



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

JUL 26 1982

Report No. 50-302/82-13

Licensee: Florida Power Corporation
 P. O. Box 14042, M.A.C. H-2
 St. Petersburg, FL 33733

Facility Name: Crystal River

Docket No. 50-302

License No. DPR-72

Inspection at the Crystal River site near Crystal River, Florida

Inspector: G. N. Huffman 7/23/82
 G. N. Huffman Date Signed

Approved by: William E. Cline 7/23/82
 for G. R. Jenkins, Chief Date Signed
 Emergency Preparedness Section
 EPOS Division

SUMMARY

Inspection on June 28 through July 2, 1982

Areas Inspected

This routine, unannounced inspection involved 41 inspector-hours on site in the area of follow-up on emergency preparedness findings.

Results

In the area inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *L. A. Hill, Nuclear Support Services Assistant Manager
- *B. E. Crane, Nuclear Operations Training Manager
- *G. H. Ruzala, ChemRad Protection Manager
- *C. G. Brown, Nuclear Compliance Supervisor
- J. R. Edwards, Nuclear Operations Training Supervisor
- J. R. Cuneo, Technical Training Supervisor
- P. Griffith, Assistant Shift Supervisor
- J. Hebb, Shift Supervisor
- W. Kemper, Shift Supervisor
- C. Arbuthnot, Nuclear Operations Chief
- *R. Clarke, ChemRad Protection Specialist
- *R. Fuller, Licensing Specialist
- *S. D. Mansfield, Nuclear Compliance Auditor

Other licensee employees contacted included technicians, operators, and office personnel.

Other Organizations

- A. V. Billiris, Southern Science
- H. Howard, Keller and Wreath

NRC Resident Inspector

- T. Stetka, Senior Resident Inspector
- *B. W. Smith, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 2, 1982, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

(Open) Violation (302/78-11-02): Failure to properly verify fire brigade staffing. An inspector reviewed and found another example of this problem. FPC has committed to complete corrective actions by August 13, 1982. (Details, section 5)

(Open) Deviation (302/78-11-01): Failure to maintain control of the EM 206 emergency roster. An inspector reviewed and found another example of this problem. FPC has committed to complete corrective actions by August 13, 1982. (Details, section 5)

(Closed) Unresolved (302/80-14-08): Incomplete post-accident documentation. An inspector reviewed and found the documentation and corrective actions to be adequate. (Details, section 14)

(Closed) Deficiency (302/81-14-35): Alternate meteorological data. An inspector reviewed and verified the studies, described in FPC's letters of November 2, 1981, December 2, 1981, and June 30, 1982, had been conducted. (Details, section 17)

(Closed) Deficiency (302/81-14-36): Surface effects on meteorological data. An inspector reviewed and verified the studies, described in FPC's letters of November 2, 1981, December 2, 1981, and June 30, 1982, had been conducted. (Details, section 17)

(Closed) Deficiency (302/81-14-44): The impact of shoreline environment on plume trajectory. An inspector reviewed and verified the studies, described in FPC's letters of November 2, 1981, December 2, 1981, and June 30, 1982, had been conducted. (Details, section 17)

(Closed) Deficiency (no tracking number; item 1.b. of CAL dated September 11, 1981): FPC responsibility for initial plume monitoring. An inspector reviewed and verified the corrective actions had been taken as stated in FPC's letters of November 2, 1982, and June 30, 1982. (Details, section 17)

(Closed) Deficiency (no tracking number; item 1.c. of CAL dated September 11, 1981): Augmentation staffing for offsite surveys. An inspector reviewed and verified the corrective actions had been taken as stated in FPC's letters of November 2, 1981, and June 30, 1982. (Details, section 17)

In addition to the above, the inspector reviewed actions taken by the licensee on emergency preparedness improvement items as addressed in FPC's letter of January 20, 1982. The status of these items is discussed in the details of this report.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Training

The inspector reviewed the emergency preparedness training program including the REP, lesson plans and program implementing procedures. The licensee's ChemRad Technicians now receive training in all aspects of sampling and analysis. According to the records reviewed, all ChemRad Technicians were

trained prior to the emergency exercise in April 1982. The lesson plan for this training was reviewed in draft and appeared adequate. Based on the above, this improvement item (302/81-14-51) is closed.

