



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA ST., N.W., SUITE 3100  
ATLANTA, GEORGIA 30303

August 24, 1982

Report No. 50-302/82-19

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

Facility Name: Crystal River 3

Docket No. 50-302

License No. DPR-72

Inspection at Crystal River, Florida

Inspector: *unlabeled signature*  
for J. B. Kahle

*8/20/82*  
Date Signed

Approved by: *unlabeled signature*  
for K. P. Barr, Section Chief  
Technical Inspection Branch  
Division of Engineering and Technical Programs

*8/20/82*  
Date Signed

SUMMARY

Inspection on August 2-6, 1982

Areas Inspected

This routine, unannounced inspection involved 42 inspector-hours on site in the areas of gaseous effluents, liquid effluents, solid radioactive waste disposal packaging and transportation of radioactive materials, chemical analysis of reactor coolant, followup on previously identified enforcement matters, followup on inspector identified items and discussion of inspection concerns.

Results

Of the eight areas inspected, no violations or deviations were identified.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*E. Morris Howard, Site Nuclear Operations Director
- \*T. Lutkehaus, Plant Manager
- \*C. Brown, Nuclear Compliance Supervisor
- \*J. Cooper, Nuclear QA/QC Manager
- \*D. Perkey, Licensing Consultant
- \*S. Ford, Licensing Consultant
- \*K. Lancaster, Senior Quality Auditor
- \*P. McKee, Operations Superintendent
- \*G. Boldt, Technical Services Superintendent
- \*D. Brock, Maintenance Supervisor
- \*G. Perkins, Plant Health Physicist
- \*R. Browning, Health Physics Supervisor
- \*D. Wilder, Chem-Waste Supervisor
- \*R. Pinner, Chem-Waste Supervisor
- \*J. Roberts, Chem-Waste Supervisor
- G. Ruzala, Chemistry and Radiation Protection Manager
- S. Robinson, Chemistry and Waste Manager
- R. Clarke, Chemistry and Radiation Protection Specialist
- J. Krull, Engineer
- S. Lashbrook, Health Physics Supervisor
- S. Mansfield, Nuclear Compliance Auditor
- R. Staley, Chem-Nuclear Representative

Other licensee employees contacted included three technicians and two operators.

#### NRC Resident Inspector

- \*T. Stetka, Senior Resident Inspector

- \*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on August 6, 1982, with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Enforcement Matters

- a. (Closed) Noncompliance (81-12-01), Failure to Adequately Perform Measurements (Surveys) of Concentrations of Radioactive Materials in Air. The inspector verified the routine weekly air sampling schedule

had been established for each elevation level of the auxiliary building. Examination of the records showed that areas such as the waste evaporator rooms, valve galleries, waste gas compressor rooms, contaminated waste storage tank room, make-up tank room, and other high potential airborne radioactive contamination rooms were sampled for airborne concentrations of radioactive material.

- b. (Closed) Noncompliance (82-06-01), Failure to Follow Radiation Protection Procedures. The inspector verified through discussions with licensee representatives and documentation records that the radiation protection technicians were instructed in the health and safety importance and the regulatory requirements for following approved procedures. There was documentary evidence that maintenance was informed of the problem and their cooperation was solicited in preventing a recurrence.

#### 4. Licensee Action On Inspector Identified Items

- a. (Open) IFI 80-42-03, Review Progress of the Licensee Modification to Install a Wall Around the RCA Fence and Trailers. The licensee's identification of this item is MAR 81-1-60. Licensee representatives stated that 20 of the 40 concrete blocks to complete the wall have arrived on site. Fourteen of the blocks have been installed at the present time. Licensee representatives were informed that the item remains open.
- b. (Open) IFI 80-42-10, Review Licensee's Progress in Modifying Radwaste Tank Level Instrumentation. The licensee has identified work associated with this item as MAR 80-12-65, MAR 78-6-12 and MAR 78-6-12A. Some of the work has been completed; however, completion of the instrumentation modification of the identified tanks will be accomplished during the next refueling outage. Licensee representatives were informed the item would remain open.
- c. (Open) IFI 81-01-05, Review Licensee's Activities to Resolve TLD Reading Inaccuracies. In reviewing this item, the licensee notified the inspector that their program for providing a duplicate badge (TLD) for a worker and a spiked badge for a fictitious person had failed. For various reasons the licensee had failed to record the badge number of the person who wore a duplicate badge and there was a mixup in exposing the spiked badge. Even though radiation protection personnel had taken measures to assure that corrective action would prohibit a recurrence, management personnel were not informed that the TLD spike program had not been performed as required by the Radiation Protection Procedure, RP-216, Health Physics - Vendor Services Spike Program. Licensee representatives were informed that the matter would be considered a licensee identified item of noncompliance. It appeared that the licensee had a laxity in establishing official reporting requirements, management overview and quality assurance. Licensee representatives were informed that the following inspector followup items (IFI)

would be identified to assure that management is promptly notified of potential noncompliance, that management performs overviews of assigned work, and that an evaluation is performed to determine the acceptability of the dosimetry QA check program:

- IFI 82-19-01 Followup on the licensee's program to assure work requirements are accomplished (computer printouts of procedure requirements with technician sign offs).
- IFI 82-19-02 Followup on management/supervisor review of the dosimeter QA check program.
- IFI 82-19-03 Followup on evaluation to determine if QA check program is sufficient to properly identify inconsistencies in the dosimetry results.
- IFI 82-19-04 Followup on review by licensee to determine method of radiation protection reporting deficiencies, nonperformances, or noncompliances to management.

