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

Report No.: 50-302/79-7

Licensee: Florida Power Corporation
P. O. Box 14042, Mail Stop C-4
St. Petersburg, Florida 33733

Facility Name: Crystal River 3

Docket No.: 50-302

License No.: DPR-72

Inspection at Crystal River Site, Crystal River, Florida

Inspector: _____ 2/16/79
G. T. Gibson Date Signed

Approved by: _____ 2/26/79
J. W. Hufham, Section Chief, FF&MS Branch Date Signed

SUMMARY

Inspection on January 22-26, 1979

Areas Inspected

The inspection involved 32 manhours onsite and 2 manhours offsite by one NRC inspector. A special unannounced emergency plan followup, announced confirmatory measurements sample collection, and unannounced health physics inspection including: review of auxiliary building evacuation system; review of evacuation accountability system, collected intercomparison radiochemistry sample collection; examined personnel monitoring equipment; monitored personnel protective clothing; review of plant decontamination facilities; and examination of RCA material control program.

Results

Of the seven areas reviewed, two items of noncompliance were identified (Infraction - failure to have adequate auxiliary building evacuation system - Section 5; Deficiency - failure to have working portal monitor at guard house (Emergency Assembly Center) - Section 7) in two areas.

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## DETAILS

1. Persons Contacted

Licensee Employees

*G. Beatty, Nuclear Plant Manager
P. McKee, Technical Services Superintendent
*J. Cooper, Compliance Engineer
*J. Wright, Chem-Rad Protection Engineer
*J. Harrison, Assistant Chem-Rad Protection Engineer
*G. Perkins, Health Physics Supervisor
G. Beal, Technician
R. Fuller, Chem-Rad Plant Engineer
S. Lashbrook, Technician
C. Ruszala, Radwaste Supervisor
*G. Williams, Nuclear Compliance Plant Engineer

In addition, the inspector interviewed 14 FPC plant personnel and 3 licensee subcontractor personnel.

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on January 26, 1979, with those persons noted in Paragraph 1. The licensee acknowledged the two items of noncompliance and one unresolved item. As discussed in Section 5.g., the licensee provided a complete response to one item of noncompliance and the inspector stated no additional response would be required.

3. Licensee Action on Previous Inspection Findings

No previous enforcement items were within the scope of this inspection.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve noncompliance or deviations. One new unresolved item identified furing this inspection is discussed in Section 6.b.

5. Audibility of Auxiliary Building Evacuation Announcement System

a. The inspector reviewed the licensee emergency announcement system for evacuation of the auxiliary building. As discussed in IE inspection report 302-79-01, unresolved item 302-79-01-01 disclosed potential areas in the auxiliary building where high noise levels may preclude audibility of the PA system which is used to announce evacuation of the auxiliary building.

b. The inspector toured the auxiliary building area. The inspector interviewed 21 individuals, selected at random, from plant records of individuals in the RCA during recent auxiliary building evacuations. Of the 21 individuals interviewed, 19 individuals stated that "dead areas" existed in the auxiliary building and related areas. In addition, on January 4 and January 22, 1979, six and eight individuals, respectively, working in the auxiliary building, were unable to hear actual evacuation announcements. The inspector compiled a partial listing of the following areas where the PA system is apparently inadequate: Diesel Room (during diesel operation), air handling fan area (145 foot elevation), auxiliary building pumps and waste tanks (143 foot elevation), and the makeup pump decay heat pit (75 foot elevation) area.

c. Technical Specification 6.8.1.e requires the licensee to implement the emergency plan procedures. Emergency Plan procedure EM-100, "Emergency Plan", Section 2.5.1.2, states, "As the Plant Public Address (PA) System, the phone is used for announcements or special instructions. A number of speakers are located strategically throughout the plant to assure maximum voice coverage". Section 4.1.1 states, "A class 'A' radiation emergency is one which involves excessive and/or uncontrolled radioactive spills and unexpected high radiation areas which may require partial evacuation from or within the Nuclear Plant area only. The plant evacuation alarm system will not be used for a Class 'A' radiation emergency although the RB evacuation alarm may be used as required". Section 2.6.1.A states, "The Emergency Coordinator will use the plant PA system to notify plant personnel of the emergency". Contrary to the above, the plant PA system on January 4 and 22, 1979 did not adequately function to alert plant personnel in the auxiliary building. This constitutes an item of noncompliance with the referenced Technical Specification (302-79-07-01).

d. The inspector examined licensee work requests and discussed with licensee personnel engineering evaluations of the PA system. Licensee personnel stated the PA system was properly functional, but did not have the ability to be audible in certain high noise areas.

e. The inspector examined all licensee reports of plant Safety Meetings for 1978 to identify instances where the PA audibility question was discussed. The inspector observed the first apparent discussion of system adequacy was on November 28, 1978.

f. The inspector conducted an independent assessment of the audibility of the PA system, including a demonstration of the "Call Code Mode", in the auxiliary building. Although the "Call Code Mode" system improved audibility, areas were still identified by the inspector which were "dead areas".

g. The inspector discussed with licensee personnel the item of noncompliance and proposed corrective actions. As discussed and as committed to by the licensee in the exit interview (Section 4), the licensee is to conduct the following program:

(1) The licensee shall evaluate alternative annunciator systems, including, but not limited to:

(a) An additional "siren" type sound to the existing reactor building and site evacuation siren sound system.