The licensee has been providing all employees with the required General Employee Training (GET) on an annual basis since October 1981. However, the licensee stated in a letter dated January 20, 1982, that procedure AI-1400 "Conduct of Training" would be revised to reflect this change. The revision, TDP-301, although in draft form, is not ready for distribution. In addition, a previous inspection revealed the need for the training department to finalize their documentation of emergency training lesson plans, develop a method for updating training after procedure or equipment changes and include a description of the instruction provided the Emergency Sampling Team (EST) in TDP-307. Although most of this material is in a pencil draft form which appears to be adequate, none of these actions are completed and the improvement items in this area (302/81-14-02, 302/81-14-03, 302/81-14-04 and 302/81-14-05) will remain open.

During a previous inspection, the licensee was cited with a violation for placing a man on the shift fire brigade roster in the control room log book who had not been properly qualified through training. On July 1, 1982, the inspector checked the qualifications of the five persons assigned to the roster and discovered that one individual had been disqualified on June 30 because he had not received requalification training during the quarter. A check was then made of all persons assigned to the roster for the month of June and no additional violations of Technical Specifications section 6.2.2.F., "Facility Staff," or section 6.4., "Training," were found. It was concluded that this isolated incident occurred because EM-206 allows five days for the Procedures Specialist to update the EM-206 roster from which the Assistant Shift Supervisors construct the fire brigade roster each shift. FPC has agreed to implement a procedural change by August 13, 1982, to prevent a recurrence of this problem. This violation (302/78-11-02) will remain open pending a subsequent inspection of corrective action taken.

Related to the above violation, during a previous inspection a deviation was identified wherein an individual listed on the EM-206 roster as a fire brigade member had left FPC 27 days earlier. At that time there was an administrative directive which allowed ten days for a supervisor losing an individual listed on the roster to make notification that a change was required in the roster and five days for issuance of the updated roster. The procedures in EM-206 now require the supervisor to report the loss of personnel "in a timely manner." On June 30th, the inspector selected 100 names at random and found one individual who had left FPC's employ on May 29th. In discussions with the employee's supervisor, copies of documents submitted on June 29th indicated that the supervisor had submitted the individual's name for deletion from the EM-206 roster. The inspector indicated that he did not feel 31 days was "in a timely manner." Further, during discussions with five different supervisors, when asked what the procedure was for updating the EM-206 roster, all five indicated that they

had to submit an update at the end of each quarter which implies "in a timely manner" could be as long as 90 days. FPC has committed to take corrective actions by August 13, 1982. Pending an inspection of corrective actions taken, this deviation (302/78-11-01) will remain open.

6. Emergency Response Facilities

The inspector reviewed the licensee's program for implementing and operating selected emergency response facilities. This included discussions with licensee personnel, a review of applicable procedures, a tour of the facilities and an inspection of equipment and supplies.

a. Technical Support Center (TSC)

The interim TSC in the Administrative Building was quite small, requiring assembly of TSC personnel at the construction site for the permanent TSC. The permanent TSC is now complete, except for two computer controlled systems. Emergency assembly is in the permanent TSC, which eliminates any previous confusion about the location of the TSC.

The new TSC has in excess of 4,000 square feet with an expected emergency occupancy of about 30 people, i.e., in excess of the minimum of 75 square feet per person. In the main "war room," the TSC utilizes felt marker boards for critical data display. For additional data, paper flip charts are available mounted on easels. As mentioned above, FPC plans to install two computer systems: a data recall system and a dose assessment system. Already existing in a side room are large area maps for plotting releases. Smaller wide area maps for dose assessment are permanently mounted in the war room along with aerial photos, site maps and state maps. The site and area maps indicate the preselected monitoring locations.

Two rooms are reserved for private NRC use enclosing about 225 square feet of floor space, i.e., about 75 square feet for each of the three expected NRC occupants. Recognizing that the HPN phone system is to be eliminated, there presently exists an HPN and an ENS phone in the larger NRC office. One of each type phone is also mounted on a wall in close proximity to the NRC rooms. In addition, two commercial lines are provided in the larger office and one in the smaller. The NRC also requested a direct line to the dose assessment personnel. However, both groups are now within reasonable proximity in the TSC.

A dedicated phone link exists between the war room of the TSC, the Control Room, the Operational Support Center (OSC) and the Emergency Operations Facility (EOF) located in Crystal River. The phone in the TSC is equipped with a head set to facilitate constant contact while recording data. There is also a second dedicated line between the TSC, the EOF and the Corporate Command Center (CCC) in St. Petersburg.

