



**Florida
Power**
CORPORATION

September 30, 1980
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CS-80-226

Mr. J. P. O'Reilly, Director
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
101 Marietta St., Suite 3100
Atlanta, GA 30303

Docket No. 50-302
Licensee No. DPR-72
Ref: RII:RWZ
50-302/80-25

Dear Mr. O'Reilly:

We offer the following responses to the items identified as significant appraisal findings of Appendix A, and the apparent items of noncompliance of Appendix B in the referenced inspection report.

Appendix A
NOTICE OF SIGNIFICANT APPRAISAL FINDINGS

- A. An adequate Respiratory Protection Program, from training to use did not exist. The importance of this significant appraisal finding is underscored by the number of noncompliance items listed in Appendix B (Items A, B, and F) which relate to the Respiratory Protection Program (Sections 7 and 9).
- A. Response: Some corrective action has been taken to upgrade our Respiratory Protection Program as of this date. This action includes current economic and safety evaluation of feasibility for purchase of a respiratory fitting chamber, interim assignment of a Health/Physics technician to the Training Department, permanent assignment of a Health/Physics Training Instructor by October 6, 1980, and addressing several Inspector Followup Items in a proposed procedural revision.

Additionally, two trips have been completed to other nuclear facilities for the purpose of whole body counts evaluation. Documentation is being prepared to facilitate Inspector Followup action.

The commitments made for development of a new Respiratory Protection Training Program by January 1, 1981 with all personnel trained by October 1, 1981 and completion of the Bioassay Program review by November 30, 1980 remain unchanged. Reference to respiratory items listed as infractions are addressed in our answer to Appendix B.

- B. An adequate training/retraining program which would maintain the proficiency of the Health/Physics technicians had not been developed nor implemented. This lack of training/retraining contributed to several of the noncompliance items identified in Appendix B (Section 5).

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B. Response: A permanently assigned Technical Instructor has been hired and dedicated to the purpose of Chemistry and Radiation Protection personnel. He is expected to assume his duties October 6, 1980. Development of a training syllabus is underway with initiation date scheduled for January 1, 1981.

C. Management of Health/Physics records was inadequate. The appraisal found: (1) NRC Form-4's incomplete; (2) dosimeter/TLD investigations not documented; (3) dosimeter calibration records incomplete; (4) respirator issuance records incomplete; (5) exposure records changed without a documented basis; and (6) survey records not readily retrievable. In addition, records were not stored in fireproof containers (Section 8).

C. Response: Some work has been completed in the records management area. Methods for rapid data transmittal for Health/Physics records have been developed and implemented. Previous commitments from our July 9, 1980 correspondence to you have been met. Files identified by your inspectors as incomplete have been reviewed and corrected.

Items within this e identif s infractions are addressed in our answer to Appendix b.

D. An adequate Health/Physics surveillance program to preclude many of the problems discussed in this report was not being implemented. Numerous examples of inadequate surveillance are detailed in the details of the report (Section 9).

D. Response: A detailed study of Chemistry and Radiation Protection staffing needs has been completed and is currently in the corporate review cycle. Review completion is still expected by November 30, 1980. Florida Power Corporation realizes that an adequate staff is paramount to the improvement of the Health/Physics Surveillance Program.

A review is under way to reevaluate posting requirements. In some cases, it would appear that posting with conservatism rather than strict compliance with Federal guidelines has led to procedural noncompliances. We are evaluating the use of new barriers, such as spring closing devices, to assist in our control of posting requirements. Changes in this area will be in effect prior to November 30, 1980.

Appendix A references various sections of the inspection report that lists numerous Inspector Followup Items. These items will be logged and followed by the Crystal River Unit 3 Compliance Section.

Appendix B
NOTICE OF VIOLATION

A. As required by Technical Specification 6.11, "Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered-to for all operations involving personnel radiation exposure."

