



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

Report Nos. 50-269/81-11, 50-270/81-11, and 50-287/81-11

Licensee: Duke Power Company
422 S. Church Street
Charlotte, NC 28242

Facility Name: Oconee

Docket Nos. 50-269, 50-270, and 50-287

License Nos. DPR-38, DPR-47, and DPR-55

Inspection at Oconee facility near Seneca, South Carolina

Inspectors: J. M. Puckett
J. M. Puckett

6/22/81
Date Signed

L. A. Franklin
L. A. Franklin

6-23-81
Date Signed

Approved by: C. M. Hovey
C. M. Hovey, Acting Section Chief
Technical Inspection Branch
Engineering and Technical Inspection Division

6/23/81
Date Signed

SUMMARY

Inspection on May 26-29, 1981

Areas Inspected

This routine, unannounced inspection involved 52 inspector-hours onsite in the area of HP appraisal findings.

Results

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

8107240418 810630
PDR ADOCK 05000269
Q PDR

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *J. E. Smith, Station Manager
- *J. N. Pope, Superintendent Operations
- *C. L. Thames, Health Physics
- *C. T. Yongue, Station Health Physicist
- *T. C. Matthews, Technical Specialist, Licensing

Other licensee employees contacted included five technicians .

Other Organizations

- *F. B. Foster, Institute for Nuclear Power Operations (INPO)
- *T. L. Cellmer, INPO
- *A. S. Bunker, INPO

NRC Resident Inspector

- *F. Jape
- *W. T. Orders

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on May 29, 1981 with those persons indicated in paragraph 1 above. The inspector thanked the licensee representatives for their cooperation in the inspection and noted that it must have been a difficult week with both INPO and the NRC inspecting the facility simultaneously.

The Station Manager made a commitment to the inspectors regarding concerns about personnel contamination action levels for HP notification. This is fully explained in Section 5 of the details.

3. Licensee Action on Previous Inspection Findings

- a. (Closed) Infraction (80-31-17), Failure to Follow Procedures. This item concerned potentially radioactive tools, equipment, or waste and the failure to wrap, bag, tag or identify the equipment when it was removed from the work area where it was used.

The inspectors toured the facility auxiliary building and no discrepancies in the labelling and containment of radioactive material were observed. In the areas inspected, the housekeeping in general was observed to be well above average.

- b. (Closed) Infraction (80-31-19), Failure to Perform Safety Evaluation. This item refers to the placement of lead shielding on seismic classified safety systems without evaluation of the impact of associated static and dynamic loads the extra weight would demand during system operation. During the tour, the inspectors noted no instance where lead shielding had been improperly utilized. The licensee also has an approved procedure which provides (1) assessment of loading, (2) contains criteria for shielding use, and (3) a surveillance program for installed shielding.

4. Licensee Action on Previous Inspector Identified Items

- a. (Closed) Inspector followup item (IFI) (80-31-01), Inconsistencies Between Station Procedures and the System Health Physics Manual. The Station Health Physicist informed the inspectors that as procedures are revised or originally written a copy is now sent to the Corporate Health Physics Office for review and comment as to its adequacy and consistency prior to its implementation at the facility. This will result, in time, in all procedures receiving such a review. In addition, the Corporate Health Physics Staff will be performing informal reviews on their own initiative towards achieving the same goals.
- b. (Closed) IFI (80-31-02), Address Audits Performed by System Health Physics Staff to Station Manager. The inspector was shown a recent System Health Physics Audit and it was addressed to the Station Manager.
- c. (Closed) IFI (80-31-03), Verification of the Qualifications of Vendor-Supplied Health Physics Technicians. The licensee's Corporate Office now performs a verification check on the resumes of vendor-supplied HP technicians. The inspector examined a recent verification and noted that the qualifications of four individuals had been questioned by the licensee. The vendor was notified by the licensee that three of these individuals would not be accepted and had requested additional information on the fourth. This program appears adequate to protect against unqualified personnel being given responsibilities when they are not qualified in accordance with the Technical Specification ANSI N18.1 requirements.
- d. (Open) IFI (80-31-04), Upgrading General Employee Radiation Protection Training. A licensee representative stated to the inspectors that the Duke Power Company System General Employee Radiation Protection

Training Program was being revised in its entirety and that the concerns from IE Report 80-31 were under evaluation for inclusion in this revision. This item will remain open until the completion and implementation of the revision.