FPC agreed to include a base station in their equipment plan in their letter of January 20, 1982. The base station was to be for communications with mobile monitoring teams. However, after further consideration, they found that transceivers provide adequate communications within the ten mile EPZ. During the tour, the inspector observed ten transceivers located in a charging unit within the TSC.

Based on the above findings, the previously identified improvement items for this area (302/81-14-06, 302/81-14-07, 302/81-14-08, 302/81-14-09, 302/81-14-10, 302/81-14-11, 302/81-14-12, 302/81-14-14, 302/81-14-39, and 302/81-14-57) are closed.

b. Operational Support Center (OSC)

The OSC is a small room adjacent to the Control Room which does not have a filtered air system and would need to be evacuated in a Site Emergency. Consequently, a need to provide a backup to the OSC was identified during a previous inspection. FPC responded by stating that EM-102, "Activation, Operation and Staffing of the TSC and OSC," had been revised. Section 7.2.3.2.1. of EM-102 only references an "adequate alternate location" as having been established, but section 7.2.3.1. references EM-205, "Assembly, Evacuation and Personnel Accountability of CR-3 Personnel During Emergencies." EM-205 provides for assembly at pre-designated areas when an Alert is declared. The OSC is only staffed with a small group, i.e., 12-15 persons. Emergency Teams would be assembled from personnel in the assembly areas which are generally organized on the basis of skills. When a Site Emergency is declared, section 7.2.2.5. of EM-205 indicates that the OSC will be abandoned and all personnel not included in the Control Room or TSC will evacuate to the Primary Evacuation Area (PEA; formerly the Emergency Assembly Center [EAC]) (or a secondary location [SEA] when directed) where they will assemble separately from non-emergency plant personnel. The only exceptions are the Plant Health Physicist who reports to the TSC and the Chief ChemRad Protection Technician who reports to the Control Room. Through this plan, FPC has avoided the need for a back-up OSC. Also, since the OSC and assembly areas only serve the purpose of removing personnel from potentially hazardous areas during the Alert stage in an emergency, FPC has eliminated the need for monitoring and decontamination supplies in assembly areas. Personnel working in radiation control areas would pass through portal monitors and frisking stations on the way to their assembly areas. In an evacuation, they would also pass through a second portal monitor enroute to the PEA (or SEA). Health physicists will be available at both locations and decontamination kits will either be provided from the TSC or contaminated personnel will be taken to the TSC for decontamination. Emergency kits are provided in strategic locations for the teams directed to re-enter the facility from the PEA or SEA.

Emergency Teams are assembled in either the assembly areas or evacuation areas using the roster included in EM-206. During a previous inspection, it was noted that many persons on the list may be assigned to from three to five different teams and a need for prioritizing team assignments was identified. FPC agreed to respond when additional manpower is available. The assignments have not changed substantially, but FPC has proposed a reorganization which will split the ChemRad Technicians and H. P. Technicians. It is also proposed that none of these people be assigned as members of the Fire Brigade. If these actions are completed, no emergency team members will belong to more than two Teams. This improvement item (302/81-14-01) will remain open pending the reorganization and a revision of the EM-206 roster.

Based on the above findings, the remaining improvement items in this area (302/81-14-13, 302/81-14-15 and 302/81-14-20) are closed.

c. Emergency Operations Facility (EOF)

Corporate procedure NL-18, "Activation and Notification of the Corporate Emergency Support Plan," determines the level of response by corporate personnel; and corporate procedure NL-19, "Corporate Emergency Support Plan, Crystal River Unit 3," outlines and defines the activities of corporate personnel in support of the Unit 3 staff. In combination, these procedures appear to implement the EOF along with the Corporate Command Center (CCC), the Central Division Personnel Office (CDPO), the Emergency Control Center (ECC), the Energy News Center (ENC) and the General Office Complex (GOC). However, the emergency radiation protection and monitoring equipment for the EOF is still on order. When received, the equipment and supplies will be permanently placed in the EOF, but not in kit form. Certain members of the staff selected to man the EOF are ex-health physicists. They have been trained and will be retrained in the specific use of the new equipment when received. The related improvement items in this area (302/81-14-18 and 302/81-14-28) will remain open pending receipt of the equipment and completion of the retraining. The remaining improvement item (302/81-14-17) is closed.