Radiological Control Procedure RP-102, Revision 9, entitled "Respiratory Equipment Manual" states:

- (1) In Section 4, "the training program shall, as a minimum, cover the following:
 - g. Discussion of the application of various cartridges and canisters available for air-purifying respirators...
 - j. Classroom and field training to recognize and cope with emergency situations.
 - k. Familiarization with plant respiratory protection devices...";
- (2) in Section 4, that "The training required for use of respiratory protective devices will be conducted by a member of the Chem/Rad Section",
- (3) in Section 5.1.4, that "The Chem/Rad Section will maintain a record of all individuals placed on the respiratory protection program, the particular type respirator that best fits the individual, and the alternate respirator.";
- (4) in Section 8.2.1.2 that "Testing will be carefully supervised and/or performed only by responsible and thoroughly trained individuals.",
- (5) in Section 8.2.2.3, that "All repairs on respiratory protective devices will be performed by personnel who are thoroughly familiar with the device and instructed in the type of repair to be performed.";
- (6) in Section 8.5.2, that "In no case will a contaminated respiratory protective device be returned for reissue or use."
- (7) in Section 8.3.1, that "Each respirator will be washed and disinfected at the conclusion of use."; and
- (8) in Enclosure 5, note b, that the protection factors apply "Only for shaved faces and where nothing interferes with the seal of tight-fitting face pieces against the skin."

Contrary to the above, (1) the training program which was conducted on June 16, 1980 did not include discussions of the types of canisters available, field training for emergencies, nor familiarization with plant devices; (2) respiratory protection training conducted on June 16, 1980, was not conducted by a member of the Chem/Rad Section; (3) records of the Respiratory Protection Program did not have training, fit or medical examination examination dates specified; (4) a tester administering a fit test on June 17, 1980, had not been trained; (5) repairs on respirators were being performed on June 18, 1980 by individuals who were not trained nor instructed; (6) five randomly selected ready for issuance respirators were surveyed on June 18, and found to exceed the contamination limit for the facility; (7) for the period June 16 through June 27, 1980, no disinfectant for respirators was being used; and, (8) on June 16 and 18, 1980, workers were observed with respirators worn over protective clothing and the protective clothing interfered with the facial seal.

This is an infraction.

A. Response: Development of a revised Respiratory Protection Training Program is underway to incorporate the infraction concerns. At present, the program is approxi-

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mately 40% complete. Additional manhours will be devoted to the program development when the Chemistry and Radiation Protection Technical Instructor reports to Training October 6, 1980.

The program, when developed, may include a fitting booth to establish a quantitative fit, and is being developed within NRC guidelines. We are currently waiting for correspondence from the NRC concerning certain aspects of the program.

Procedural revisions have been entered to the review cycle to allow a qualified training instructor to perform respirator training. Clarification and guidance will now be in the procedure to maintain contamination control.

As previously committed, the training program will be developed by January 1, 1981 and all personnel will be trained by October 1, 1981. Full implementation of procedural revisions is expected before January 1, 1981.

- B. As required by 10 CFR 20.103.c, "When respiratory protective equipment is used to limit the inhalation of airborne radioactive material, the licensee may make allowances for such use in estimating exposures of individuals to such materials provided that such equipment is used as stipulated in Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection." Regulatory Guide 8.15, Section 4.f requires: "Bioassays and other surveys, as appropriate, to evaluate individual exposures and to assess protection actually provided"; and Section 4.h requires: "Determination prior to assignment of any individual to tasks requiring the use of respirators that such an individual is physically able to perform the work and use the respiratory protective equipment. A physician is to determine what health and physical conditions are pertinent. The medical status of each respirator user is to be reviewed at least annually."

This is an infraction.

- B. Response: This infraction cited two examples: a) involves issuance/medical records and b) whole body counts. For clarity, each will be discussed separately.

Our file, containing qualification/medical records has been reviewed, and the out-of-date files have been removed to preclude inadvertent respiratory issuance to unqualified individuals. Corrective steps to avoid further noncompliance include a review of current practices and possible revision to the method by which Health/Physics determines an individual's qualifications. The program is presently in full compliance.

The (b) portion of this infraction states, "the respiratory program does not require termination whole body counts for anyone, nor does it require whole body counts for visitors." Florida Power Corporation disagrees that this practice is currently grounds for an infraction.

Regulatory Guide 8.15, Section 4.F references NUREG-0041, Sections 4 and 11. No actual requirement for termination whole body counts, or for commencement count for visitors exists in these documents. Contact with two other Southeastern Power Companies verified that they do not count all visitors and that termination counts are desirable but not always possible.

Florida Power Corporation recommends that the portion of Infraction B, involving whole body counting practices, be reclassified as an Inspector Followup Item.

- C. As required by Technical Specification 6.12.1.a, entrance to a High Radiation Area "shall be controlled by issuance of a Radiation Work Permit and any individual or group of individuals permitted to enter such areas shall be provided with a radiation monitoring device which continuously indicates the radiation dose rate in the area."

