetka</u>	<u>6/26/84</u>
	J. F. Stetka, Senior Resident Inspector	Date Signed
	<u>John F. Rogge</u>	<u>6/26/84</u>
	J. F. Rogge, Project Engineer (May 7-11, 1984)	Date Signed
Approved by:	<u>V. W. Panciera</u>	<u>6/26/84</u>
	V. W. Panciera, Chief, Project Section 2B, Division of Reactor Projects	Date Signed

SUMMARY

Inspection on May 7-31, 1984

Areas Inspected

This routine inspection involved 124 inspector-hours on site by one resident inspector and one regional based inspector in the areas of plant operations, security, radiological controls, Licensee Event Reports and Nonconforming Operations Reports, and licensee action on previous inspection items. Numerous facility tours were conducted and facility operations observed. Some of these tours and observations were conducted on back shifts.

Results

One violation was identified (Failure to follow surveillance and administrative procedures; Paragraph 5.b(8)).

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- B. Bandhauer, Nuclear Reliability Supervisor
- *G. Boldt, Operations Manager
- *R. Carbiener, Nuclear Compliance Specialist
- R. Clarke, Plant Health Physicist
- *J. Cooper, Manager Site Nuclear Quality Control
- D. Fields, Nuclear Reliability Supervisor
- *W. Herbert, Nuclear Technical Specification Coordinator
- E. Howard, Director, Site Nuclear Operations
- W. Johnson, Acting Maintenance Superintendent
- *J. Kraiker, Operations Superintendent
- H. Liles, Nuclear Plant Engineer II
- *M. Mann, Nuclear Compliance Specialist
- *P. McKee, Plant Manager
- S. Robinson, Nuclear Waste Manager
- *V. Roppel, Engineering and Technical Services Manager
- *B. Rossfeld, Compliance Manager
- *R. Thompson, Engineer I

Other personnel contacted included office, operations, engineering, maintenance, chem/rad and corporate personnel.

*Attended exit interview

2. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on May 31, 1984. During this meeting, the inspector summarized the scope and findings of the inspection as they are detailed in this report. During this meeting the violation and inspector followup items were discussed.

3. Licensee Action on Previous Inspection Items

(Closed) Deficiency (302/80-13-02): The licensee has an approved performance test procedure, PT-119, Leak Checking OTSG "B" With Helium or Nitrogen, to provide instruction to perform these operations. The memorandum issued by the Plant Manager dated May 8, 1980, emphasizing the intent of the temporary procedure change process addresses the generic cause of this violation and appears to have prevented recurrence.

(Closed) Unresolved Item (302/80-13-01): The licensee reviewed this finding and determined that the procedure in use was approved by Florida Power Corporation (FPC) prior to use. The Field Construction Procedures have been deleted and were replaced by Performance Test procedures (PT's). Procedure

CRR-3-14 has been replaced by PT-119 (for Once Through Steam Generator (OTGS) B) and PT-132 for OTSG A. These PT's have been properly reviewed and approved.

(Closed) Unresolved Items (302/80-33-04): Observations made by the inspector indicate that all releases include verification of initial conditions by the operators prior to making a release. In addition the licensee revised these radwaste release operating procedures to clarify the applicable initial conditions for each release.

(Closed) Deficiency (302/80-33-06): Modification 80-9-76 was completed on April 29, 1982 with the installation of the new 0-3000 psig gauges and the inspector verified installation of the new gauges.

(Closed) Inspector Followup Item (302/80-38-11): Plant operators received additional training in the operation of the main generator exciter circuit during normal requalification classes.

(Closed) Inspector Followup Item (302/80-42-08): The licensee has determined that the cause for water formation in the instrument dry sensing line to be due to a combination of factors including a "wet" nitrogen supply and an open tank vent valve. These items were corrected and subsequent testing by the licensee indicates the problem has been resolved.

(Closed) Inspector Followup Item (302/80-28-01): The licensee has completed approximately 65% of modification (MAR) 79-12-5 and will complete the upgrade of the communications system by the end of 1984. In addition a new modification, MAR 80-08-03-01, is being developed to prevent unauthorized tampering with individual speaker volume controls. This modification will be completed in 1985. Based upon the licensee's progress to resolve this issue and review of records demonstrating that these activities will be completed, this item is closed.