A previous inspection revealed the need for FPC to establish a radio link with offsite monitoring teams from the EOF and provide the NRC with three commercial dial phones and an HPN line. FPC responds that they can successfully direct monitoring efforts from the EOF through a link with the TSC, although the State has expressed the need for a base station at the site. FPC may choose to use a repeater rather than a base station. Also, FPC does not intend to install additional telephones since the permanent EOF should be ready for occupancy in October 1982. The improvement item in this area (302/81-14-16) will remain open pending further developments.

A previous inspection indicated the need to establish test schedules for all communications systems at the EOF. FPC responded by letter of January 20, 1982, with a test schedule that appeared to be adequate with two exceptions. The first concerned an absence of tests of the tie-lines between the EOF, TSC, OSC and Control Room. FPC indicated that this system will be replaced by a microwave relay system when the permanent EOF is completed. The second concerned an absence of tests of the FM radio system. FPC indicated this system is used daily to communicate with maintenance and line-crews and thus problems are detected and repaired immediately when they occur. The improvement item in this area (302/81-14-38) will remain open pending installation of the microwave relay system.

7. Assembly Areas

The inspector reviewed the licensee's program for assembly and evacuation of onsite personnel. This included a review of applicable procedures, discussions with licensee personnel, a tour of the assembly and evacuation areas and an inspection of applicable equipment and supplies.

FPC revised the Radiological Emergency Plan (REP) and EM-205 so that a clear, concise and coordinated policy and plan appears to exist. The need for EAL's was avoided by requiring evacuation of all but essential personnel in EM-205. Essential personnel will report to either the Control Room or TSC where the required protection is provided. Based on the above, the improvement items in this area (302/81-14-19 and 302/81-14-46) are closed.

A previous inspection revealed the need to mark evacuation routes, post assembly and evacuation areas, and provide an evacuation area protected from the weather. FPC responds that the Emergency Coordinator wishes to reserve the right to designate evacuation routes since unexpected radiological hazards may arise in an emergency. However, both primary and secondary evacuation areas are marked. The assembly areas are listed on signs in locations convenient to employees as a daily reminder of their assignment. The PEA is located just outside the protected area near the guard house. The weather protected SEA is within a warehouse relatively close to the PEA. A diagram showing all the primary and secondary evacuation areas is found in the REP and EM-205, "Assembly Evacuation and Personnel Accountability of CR-3 Personnel During Emergencies." Based on the above, the improvement items in this area (302/81-14-21, 302/81-14-55 and 302/81-14-56) are closed.

Once personnel are in an assembly or evacuation area, a personnel accountability check must be completed within 30 minutes. The initial accountability is accomplished by a computer comparison of "key card" entries into and out of the protected area and many areas within. In a previous inspection, it was noted that an output terminal was not yet in operation at the entry/exit to the Radiation Control Area (RCA). FPC found it difficult to maintain an output terminal at that location, so only a card reader is located at the entrance to the RCA and all personnel accountability is done on an output unit at the guards house. Communications with strategic

locations, like the entrance to the RCA, is easily accomplished by telephone or radio. Based on the above, the inspector follow-up item for this area (302/79-07-02) is closed.

During a previous inspection the need was identified for the licensee to assign someone the authority and responsibility for unaccounted-for personnel searches. In addition, it was indicated that guidelines for action were needed, such as the use of the PA system in personnel searches. EM-205 was revised to require that all missing personnel be reported to the Emergency Coordinator. EM-209, "Reentry Procedure," gives the Emergency Coordinator the authority and responsibility for directing any searches based on advice from the ChemRad Technician. FPC felt guidelines were unnecessary as the options are apparent and decisions must be made on an "ad hoc" basis. Based on the above, the improvement items in this area (302/81-14-59, 302/81-14-60 and 302/81-14-61) are closed.