- e. (Closed) IFI (80-31-05), High Dose Range Reading Capability of the Thermoluminescent Dosimeter (TLD) System. The licensee has, via a study performed by the University of Michigan, found that there is good agreement and linearity by the present Teledyne 9100 system up to the 700 rad dose level. Excellent agreement is found up to 100 rad. The licensee plans to extend testing to 1000 rad dose at the next testing interval. The inspectors had no further questions.
- f. (Open) IFI (80-31-06), Quality Control Checks of TLD System. The licensee has decided to implement a "blind check" of TLD badges, but formal procedures have not yet been written and approved. This item remains open until the check system is instituted.
- g. (Open) IFI (80-31-07), Calibration of TLD System with Radiation Sources Similar to Those Expected Within the Plant. The licensee has agreed with the goals of such a program, but is experiencing difficulty in obtaining appropriate NBS (National Bureau of Standards) traceable sources in a timely manner. This item will remain open until the program is implemented.
- h. (Open) IFI (80-31-08), Quality Control Check of Internal Monitoring System. The licensee has instituted a plan for all of Duke Power Company's nuclear facilities to perform this check. Details of how this will be accomplished have not yet been determined.
- i. (Closed) IFI (80-31-09) Storage of Respirators. The licensee has examined this problem and has determined it is unfeasible to change the system as established. The original problem was centered around the potential for accidental cross-contamination of clean respirators. Since no incident of this type has been observed, this appears to not be a significant concern.
- j. (Open) IFI (80-31-10), Updating Radiation Work Permits (RWPs) With Current Radiological Information. The inspectors were shown a new form intended for inclusion in the RWP procedure. This procedure is currently under revision and the change appears to adequately address this problem.
- k. (Open) IFI (80-31-11), Establishment of Specific Requirements for Technicians to Serve in Responsible Positions. As a temporary measure, the licensee has issued a memorandum to the Operating Health Physics Supervisors instructing them to ensure only ANSI N18.1 qualified

personnel shall write RWPs and set radiological protection requirements for work. The RWP procedure revision addressed in paragraph 4.j. of this report includes this requirement.

- l. (Closed) IFI (80-31-12), Establish RM-14 Frisker Response Check Criteria. Licensee procedure, "Procedure for Daily Source Check of the RM-14 and RM-15 Beta-Gamma Radiation Monitors", HP/O/B/1005/07A, properly outlines the technique for source check of these instruments. The licensee believes that the technician who provided information to the inspector at that time merely failed to communicate his knowledge of this procedure adequately to the inspector and did in fact know the requirements.
- m. (Closed) IFI (80-31-13), Policy Concerning Notification of Health Physics of all Personnel Contamination. This item relates to the statement in the licensee's General Employee Radiation Protection Training that individual radiation workers should attempt self decontamination prior to notifying HP. This item is discussed further in paragraph 5. of this report.
- n. (Open) IFI (80-31-14), Verification of RM-14 Alarm Setpoints. The licensee is still seeking a solution to the problem of how to ensure the alarm setpoints on these instruments can be consistently set at a realistic level and maintained at that point. Some of the problems encountered are (1) varying background levels and the attendant false alarms, (2) unauthorized change of the setpoint due to easy accessibility of the adjusting knob, and (3) determination of appropriate level.
- o. (Closed) IFI (80-31-15), Conversion to HP-210 Probe for Personnel Monitoring. The licensee stated that personnel monitoring is now accomplished using thin-window detectors of the HP-210 type.
- p. (Closed) IFI (80-31-16), Improved Sensitivity of Portal Monitors. The licensee has adjusted the count time on portal monitors and achieved a 20% increase in sensitivity. Self frisking is regarded as being the primary means of personnel contamination according to licensee representatives. Portal monitors are regarded as a backup check at this facility.
- q. (Closed) IFI (80-31-18), Personnel Contamination Monitoring. Personnel contamination monitoring is discussed further in IE Report 269/270/287/81-08.
- r. (Closed) IFI (80-31-20), Solid Radioactive Waste Volume Reduction Training for Station Staff. Solid radwaste volume reduction training is being incorporated in the upgraded general employee training discussed in paragraph 4.d of this report.

