



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

JUN 13 1984

Report No.: 50-302/84-17

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 Date: May 15 - 18, 1984

Inspection at Crystal River site near Crystal River, Florida

Inspector: T. R. Collins  
T. R. Collins

6/8/84  
Date Signed

Approved by: G. R. Jenkins  
G. R. Jenkins, Section Chief  
Division of Radiation Safety and Safeguards

6/11/84  
Date Signed

SUMMARY

Areas Inspected

This routine, unannounced inspection involved 28 inspector-hours on site during regular hours inspecting: radiation protection program including instruments and equipment used for radiation protection of personnel; posting, labeling and control of radiological areas; radiation work permit controls; shipments of radioactive material, 10 CFR 61 requirements, radwaste volume reduction program; ALARA program; General Employee Training (GET); and previously identified inspector follow-up items.

Results: Violation - Failure to use proper locking device for High Radiation Area control.

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## REPORT DETAILS

### 1. Persons Contacted

- \*G. L. Boldt, Nuclear Plant Operations Manager
- S. Mansfield, Nuclear Compliance specialist
- \*P. Skramstad, Nuclear Chem/Rad Superintendent
- S. Robinson, Nuclear Waste Superintendent
- \*J. Bufe, Nuclear Compliance Specialist
- \*R. Clarke, Radiation Protection Manager
- \*J. Roberts, Nuclear Chemistry Manager
- \*G. Clymer, Nuclear Waste Superintendent
- R. Browning, Health Physics Supervisor
- P. Hughes, Licensing Engineer
- \*V. Hernandez, Senior Quality Auditor
- \*S. Long, Senior Quality Auditor
- \*W. Clemons, Compliance Engineer

Other licensee employees included two construction craftsmen, three technicians, two operators, three security force members, and two office personnel.

NRC Resident Inspectors

- \*T. Stetka, Sr. Resident Inspector

\* Attended exit interview

### 2. Exit Interview

The inspector scope and findings were summarized on May 18, 1984, with those persons indicated in paragraph 1 above.

On June 6, 1984, the inspector informed licensee representatives by telephone conversation that an apparent violation of the use of an improper locking device to control the access to containment which is a high radiation area. See paragraph 9.0 of Report Details for further explanation.

### 3. Licensee Action on Previous Enforcement Matters (92702)

(Closed) Violation 302/83-24-01 Failure to accurately describe on the shipping paper the total quantity of radioactive material contained in a package. The inspector reviewed the licensee's corrective action to preclude future events of this type, which includes a conservative estimate of curie content and an additional administrative review of the radioactive waste shipping papers by the plant health physicist and nuclear waste supervision. The inspector had no further questions.

4. Shipment of Radioactive Material (86721)

On May 17, 1984, the licensee was preparing a shipment of low-level radioactive material (secondary resin) to Chem Nuclear Systems, Inc. (CNSI) for burial. The inspector observed the preparation and packaging of this shipment of radioactive material and concluded that the shipment met the requirements of 10 CFR 71, and 49 CFR. No violations or deviations were identified.

5. 10 CFR PART 61 Implementation (86721)

The inspector reviewed the licensee's procedure WP-101, Packaging, Storing, and Shipping of Radioactive Materials to verify that the licensee has addressed the compliance and implementation of 10 CFR 61 requirements. After review of pertinent sections of the WP-101 procedure, the inspector concluded that the licensee's program apparently met the requirements of 10 CFR 61. No violations or deviations were identified.

6. ALARA Program (83728)

- a. The inspector noted that the ALARA Specialist is a full time licensee employee as opposed to a contract employee. From discussions with the ALARA Specialist, it appears he is well qualified. He is knowledgeable of plant systems, plant operations and conditions within the plant that affect radiation safety and protection. He is experienced in operating and radiation protection procedures at Crystal River 3, experienced in radiation protection principles and techniques, and familiar with ALARA concepts, philosophies, responsibilities, administration procedures and methods.
- b. The licensee has established a policy which provides management instructions, including responsibilities, for implementing an ALARA program. An ALARA program manual has been developed which provides detailed instructions regarding the scope and interfacing of responsibilities and guidance for implementing the ALARA program at the plant. Several implementing procedures have been prepared which pertain to initiation of ALARA reviews, review and evaluation by various levels of management and functional groups, post evaluations, records and reports. The ALARA program is essentially initiated from the Radiation Work Permits (RWP), Modification Approval Records (MAR) and Construction Work Packages (CWP). Action guides have been established for less than 1, 10, 50 and 100 person-rem and routine repetitive tasks. A system has been developed with assigned responsibilities for post evaluations, reports and maintaining records which will provide a data base for future ALARA reviews.
- c. The licensee has projected a value of 100 person-rem for 1984. This projection appears to be adequate since no scheduled maintenance or refueling outages are planned for 1984. The licensee has expended a total of 13 person-rem through April of 1984.

No violations or deviations were identified.