(b) Augment the current announcement PA and "Call Code Mode" system with bells and speakers.

(c) Flash existing lights.

(d) Install visual alarm devices.

Completion of the evaluation and selection of corrective action shall be completed by February 15, 1979.

(2) On February 15, 1979, the licensee shall inform the Commission as to the date by which completion and operation of the corrective action selected in (1) above.

(3) In the interim period, until operation of a final system, the licensee shall:

(a) Post notices and inform all employees that as of January 29, 1979, auxiliary building evacuation announcements will be supplemented with a dual-single ring on the "Call Code Mode".

(b) A guard shall be posted from January 29 until February 5, and thereafter if required, at the entrance to the RCA to assure that personnel properly adhere to sign-in/sign-out procedures for RCA accountability.

(c) During all shifts, during an auxiliary building evacuation, Chem-Rad technicians will immediately review the RCA entrance records and RWP orders to perform personnel accountability and to re-enter the auxiliary building if necessary to assure all personnel receive the evacuation announcement.

This item will be examined during subsequent inspections.

6. Accountability During RCA Evacuations

a. The inspector reviewed plant RCA dosimetry records to identify personnel in the auxiliary building as discussed in Section 5.b. The inspector noted that licensee personnel were not checking in/out each entry into the RCA. The inspector confirmed this observation during discussions with licensee personnel. Currently, the licensee is unable to quickly account for personnel in the RCA based upon dosimetry records at the Chem-Rad office control point. As discussed in Section 5.g(3)(b), current accountability shall be improved.

b. As discussed with licensee personnel, a new security-accountability computer system is currently being installed. The new system will allow the licensee to identify and locate personnel during emergencies, thus allowing reentry if assistance is required. This item shall be considered an unresolved item (302-79-7-02) pending installation and successful operation of this system, including a remote terminal output at the Chem-Rad RCA control point.

7. Preventative Measures Personnel Contamination

a. The inspector noted, on January 22 and 24, 1979, that on three occasions, the inspector passed through the radioactive personnel portal monitor at the guard house without initiating the counting mechanism. Additionally, on January 24, the inspector observed two licensee individuals pass through the portal monitor without activating the counting mechanism. Procedure EM-100, Section 4.3.1.1.f states, "All personnel leaving the plant will be monitored at the guardhouse for radioactive contamination". Contrary to Technical Specification 6.8.1.e, requiring implementation of EM procedures, failure of the portal monitor to operate properly for preventative contamination monitoring constitutes an item of noncompliance with the referenced Technical Specification (302-79-7-03).

8. Protective Clothing

The inspector performed an independent survey of the contamination levels on protective coveralls. The inspector surveyed selected clothing used as PC's for reactor building entry. The coveralls surveyed were within the contamination limits set forth in the Radiation Control Manual, Procedure RP-101. The inspector has no further questions regarding this item at this time.

9. Decontamination Facilities

a. The inspector examined the Decontamination Room in the RCA. The inspector discussed with licensee personnel the methods of decontamination when the liquid waste tank is being discharged and the sinks are labelled "closed". Licensee personnel stated that employees will be reinstructed in HP procedures, such that the contaminated individual notifies HP personnel and then use the decontamination facilities. This item will be examined during a subsequent inspection (302-79-7-04).

b. The inspector also discussed with licensee personnel the availability of cleaning agents in the decontamination kit kept in the decontamination facility. In addition, general housekeeping in the decontamination area was discussed. Licensee personnel stated recent administrative changes had been made to improve the condition of the decontamination facility. This item will be examined during a subsequent inspection (302-79-7-05).

10. Removal of Materials from the Reactor Building

The inspector examined the HP survey records of selected items removed from the reactor building during the August through October 1978 outage. The inspector discussed with licensee personnel the methods and procedures whereby material is surveyed and tagged prior to removal from the facility. The inspector examined work logbooks of HP for the periods August 1 through October 1, 1979. The inspector noted the records reviewed indicated all material was properly contained within the RCA and/or the special RCA laydown area on the plant berm. This item will be examined further during a subsequent inspection. (302-79-7-06)

11. Confirmatory Measurements Samples

a. The inspector discussed with licensee personnel problems associated with samples previously collected (302-77-24-13) where the samples were discarded inadvertently. Therefore, item 302-77-24-13 is considered closed.

b. The inspector obtained a liquid waste, waste gas, particulate filter, and charcoal adsorber sample. The licensee performed analyses on these samples during the inspection and will submit these results to the inspector. This item will be examined during a subsequent inspection (302-79-7-07).