A previous inspection revealed the need to coordinate the evacuation plans for CR-1, 2, 4 and 5 with Unit 3 (CR-3), provide for security force assistance and determine the need for priority road lane use. Section 3.3. of EM-205 now assigns the guard force the responsibility for the accountability of all visiting personnel. EM-211, "Duties of the Security Officer," requires the Security Supervisor to assure the guard force has sufficient personnel to control both access to Unit 3 and the accountability of Unit 3 personnel, including reporting unaccounted-for personnel to the Emergency Coordinator. EM-212, "Duties of the Plant Guards," gives the guard force the authority to deny unauthorized entry or exit from Unit 3 and to implement and enforce the evacuation and accountability of personnel under direction from the Emergency Coordinator. Finally, EM-214, "Notification, Assembly, Evacuation and Accountability of Crystal River Generation Complex Personnel (Except CR-3)," provides for evacuation of the remaining four sites at Crystal River under the direction of the Emergency Coordinator. However, various options for lane use on the road from the site are still being evaluated. Therefore, the improvement item related to this area (302/81-14-58) will remain open. The remaining improvement item in this area (302/81-14-64) is closed.

8. Decontamination

The licensee's emergency decontamination program was reviewed. This included discussions with licensee representatives, a review of selected procedures and an inspection of facilities, supplies and equipment. A previous inspection revealed the need to establish action levels for emergency decontamination and that the procedures in RP-103 needed to be revised to require the assistance of ChemRad personnel when performing personnel decontamination. RP-103, "Decontamination of Personnel, Areas and Equipment," has been revised to specify action levels requiring further decontamination assessment. However, FPC indicated it was not necessary to make further revisions of RP-103 since only ChemRad Technicians perform decontamination. Based on the above, the improvement items in this area (302/81-14-62 and 302/81-14-63) are closed.

9. Kits and Survey Instruments

The licensee's program for maintaining kits and survey instruments was reviewed including a review of applicable procedures, discussions with the licensee, a tour of kit locations, and inspection of their contents. During the tour it was noted that each kit or additional support item was clearly marked to indicate what team will use it during an emergency. Survey instruments displayed calibration stickers with the expiration date by day, month and year and support items were tagged. All markings clearly indicated what part of the kit that item constituted, e.g., the kit was marked "1 of 3" and the generator was marked "2 of 3," etc. Based on the above, the improvement items in this area (302/81-14-25, 302/81-14-26 and 302/81-14-66) are closed.

The most commonly used decontamination solutions are now included in the decontamination team kits and listed on the inventory lists in the kits and in RP-219, "Inventory and Availability of Emergency Supplies/Equipment." The less commonly used solutions, listed in RP-103, "Decontamination of Personnel, Areas and Equipment," are available from the Chemistry Laboratory. In addition, a review of kits contents was made and stop-watches, calculators, tape measures and other items have been added to the kits where appropriate. However, RP-219 has not been revised to address perishable supplies and 0-200 Rem dosimeters have not been included in the kits. Consequently, some improvement items related to this area (302/81-14-27, 302/81-14-54 and 302/81-14-67) will remain open. The remaining improvement item related to the above (302/81-14-22) is closed.

EM-210, "Duties of the Environmental Survey Team," now states that when the Environmental Survey Team (EST) kit is not stored in the Emergency Survey Vehicle (ESV), it must be available in the TSC. At the time of the inspection, the kit, including all properly marked support equipment was in the ESV. Based on the above, the improvement item in this area (302/81-14-49) is closed.

During a previous inspection a need was identified for placing a decontamination kit in the EAC (old terminology) along with water and waste disposal provisions. The EAC included the guard house. The PEA is adjacent to the guard house. A decontamination kit was inspected in the guard house, but the water and waste provisions have not been provided at that location since they can be easily provided from the TSC, about 75 feet away, when it is not possible to move an individual or item to the TSC. Based on the above, the improvement item in this area (302/81-14-23) is closed.

10. Non-Radiation Process Monitors

Selected portions of the licensee's non-radiation process monitor program was reviewed. This included discussions with the licensee, a review of applicable procedures and a tour of selected facilities.

During a previous inspection, a need to revise EP-109 or the REP and EM-203 so that they are compatible with respect to seismic provisions was identified. Enclosure 2 of EM-202, "Duties of the Emergency Coordinator," was revised so that proper horizontal acceleration forces were reflected, as provided in EP-109, "Earthquake." Based on the above, the improvement item in this area (302/81-14-33) is closed.

During a previous inspection it was determined that FPC plans to use certain toxic gases including chlorine and hydrogen sulfide in their processes at the non-nuclear generating units. FPC indicated that toxic and flammable gas detectors would be installed on the Control Room air intakes early in 1982. The equipment is installed and presently being tested and calibrated. Completion of the project is now projected for late summer 1982. Consequently, the improvement item in this area (302/81-14-34) will remain open pending release of the equipment for operation.