Contrary to the above, on June 16, 1980, two workers entered a High Radiation Area in the vicinity of the reactor vessel flange during the lowering of the vessel head without a survey instrument, and on June 20, 1980, one worker entered a High Radiation Area in the "backyard" near the Chem-Nuclear trailer without a dose rate survey instrument.

This is an infraction.

- C. Response: The Contract Health Physics Technicians involved in both incidents described in your report were immediately informed of the Technical Specification requiring "any individual or group of individuals" entering a high radiation area to carry a "Radiation Monitoring Device which continuously indicates the radiation dose rate in the area".

All contract technicians were informed of the Technical Specifications requirement to provide a survey instrument to individuals or groups of individuals entering High Radiation Areas.

As of January 1, 1981 a test will be administered to incoming contract technicians prior to commencement of work at CR-3. This test will be designed to evaluate the individuals general knowledge of Health/Physics practices and also his knowledge of specific CR-3 Health/Physics procedures.

Full compliance has been achieved as of this date. The contract testing program shall be implemented by January 1, 1981.

- D. As required by Technical Specification 6.4.1, a retraining program for the facility staff shall be maintained and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971. Section 5.5 of ANSI N18.1-1971 states that a training program shall be established which maintains the proficiency of the operating organization.

Contrary to the above, the licensee did not have a formal retraining program which maintained the proficiency of the Health/Physics technicians.

This is an infraction.

- D. Response: Program development is underway to meet the training/retraining requirements for Health/Physics personnel. Accelerated development is anticipated after the Chemistry and Radiation Protection Technical Instructor reports to the Training Department October 6, 1980

Included in the program development is a trip to Duke Power by members of the Crystal River Training Department in early October 1980. Duke Power has an established training/retraining program for Health/Physics technicians.

As previously committed, program implementation will occur by January 1, 1981.

- E. As required by 10 CFR 20.203.c.1, each high radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words "CAUTION - HIGH RADIATION AREA".

Contrary to the above, on June 18, 1980, a High Radiation Area was not conspicuously posted in the containment near the reactor vessel head storage stand. Levels of 2.2 rem per hour on contact with a vacuum cleaner and 150 millirem per hour 18 inches from the vacuum cleaner were measured. In addition, 100 millirem per hour was measured at 18 inches from a shielded motor tube housing. Workers in the area were not aware of these dose rate levels.

This is an infraction.

- E. Response: The two violations stated were corrected immediately upon notification. A radiation survey was performed on all elevations of the Reactor Building to determine if any other posting violations existed. None were discovered.

All HP technicians were instructed as to the importance of posting and maintaining posting of high radiation areas, radiation areas, contaminated areas, etc.

No further corrective action is being considered at this time. Full compliance has been achieved.

- F. As required by 10 CFR 20.201, "Each licensee shall make or cause to be made such surveys as may be necessary for him to comply with the regulations in this part". 10 CFR 20.103.c states "the licensee shall use suitable measurements of concentrations of radioactive materials in air for detecting and evaluating airborne radioactivity in restricted areas...".

Contrary to the above, on June 19, 1980, no airborne radioactivity survey was taken in the breathing zone of three people working in the vicinity of the reactor vessel head bolts. Surface contamination levels in the area provided potential for significant airborne radioactivity. Respirators were worn.

This is an infraction.

- F. Response: 10 CFR 20.103.C does not state, as referenced in your report, "The licensee shall use suitable measurements of concentrations of radioactive materials in air for detecting and evaluating airborne radioactivity in restricted areas..." This wording is located under 10 CFR 20.103.a.3. 10 CFR 20.103c does, however, state, "When respiratory protective equipment is used to limit the inhalation of airborne radioactive material...the licensee may make allowance for such use in estimating exposures of individuals to such materials provided that such equipment is used as stipulated in Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection".

Florida Power Corporation does not believe that it was in violation of either of the above mentioned sections of 10 CFR 20, since nowhere in either 10 CFR 20, or Regulatory Guide 8.15, is there any mention of "Breathing Zone" nor any definition offered. Regulatory Guide 8.15 references NUREG 0041 in which "Breathing Zone" is mentioned in conjunction with lapel samplers used for measuring the air actually being inhaled by the individual. Since the workers referred-to in the violation were wearing respirators, the use of this type of apparatus was not feasible. Additionally, there is no specific requirement that air samples be taken in the "Breathing Zone". Air samples were taken in the vicinity of the workers during the work period.

Florida Power Corporation recommends that Infraction "F" be reclassified as an Inspector Followup Item.