#### 5. Organization and Personnel

During the inspection the licensee informed the inspector that the Chemistry and Radiation Protection Manager would terminate employment with the licensee on August 20, 1982. Further, the Plant Health Physicist would be acting in that capacity until the position is permanently filled. Licensee management was informed that the NRC would follow the licensee's program on this matter to assure that the selectee met the radiation protection manager qualifications specified in Regulatory Guide 1.8, Personnel Selection and Training and ANSI N18.1 - 1971, Selection and Training of Nuclear Power Plant Personnel IFI 82-19-05.

#### 6. Gaseous Effluents

- a. The inspector discussed the various gaseous waste sources and monitoring/control instrumentation with licensee representatives. All gaseous wastes are discharged via the reactor building purge system (RMA-1) or the auxiliary building vent (RMA-G). Several gaseous sources, such as the turbine building condenser air ejector exhaust and the auxiliary building waste gas decay tanks, are discharged via the auxiliary building vent. Licensee representatives stated that the higher activity radioactive gases were collected in one decay tank in order that a maximum decay time could be utilized. The inspector verified that the maximum activity in this tank did not exceed the technical specifications. An examination of procedures and the release permit records showed that the licensee's procedures and controls were conservative for meeting the environmental technical specifications. The licensee's release permit form has established check points to

assure that the instantaneous release activity levels will not be exceeded. The inspector verified that the gaseous effluent monitors were calibrated quarterly, that a functional test was performed monthly, and an instrument check was performed daily. No violations were identified.

- b. Discussions with licensee representatives and an examination of licensee records revealed that the HEPA and charcoal filter systems were DOP tested within the past 18 months and that a sample of the charcoal was collected each 720 hours (monthly) for analysis. The results of these tests were within the technical specifications for the filter systems. Discussions with licensee representatives revealed that the DOP tests were performed during refueling outages. It was pointed out to licensee management that the technical specification surveillance requirement was 18 months and not during refueling outages. Management acknowledges the comment. The inspector had no further questions.

## 7. Liquid Effluents

The inspector discussed the various sources of liquid waste and the associated monitoring and sampling systems. A review of the procedures and the liquid waste release permit system showed that controls had been established to assure that the release rates and levels would meet the liquid waste effluent technical specifications. The inspector verified that the liquid effluent monitors had been calibrated, functional tested, and source checked as required by the technical specifications.

An examination of the records showed that with using a dilution factor based on 10,000 gallons per minute the release levels were less than one percent of the MPC. The actual quantity of dilution water was a factor of approximately 70 greater than that used in the analysis. No violations were identified.

## 8. Solid Waste

The inspector examined the licensees procedures for cement solidification of evaporator bottoms and dewatering the ion exchange resins. Chem-Nuclear performs the work under contract with the licensee. Procedures for determining and the precautions taken to assure the absence of free standing water was discussed with licensee and contractor representatives. Combustible solid waste is compacted into 55 gallon drums. Noncombustibles are placed in large metal boxes designed specifically for low specific activity radioactive material. Licensee representatives explained their program for radioactive waste volume reduction. They stated that emphasis would be placed on training of personnel to reduce and minimize the volume of solid waste generated. A tour of the solid radioactive waste storage area revealed that there was not an unacceptable quantity or back log of waste stored on site. Licensee representatives stated that they are

designing a two year storage facility for onsite contingency storage capacity in the event of a reduction in waste disposal allotment. A licensee representative stated that the facility would be reviewed under the provisions of 10 CFR 50.59. The inspector had no further questions.

9. Packaging and Transportation of Radioactive Material

An examination of the shipping records revealed that certificate of compliance containers for the packaging of radioactive material were inspected and approved prior to packaging and that the requirements specified in the Certificate of Compliance were met. The records showed that surveys for contamination and radiation were performed prior to shipment. An examination of the records revealed that the shipping papers contained the information required by 49 CFR 172.202 and 203 and that the proper labels and placards were specified. No violations were identified.

10. Reactor Coolant Sampling and Analyses

The inspector reviewed the licensee's procedures for coolant sampling and analyses. An examination of the records showed that samples were collected at frequencies specified by technical specifications and the results showed values within the steady state limits. No violations were identified.

11. Hood Surveillance

The inspector examined the results of an evaluation of all the laboratory type hoods to assure the proper air flow into each hood, to assure each hood is equipped with a low flow alarm, to assure hoods are in good shape and to assure the low flow alarms are working. The established set point for the minimum flow alarm was 100 cfm. No violations were identified.