(Closed) Violation 302/81-23-03): The licensee has revised procedure SP-112, Calibration of the Reactor Protection System (RPS), and SP-161, Remote Shutdown Instrument Calibration, to require calibration or replacement of the RPS hot leg resistance temperature detectors (RTD's). Due to difficulties in calibrating the RTD's the licensee has been replacing the RTD's with new calibrated units at each refueling and will continue this practice. The inspector has verified that these activities have been completed.

(Closed) Inspector Followup Item (302/84-06-02): The Emergency Diesel Generator lube oil system flow diagram was re-drawn and issued for implementation on March 9, 1984.

(Closed) Inspector Followup Item (302/84-12-01): A revision was made to the Operators Section Implementation Manual (OSIM) that provides direction for the use of a dedicated operator to compensate for inactive automatic equipment functions, failed equipment, and degraded instrumentation. These instructions require logging the stationing of the watch and periodic checks

on the watch stander to assure this person remains alert. The implementation of this new directive appears to be effective.

(Closed) Unresolved Item (302/82-02-09): Procedure SP-296 was revised in Revision 3 to provide an improved tracking system for transient cycles using the Nuclear Operations Technical Advisor (NOTA) to identify the event and a results engineer to track the number of cycles. This improved system has been implemented and appears to be effective. The history of past transient cycles is still being updated; however, discussion with licensee personnel and review of applicable records indicate that no Technical Specification limits have been approached or exceeded.

(Closed) Inspector Followup Item (302/82-05-06): The inspector reviewed the PM program and determined that rebuilding the filter (air supply) regulators and replacement of the Limitoque torque switches were included in the program. These components are being rebuilt/replaced on a three year frequency.

(Closed) Inspector Followup Item (302/81-23-06): The engineering design evaluation determined that restraints and jet shields would have to be added to sections of the emergency feedwater pump steam supply lines to meet the High Energy Line Break Outside Containment (HELBOC) concern. The necessary restraints and shields were added in accordance with modification (MAR) 81-10-19-01 that was completed during the 1983 refueling outage.

(Open) Inspector Followup Item (302/84-02-04): The licensee is still having problems maintaining a negative pressure within the auxiliary building (AB). Though no unmonitored releases have occurred, the potential for such an event is possible. Upon re-identifying this problem to the licensee, a Short Term Instruction (STI) was written to instruct operators on ventilation fan operation and a procedure change is being implemented to follow-up on this instruction. The instructions provided on this STI appear effective in controlling AB pressure. This item remains open pending revision to procedure OP-409.

(Open) Inspector Followup Item (302/83-27-03): The licensee is still having communication problems between the Health Physics (HP) organization and the Operations organization regarding actuation of radiation monitors (i.e., notifying HP technicians when an alarm has occurred) and of ongoing plant evolutions (e.g., routine release of waste gas tanks). The licensee is continuing to evaluate this problem.

(Closed) Inspector Followup Item (302/77-18-04), (302/78-18-05), (302/78-24-05), (302/79-34-01), (302/79-37-01), (302/79-40-02): These items are considered to be no longer applicable and are closed for administrative purposes.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Review of Plant Operations

The plant continued in Mode 5 (Power Operation) for the duration of this inspection period.

a. Shift Logs and Facility Records

The inspector reviewed records and discussed various entries with operations personnel to verify compliance to Technical Specifications (TS) and the licensee's administrative procedures.

The following records were reviewed:

Shift Supervisor's Log; Reactor Operator's Log; Equipment Out-of-Service Log; Shift Relief Checklist; Auxiliary Building Operator's Log; Active Clearance Log; Daily Operating Surveillance Log; Work Request Log; Short Term Instructions (STI's); and selected Chemistry/Radiation Protection Logs.

In addition to these record reviews, the inspector independently verified clearance order tagouts.

No violations or deviations were identified.

b. Facility Tours and Observations

Throughout the inspection period, facility tours were conducted to observe operations and maintenance activities in progress. Some operations and maintenance activity observations were conducted during backshifts. Also, during this inspection period, licensee meetings were attended by the inspector to observe planning and management activities.