11. Meteorological Program

The inspector reviewed the licensee's program for the use of meteorological information in emergency conditions. The review included discussions with licensee representatives, a review of selected procedures and documents, and a tour of the meteorological tower site.

In a previous inspection the accuracy of the temperature probes on the meteorological tower was questioned because of their orientation towards the sun, the unevenness of the ground around the tower, and the fact that the ground varies from black (coal) to white (coral sand). A study determined that the shields around the temperature probes guarantee their accuracy to 0.2°F when measuring ambient temperatures. This is accomplished by a fan drawing ambient air through the shield which protects the probe from ground radiation effects. Based on the above, the improvement item in this area (302/81-14-37) is closed.

A deficiency was identified during a previous inspection related to the need for a study of the surface conditions in the vicinity of the meteorological tower. Originally, the area immediate surrounding the meteorological tower had high dirt piles, trash piles and deep ditches. FPC has removed all but a small volume of trash and used the dirt piles to fill the ditches. While the area is not level, it is greatly improved and FPC supplied the inspector with a copy of a report which indicates the Unit 3 structures now have the greatest influence on distorting tower data. The study was performed in response to a Confirmation of Action Letter dated September 11, 1981, to which FPC responded by letters of November 2, 1981, December 2, 1981, and June 30, 1982. Based on completion of the studies and pending further actions by FPC, the deficiency item in this area (302/81-14-36) is closed and an inspector follow-up item is identified (302/82-13-01).

A second deficiency was identified during a previous inspection which related to the need for a study to locate acceptable alternative sources of meteorological data. FPC's letter of December 2, 1981, stated that the closest sources of alternate data, Cross City, Florida, and Ruskin, Florida, area approximately 60 miles away and do not necessarily reflect climatic conditions at Crystal River. However, FPC indicated this problem would be resolved as part of their response to NUREG-0696, "Functional Criteria for Emergency Response Facilities," and Reg. Guide 1.23, "Meteorological Programs in Support of Nuclear Power Plants, Rev. 1." Based on completion of the study and pending further actions as indicated above, the deficiency in this area (302/81-14-35) is closed, and an inspector follow-up item is identified (302/82-13-02).

A third deficiency was identified during a previous inspection which related to the need for a study to determine the capability of the meteorological system to assess the impact of the shoreline environment upon a plume trajectory. A copy of the study was provided to the inspector. In FPC's letter of November 2, 1981, it was stated that the study revealed the meteorological tower can detect "sea breeze" effects, but can not predict how far inland the wind pattern will change. In FPC's letter of December 2, 1981, FPC indicated two overlapping approaches they can utilize to aid in plume tracking under conditions where a sea breeze effect exists. The report and FPC's response letters are presently being reviewed by NRC's meteorological staff. Based on FPC's completion of the study and the pending outcome of NRC's staff review, the deficiency for this area (302/81-14-44) is closed and an inspector follow-up item is identified (302/82-13-03).

12. Dose Assessment

The licensee's program for making dose assessments was reviewed including a review of applicable procedures and a walk-through with shift personnel. During a previous inspection a need was indicated for EM-204, "Release and Offsite Dose Assessment During Radiological Emergencies at CR-3," to be made shorter and simpler. The inspector judged that the revised procedure is still too long and complex. Walk-throughs were performed on two day shifts and one back shift. In all three cases, shift personnel had an excellent grasp of what actions they should take in an emergency but avoided actual use of the emergency procedures. Since the walk-throughs were considered unsuccessful, the improvement item in this area (302/81-14-45) remains open.

13. Transportation

The inspector reviewed the licensee's program with respect to its emergency vehicles. The review included a review of applicable procedures, and an inspection of the vehicles and their contents.

At the time of a previous inspection, the Emergency Survey Vehicle (ESV) was unavailable and not equipped with a radio or EST kit (see Section 9). The ESV is now available at all times, and its use is controlled by EM-210,

"Duties of the Environmental Survey Team," and RP-219, "Inventory and Availability of Emergency Supplies/Equipment." RP-219 also applies to the Plant Emergency Vehicles. For both vehicles it specifies the contents and requires weekly 30-45 minute operational checks. The results of the weekly checks must be logged, and problems must be reported to the ChemRad Protection Manager for immediate action. The contents of the vehicles are checked quarterly. Presently, transceivers are being used rather than permanently installed radios.