- G. As required by 10 CFR 20.203.b, "Each radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words "CAUTION -RADIATION AREA".

Contrary to the above, the following radiation areas were not conspicuously posted:

- a. On June 23, 1980, an open LSA box in the compactor room read 30 millirem per hour at 18 inches.
- b. On June 25, 1980, a general area level of 25 millirem per hour was measured outside the compactor room and the room was unmarked. The area sign was discovered under debris.
- c. On June 25, 1980, a general area level of 15 millirem per hour was measured in the safeguards area pipe gallery at the 95 foot elevation.

This is an infraction.

- G. Response: This infraction was similar to infraction "E", in that it involves posting violations. Upon notification, the posting was immediately addressed in the identified areas. The items listed as G.a. and G.b. were located in the compactor room which contained other radiation area posting. However, additional posting was added to meet the inspector's concerns. The item listed as G.c. was a dislodged sign that had been dropped from its mounting.

Work is currently underway to fabricate swinging gate devices to reduce the potential for dislodged barriers during personnel entry/exit to radiation areas in the future.

During the outage period, a Health/Physics technician was assigned to the Radiation Controlled Area as a rover 24 hours per day, specifically to address posting conditions and other Health/Physics concerns. Upon arrival, the Appraisal Team informed us that their purpose was not to perform a compliance audit, but rather to find and identify program weaknesses. Further, they stated enforcement action would only be taken where true program deficiencies existed. Florida Power Corporation believes that the infraction identified in this section constitutes an unreasonable level of severity. If the NRC still feels this item must be carried

as an infraction, Florida Power Corporation feels it should be grouped under Infraction "E" as an example.

Full compliance has been achieved at this time.

- H. As required in part by 10 CFR 20.102.b, "Before permitting any individual in a restricted area to receive an occupational radiation dose in excess of the standards specified in 20.101(a), each licensee shall:

Calculate on Form NRC-4 in accordance with the instructions appearing herein, or on a clear and legible record containing all the information required in that form, the previously accumulated occupational dose received by the individual and the additional dose allowed for that individual under 20.101(b).

Contrary to the above, two workers with incomplete Form NRC-4's were authorized by dosimetry control printout to exceed 1.25 rem per quarter and one of the workers actually received a dose in excess of this limit (1,274 millirem based on pocket dosimeter readings).

This is an infraction.

- H. Response: A review of all personnel exposure records has been conducted and all deficiencies identified have been corrected.

Florida Power Corporation wishes it understood that the worker referenced in this infraction did not exceed 1.25 rem at Crystal River. The exposure of 1274 millirem was a combination of exposures from Crystal River and another facility. The error detected by the inspector involved an improper computer entry which failed to enter previous years exposure, thus invalidating the 5(N-18) calculation.

A revision to RP-201, "Personnel Exposure Documentation" is being written to incorporate a specific procedure for TLD issue, deletion, and termination. An FPC compliance inspection was conducted involving personnel exposure records, after the HP appraisal, resulting in another review of all personnel exposure records.

Full compliance is expected by November 1, 1980.

- I. As required by Technical Specification 6.11 "Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure." Procedure RP-213 "Pocket Dosimeter Functional Check" states in section 2.1.1 that "The various dosimeters will be calibration checked on a rotational basis at six month intervals or at such times as there is reasonable doubt as to the authenticity of the dosimeter's performance. The cycling for calibration purposes shall be such that an operating supply of dosimeters is readily available at all times."

Contrary to the above, on June 25, 1980, the calibration program as practiced actually calibrated approximately annually. For example a review of records indicated pocket dosimeters 007 and 581 were last calculated on February 8, 1979.

This is an infraction.

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I. Response: A check was made of all in-use 0-200mr pocket dosimeters to ensure that calibration had been performed within the previous six month period. Also, an inspection was made of the emergency kits and all high range dosimeters calibrated.

We are presently revising RP-213, "Pocket Dosimeter Functional Check" to establish a specific procedure for ensuring at least a six month calibration frequency of all in-use pocket dosimeters. To facilitate this change and to provide an adequate supply, appropriate action is being taken to increase our inventory.

Full compliance has been achieved at this time.

Very truly yours,

FLORIDA POWER CORPORATION

A. J. Armstrong VICE Pres.
For/ J. A. Hancock
Assistant Vice President
Nuclear Operations

D. C. Poole
D. C. Poole
Nuclear Plant Manager

KFL/rc