The facility tours and observations encompassed the following areas: Security Perimeter Fence; Control Room; Emergency Diesel Generator Room; Auxiliary Building; Intermediate Building; Battery Rooms; and, Electrical Switchgear Rooms.

During these tours, the following observations were made:

- (1) Monitoring Instrumentation - The following instrumentation was observed to verify that indicated parameters were in accordance with the TS for the current operational mode:

Equipment operating status; Area, atmospheric and liquid radiation monitors; Electrical system lineup; Reactor operating parameters; and Auxiliary equipment operating parameters.

No violations or deviations were identified.

- (2) Safety Systems Walkdown - The inspector conducted a walkdown of the Decay Heat Seawater (RW) and Closed Cycle Cooling (DC) Systems to verify that the lineup was in accordance with license requirements for system operability and that the system drawing and procedure correctly reflect "as-built" plant conditions.

No violations or deviations were identified.

- (3) Shift Staffing - The inspector verified that operating shift staffing was in accordance with TS requirements and that control room operations were being conducted in an orderly and professional manner. In addition, the inspector observed shift turnovers on various occasions to verify the continuity of plant status, operational problems, and other pertinent plant information during these turnovers.

No violations or deviations were identified.

- (4) Plant Housekeeping Conditions - Storage of material and components and cleanliness conditions of various areas throughout the facility were observed to determine whether safety and/or fire hazards exist.

During a tour of the A and B Decay Heat (DH) system pits located in the auxiliary building (AB) the inspector noted excessive water and debris on the floor and excessive boron crystallization on the reactor building spray pumps (BSP's). The licensee has been performing work in these pits and attributed part of the problem to this work. After a tour of the pits by licensee management, these representatives concurred with the inspector's observations and began cleanup activities. Cleanup activities in these pits will be observed during subsequent inspections.

No violations or deviations were identified.

- (5) Radiation Areas - Radiation Control Areas (RCA's) were observed to verify proper identification and implementation. These observations included selected licensee conducted surveys, review of step-off pad conditions, disposal of contaminated clothing, and area posting. Area postings were independently verified for accuracy through the use of the inspector's own monitoring instrument. The inspector also reviewed selected radiation work permits and observed personnel use of protective clothing, respirators, and personnel monitoring devices to assure that the licensee's radiation monitoring policies were being followed.

No violations or deviations were identified.

- (6) Security Control - Security controls were observed to verify that security barriers are intact, guard forces are on duty, and access to Protected Area (PA) is controlled in accordance with the facility security plan. Personnel within the PA were observed to insure proper display of badges and that personnel requiring escort were properly escorted. Personnel within vital areas were observed to insure proper authorization for the area.

No violations or deviations were identified.

- (7) Fire Protection - Fire protection activities, staffing and equipment was observed to verify that fire brigade staffing was appropriate and that fire alarms, extinguishing equipment, actuating controls, fire fighting equipment, emergency equipment, and fire barriers are operable.

No violations or deviations were identified.

- (8) Surveillance testing was observed to verify that approved procedures were being used; qualified personnel were conducting the tests; testing was adequate to verify equipment operability; calibrated equipment, as required, were utilized; and TS requirements were followed.

The following tests were observed and/or data reviewed:

- SP-110, Reactor Protective System Functional Testing;
- SP-130, Engineering Safeguards Monthly Functional Tests;
- SP-157, Meteorological System Surveillance;
- SP-300, Operating Daily Surveillance Log;
- SP-317, RC System Water Inventory Balance;
- SP-321, Power Distribution Breaker Alignment and Power Availability Verification;
- SP-333, Control Rod Exercises;
- SP-336, Triaxial Time-History Accelerograph Channel Check;
- SP-344, Nuclear Services Cooling System Operability;
- SP-354, A & B, Emergency Diesel Fuel Oil Quality and Diesel Generator Monthly Test; and,
- SP-381, Locked Valve List (Position Verification of Locked Valves), (For Decay Heat Closed Cycle Cooling valves only).

On May 16, 1984, while reviewing the completed data for procedure SP-333 performed on May 8, the inspector noted that data sheet II (Enclosure 2) that checks the local position of the rod drive breakers, was missing from the procedure package. Additionally the inspector noted that the Procedure Approval and Transmittal Sheet (PA&TS), that is required by administrative instruction AI-400, Plant Operating Quality Assurance Manual (POQAM), did not identify the missing data.