- s. (Open) IFI (80-31-21), Implementation Date for System ALARA Manual. A licensee representative stated that the manual was not yet fully implemented. The following reasons and information were offered in explanation; the Manual is sweeping in scope and requires extensive change throughout the facility and its operation and staffing; the highest levels of management at Duke Power Company are concerned and committed to ALARA and all reasonable effort is being expended to implement this policy Manual.
- t. (Open) IFI (80-31-22), Review of Plant Procedures by Health Physics Staff. Plant Technical Specifications do not require a multi-disciplinary review of all procedures at this time. As a result, the concerns of this item will not be addressed until the ALARA Manual implementation referenced above takes place.
- u. (Open) IFI (80-31-23), Isolation of Counting Room in the Event of High Airborne Radioactivity in Plant. The licensee has investigated this problem and agrees to its validity. Currently, procedures are under development to provide a counting facility outside the Auxiliary Building which would not be affected.
- v. (Closed) IFI (80-31-24), Replacement of Internal Check Sources for Fixed Area Monitors. New sources were being installed during the course of this inspection.
- w. (Open) IFI (80-31-25), Use of Ba-133 Measurements in Calibration Procedures and Techniques. IE Report 80-31 explains that the Ba133 measurement made during the course of the calibration of RIA 48 was in error by a factor of 20, yet there was no procedural action statement to resolve this error. The licensee has investigated this situation and found that one of a pair of mylar windows was missing from the detector. This condition was corrected and action level statements are being added to the calibration procedure.
- x. (Open) IFI (80-31-26), Review of Fixed Monitor Calibration Procedures and Techniques. Some work in this area has been done by the licensee, but it is not complete. The licensee is in the process of obtaining the appropriate ANSI standards and will compare their requirements for applicability and practicality against current procedures.
- y. (Open) IFI (80-31-27), Posting Current Protective Clothing Requirements and Radiological Status of Work Areas. This item is addressed in the RWP procedure change discussed in paragraph 4.j of this report.
- z. (Closed) IFI (80-31-18), Perform Safety Evaluation of Auxiliary Boiler. The inspector was shown a safety evaluation dealing with this topic. It appeared adequate.

5. Personnel Contamination Reporting

Enclosure 5.1 to Station Directive 3.8.10 requires personnel to notify Health Physics when a self-frisk for contamination reveals levels in excess of 200 counts per minute. The Directive, in paragraph 4.1.2.3 states that if contamination is "extensive" then HP should be informed prior to self-decontamination. Due to the potential in such cases for the possibility of significant skin dose, this statement is unacceptable. 10 CFR 20.101 states regulatory limits for skin dose, and 10 CFR 20.201 requires the licensee to evaluate such dose. The licensee's Technical Specifications require this type of evaluation to be performed by an individual qualified to the level stated in ANSI N18.1, a level of qualification not normally achieved by most radiation workers. The Station Manager committed to the NRC at the exit interview on May 29, 1981 that the word "extensive" would be changed to an appropriate value. This value would be assigned after an evaluation, as required by 10 CFR 20.201, was performed. This is an open item (IFI 269/270/287/81-11-01).