7. Radwaste Volume Reduction Program (84722)

The inspector reviewed a letter generated by the licensee, which was addressed to plant personnel concerning radioactive waste volume reduction. The letter revealed that a radwaste volume generation since 1979 through 1983 has been reduced from 48,970 ft<sup>3</sup> in 1979 to 19,030 ft<sup>3</sup> in 1983. In discussion with a licensee representative the inspector was informed of the licensee's radwaste volume reduction program which in part includes initial training and retraining of personnel and the discontinued use of plastic bags. The inspector concluded that the radwaste volume reduction program was adequate and had no further questions.

8. Posting of Notices to Workers (83724)

10 CFR 19.11 in part requires the licensee to post Form NRC-3 (Revision 6-82 or later) "Notice to Employees" in a sufficient number of places to permit individuals engaged in licensed activities to observe them on the way to or from any particular licensed activity location. The inspector observed the posting of Form NRC-3 (Revision 6-82) in an adequate number of locations within the plant. No violations or deviations were identified.

9. High Radiation Area Controls (83724)

On May 16, 1984, the inspector observed the use of a chain and pad lock to control the access to containment which is a high radiation area. Although the lock was on a fenced enclosure outside the containment air lock, the gate was used by the licensee on the access point to containment. The high radiation area posting required by 10 CFR 20.203(c) was affixed to this gate. The inspector informed licensee representatives that the practice of using chain and pad locks to control high radiation areas was not proper. Licensee representatives acknowledged the inspector's concern and stated they would have the door in question repaired with a proper locking device that would permit individuals to exit from the area when locked. The inspector identified this as an apparent violation of 10 CFR 20.203(c)(3) (302/84-17-01).

10. Portable Survey Instruments (83727)

The inspector observed various types of portable survey instruments in use and readied for use (RM-14s, Portal Monitors, etc.) to verify proper response and current calibrations. The survey instruments observed were apparently functioning properly and were within current calibration frequencies. No violations or deviations were identified.

## 11. Posting, Labeling and Control (83724)

The inspector toured the plant on several occasions to verify that the licensee had properly posted radiation areas, high radiation areas, contaminated areas, and radioactive material areas. No violations or deviations were identified. The inspector also reviewed the use of routine and special Radiation Work Permits (RWPs) for various areas of the plant. It appeared that current radiation surveys were being conducted for the RWPs reviewed and that external radiation exposure control was being adequately controlled. No violations or deviations were identified.

## 12. General Employee Training (GET) (83723)

The inspector observed portions of the licensee's General Employee Training by being provided site specific training in the radiation protection program, site radiological emergency program, and security program. The inspector noted that the instructor was well qualified and conducted the GET training in a professional manner. No violations or deviations were identified.

## 13. Previous Inspector Followup Items (92701)

- a. (Closed) IFI 302/81-08-02 Recertification of SCBA Regulators. The inspector was informed that a three (3) year recertification was recommended by the manufacturer. The licensee has established a program to meet this criteria. The inspector had no further questions.
- b. (Closed) IFI 302/81-03-01 Radiochemistry Crosscheck Program. The licensee has established a quality control crosscheck program for their radiochemical results with an outside vendor as recommended by Regulatory Guide 4.15. The inspector had no further questions.
- c. (Closed) IFI 302/81-03-02 Procedure Changes to Incorporate the Quality Control Program for Radiochemical Analysis. The licensee has revised procedure CH-338 which includes type of tests needed, frequency, and detailed instruction requirements. The inspector had no further questions.
- d. (Closed) IFI 302/81-03-03 Counting Room Instrument Calibration Frequencies. The licensee has established counting room instrumentation calibration frequencies in CII-400 series procedures. The inspector had no further questions.
- e. (Closed) IFI 302/81-03-06 Changes to Computer Program and Library. The licensee has made changes to their computer program and radionuclide library to include noble gases. Therefore, noble gases will be analyzed and accounted for on each release. The inspector had no further questions.

- f. (Closed) IFI 302/81-03-09 New Computer System for the Counting Room. The licensee has purchased a new counting room computer system to more efficiently assure counting results. The inspector had no further questions.
- g. (Closed) IFI 302/82-19-01 Schedule Tasks for Radiochemistry Technicians. Computer printouts of scheduled tasks are attached as a cover sheet to the work package which includes procedure requirements and technician sign offs. The inspector no further questions.
- h. (Closed) IFI 302/82-19-02 Adequate Management/Supervisor Review of Out-of-Specification Items. A review was performed on procedure RP-216 to determine the adequacy of the required management/supervisor review of results. The inspector had no further questions.
- i. (Closed) IFI 302/82-19-03 Quality Assurance Check of Dosimetry Program. The licensee performed an evaluation to determine if the current QA check program was sufficient to properly identify inconsistencies in their dosimetry results. The results of this evaluation concluded that their present program is adequate. The inspector had no further questions.
- j. (Closed) IFI 302/82-19-04 Establish a Method for Reporting Radiation Protection Procedure Violations. The licensee has determined that Nonconforming Operations Reports (NCOR) is the correct method for documenting these types of events. The inspector had no further questions.
- k. (Closed) IFI 302/84-02-04 Potential Release of Unmonitored Radioactivity. The licensee has established a program to control the potential release of radioactive material through the auxiliary building roll up doors. The inspector reviewed this program and the actions to be taken prior to opening the doors in question. The inspector had no further questions.