Procedure AI-400 requires the responsible supervisor to complete a PA&TS to assure that the procedure data is complete and acceptance criteria has been met. If the data is not complete and/or the acceptance check has not been met, AI-400 requires such information to be delineated on the PA&TS.

Discussions with licensee personnel and subsequent verification by the inspector indicate that the local breaker position checks were performed in accordance with a different surveillance procedure, SP-110, that was completed on May 2.

On May 22, 1984 that licensee reported that procedure SP-321, performed on May 22 was incomplete in that the second page of Data Sheet III (Enclosure 3) was not performed because the page was inadvertently left out of the procedure. Subsequent supervisory review including completion of the PA&TS did not identify the missing data.

Failure to adhere to the requirements of SP-333, SP-321 and AI-400 is contrary to the requirements of TS 6.8.1 and is considered to be a violation.

Violation (302/84-16-01): Failure to follow Surveillance Procedures and Administrative Instructions.

- (9) Maintenance Activities - The inspector observed maintenance activities to verify that correct equipment clearances were in effect; Work Requests and Fire Prevention Work Permits, as required, were issued and being followed; Quality Control personnel were available for inspection activities as required; and TS requirements were being followed.

Maintenance was observed and work packages were reviewed for the following maintenance activities:

- Replacement of an elbow on the discharge side of boric acid pump 1C;
- Replacement of check valve RWV-38 in the Nuclear Services Seawater System in accordance with MP-122, Disassembly and Reassembly of Flanged Connections, and MP-132, Erection of Piping; and,
- Replacement of a fuel injection pump and the oil sight glass on the governor of the B emergency diesel generator.

During the replacement of check valve RWV-38, the inspector noted confusion among maintenance and quality control personnel regarding the use of procedure MP-122 and MP-132. These two procedures interface with each other; however, there also appears to be some conflicts between them. There have been problems

utilizing these two procedures in the past and the licensee is attempting to resolve the problems.

Inspector Followup Item (302/84-16-02): Review licensee progress in resolving conflicts between maintenance procedures MP-122 and MP-132.

- (10) Radioactive Waste Controls - Selected liquid releases, gaseous releases, and solid waste compacting were observed to verify that approved procedures were utilized, that appropriate release approvals were obtained, and that required surveys were taken.

During a document review following the release of the C waste gas decay tank (WGDT), the inspector noted a licensee report that the discharge flow recorder (WD-19-FR) did not return to zero when flow ceased. Subsequent review indicates that the recorder problems caused a higher release rate than allowed by the Gaseous Radwaste Release Permit (GRWRP) (10 SCFM vs. 8 SCFM). The 2 SCFM higher release rate did not violate any limits. The problem appears to be caused by a sticking flow transmitter. The licensee is reviewing this event and will take corrective actions to prevent recurrence.

Inspector Followup Item (302/84-16-03): Review licensee activities to repair/replace sticking flow transmitter for recorder WD-19-FR.

- (11) Pipe Hangers and Seismic Restraints - Several pipe hangers and seismic restraints (snubbers) on safety-related systems were observed to insure that fluid levels were adequate and no leakage was evident, that restraint settings were appropriate, and that anchoring points were not binding.

No violations or deviations were identified.

6. Review of Licensee Event Reports and Nonconforming Operations Reports

- a. Licensee Event Reports (LER) were reviewed for potential generic impact, to detect trends, and to determine whether corrected actions appeared appropriate. Events, which were reported immediately, were reviewed as they occurred to determine if the TS were satisfied.

LER's 84-08 and 84-09 were reviewed in accordance with current NRC enforcement policy.

No violations or deviations were identified and these LER's are closed.

- b. The inspector reviewed Non-Conforming Operations Reports (NCOR) to verify the following: compliance with the TS, corrective actions as identified in the reports or during subsequent reviews have been accomplished or are being pursued for completion, generic items are

identified and reported as required by 10 CFR Part 21, and items are reported as required by TS.

All NCOR's were reviewed in accordance with the current NRC enforcement policy.

No violations or deviations were identified.