A previous inspector indicated the need to create an implementing procedure to assure that the emergency vehicles are dedicated for emergency use only. However, FPC has found the vehicles must be used at least weekly to assure that they stay in operable condition. Constant radio contact assures their recall in an emergency and the Safety Department reviews the use of the vehicles to assure all uses are authorized. Based on the above, the improvement items in this area (302/81-14-30, 302/81-14-41, 302/81-14-42 and 302/84-14-48) are closed.

14. Procedures

The inspector reviewed the licensee's program for establishing the general content and format of the emergency procedures, including a review of recent procedures to determine if the program was being implemented. AI-400, "Plant Operating Quality Assurance Manual Control Document," has been revised to specify the format for the emergency procedures (EMs). The format is varied according to the needs of the series (i.e., 100, 200, etc.). Changes in existing procedures are accomplished during the annually required review and updating. A review of recently revised procedures indicated that AI-400 is being implemented. Based on the above, the improvement item for this area (302/81-14-43) is closed.

A previous unresolved inspection item was based on a lack of documented inplant and offsite survey data following implementation of the emergency plan on February 26, 1980. A review of existing records showed that environmental samples were taken at 39 locations offsite and smears were taken at 19 locations on three levels within the reactor building. Other data concerned water samples, air samples and direct readings in the plant. The raw data was stored on microfiche and was known only to be within a group of about 200 cards, each card containing about 60 images. A limited search of these records revealed enough data to convince the inspector that the data existed. Because the files were not in chronological order, to locate all the data would have required extensive effort. It became apparent that, although the emergency plan was implemented, the inplant and offsite emergency monitoring teams used normal procedures and data collection forms rather than the procedures and forms specified by the emergency plan. FPC indicated that the incident brought about several significant changes in the emergency plan, implementing procedures and emergency team training which would prevent a recurrence. Based on the above, the unresolved item in this area (302/80-14-08) is closed.

15. Inplant Radiological Surveys

The inspector reviewed the licensee's program for inplant surveys with particular attention to equipment needs, including a review of EM-208, "Duties of the Radiation Emergency Team," and an inspection of the equipment. EM-208 has been revised to include the transceivers used by the Radiation Emergency Team on the equipment list in Section 5.0. The transceivers are stored on the charger in the TSC. Based on the above, the improvement item for this area (302/81-14-50) is closed.

16. Coordination with Offsite Groups

The inspector reviewed the licensee's program for coordination with Seven Rivers Hospital, the nearest medical facility. The review consisted of a review of the REP, applicable procedures and documents, discussions with the licensee and discussions with staff of the Seven Rivers Hospital. Seven Rivers Hospital will only be used for uncontaminated injured personnel or contaminated personnel with life threatening injuries. The FPC has established a training seminar for the hospital which is given at least annually and has been given twice to date. Based on a written agreement between the Hospital and FPC, contaminated personnel will be accompanied by personnel from the site who will assume responsibility for radiation control and decontamination. A hospital procedure has been written which directs the hospital's activities. The Seven Rivers Hospital staff feels that the support from and communications with the Crystal River Unit 3 staff is adequate. Based on the above, the improvement item in this area (302/81-14-69) is closed.

17. Confirmation of Action Letter (CAL)

There were six deficiencies specified in the CAL dated September 11, 1982. Item 1.a. (302/81-14-47) was closed out in a previous inspection. Items 2.a., b. and c. (302/81-14-35, 302/81-14-36 and 302/81-14-44) are discussed in Section 11 of this report. The inspector reviewed the remaining items, 1.b. and 1.c., through discussions with the licensee and a review of the emergency plan and applicable procedures.

Item 1.b. concerned revisions of the REP and EM-210 "to indicate that plume monitoring shall be the responsibility of FPC personnel from the onset of an emergency until such time as the State of Florida Division of Health and Rehabilitative Services team arrives on the scene and assumes this responsibility for the area beyond the site boundary." This statement was included in Section 6.3.12. of the REP and Section 3.0. of EM-210. It is further stated that upon request, the EST will assist the State in monitoring.

Item 1.c. concerned the need for Crystal River to provide for the minimum staffing specified in Table B-1 of NUREG-0654 with respect to offsite surveys. Table 6.1. of the REP was revised to satisfy this criteria. Based on the above, deficiency items 1.b. and 1.c. (no tracking numbers) are closed.