UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N.W. SUITE 1217
ATLANTA, GEORGIA 30303

Report Nos.: 50-269/78-7, 50-270/78-7 and 50-287/78-7

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

Licensee: Duke Power Company
P. O. Box 2178
422 South Church Street
Charlotte, North Carolina 28242

Facility Name: Oconee Nuclear Station

Inspection at: Seneca, South Carolina

Inspection conducted: March 28-31, 1978

Inspector: G. R. Jenkins

Reviewed by: A. F. Gibson 4/13/78
A. F. Gibson, Chief Date
Radiation Support Section
Fuel Facility and Materials Safety Branch

Inspection Summary

Inspection on March 28-31, 1978 (Report Nos. 50-269/78-7, 50-270/78-7 and 50-287/78-7)
Areas Inspected: Routine, unannounced inspection of radiation controls and followup on noncompliance, unresolved, and IE Circular items. The inspection involved about 26 inspector-hours on-site by one NRC inspector.
Results: Of two new areas inspected, one item of noncompliance was identified (Infraction: Radiation area not conspicuously posted (78-07-01)). In addition, one deviation was identified during followup on a previous item of noncompliance (Deviation: Oil Collection Basin not sampled at 2-hour frequency (78-07-02)).

DETAILS I

Prepared by: G. R. Jenkins 4/17/78
G. R. Jenkins, Radiation Specialist Date
Radiation Support Section
Fuel Facility and Materials Safety Branch

Dates of Inspection: March 28-31, 1978

Reviewed by: A. F. Gibson 4/17/78
A. F. Gibson, Chief Date
Radiation Support Section
Fuel Facility and Materials Safety Branch

1. Individuals Contacted

Duke Power Company

*J. E. Smith, Manager, Oconee Nuclear Station
*R. M. Koehler, Superintendent of Technical Services
*C. T. Yongue, Station Health Physicist
R. T. Bond, Technical Services Engineer
D. L. Davidson, Health Physics Supervisor
G. F. Davis, Health Physics Supervisor
M. D. Thorne, Health Physics Supervisor
J. A. Long, Health Physics Supervisor
L. A. Blue, Associate Health Physicist
S. Nickles, HP Lab Assistant
J. Stewart, HP Labman
T. S. Barr, Performance Engineer
R. C. Adams, I&C Supervisor

*Denotes those attending exit interview.

2. Licensee Action on Previous Inspection Findings

(Open) Unresolved Item (73-12-01): Calibration of effluent monitors. An inspector reviewed procedures and data, and discussed with licensee representatives the program for correlation of radiation monitors with laboratory analyses. This item remains open. (Details I, paragraph 7).

(Closed) IE Circular 76-03 (76-C1-03): Radiation exposure in reactor cavities. An inspector reviewed the licensee's documentation as referenced in Duke's letter of November 1, 1976, and had no further questions.

(Closed) Infraction (77-01-01): Inadequate surveys. An inspector reviewed corrective actions as stated in Duke's letter of June 24, 1977. Although the corrective actions outlined in the response appeared adequate, the inspector found that the commitment to initially sample the oil collection basin every two hours was not carried out subsequent to a Unit 2 primary to secondary leak identified on September 27, 1977. This is cited as a deviation in this report. (Details I, paragraph 8).

(Closed) Unresolved Item (77-04-01): Releases of gaseous radioactivity to the auxiliary building. Through review of shift supervisor logs and survey records, and discussions with licensee representatives, an inspector evaluated health physics actions associated with auxiliary building gaseous releases on November 4, 1977, January 8, 1978, and March 27, 1978. There were no further questions on this item.

(Closed) Infraction (77-21-01): Improper setpoint for RIA-45 vent gas monitor. An inspector reviewed a revision to procedure IP/0/A/360/1C and held discussions with licensee representatives, and determined that corrective actions stated in Duke's letter of November 22, 1977 had been accomplished.

3. Unresolved Items

No new unresolved items were identified during this inspection.

4. Radiation and High Radiation Area Doors

a. During a tour of the auxiliary building on the afternoon of March 28, 1978, an inspector observed that the door to Room 304, solid waste drumming room, was propped open and the room was unattended. The door was posted with a high radiation area sign, as well as a sign with instructions to keep the door closed and locked. A health physics supervisor surveyed the room and found that, although posted as such, the room was no longer a high radiation area.

b. Later in the tour, the inspector observed that the gate to Room 258, Unit 3 waste gas compressor room, was fully open and the room unattended. The gate was posted with a radiation area sign, as well as a sign with instructions to keep the gate closed and locked. With the gate open, the fronts of the signs were not visible. A licensee representative stated that a survey made earlier that day showed radiation levels in the room of 2-5 mrem/hr general area and 30 mrem/hr maximum. The inspector identified this as noncompliance with 10 CFR 20.203(b), which requires that each radiation area be conspicuously posted. (78-07-01).

c. Upon investigation, licensee management determined that three contractor employees were responsible for leaving the above described door and gate open. Disciplinary action was taken against those employees. In addition, the Station Manager issued a letter to all station supervisors on March 31, 1978, informing them of the incident and instructing them to caution all employees to heed station rules. The Station Health Physicist stated at the exit interview that all locked doors are checked by health physics at least once per day. The inspector stated that corrective action appeared adequate and that no further response would be required for this item of noncompliance.

5. Compressed Gas Bottles

During the tour of the auxiliary and turbine buildings, the inspector observed numerous compressed gas bottles which were not well secured. The inspector noted the potential hazard of a gas bottle being knocked over and becoming a missile. Licensee management acknowledged the inspector's comments, and stated that the item would be brought to the attention of the Station Safety Committee.

6. Receipt of Spent Fuel Element

A spent fuel element which had been sent to Babcock and Wilcox, Lynchburg Research Center for analysis was received back at the station on the evening of March 28, 1978. The inspector reviewed receipt documentation and survey results, and observed an additional radiation survey of the shipment on the morning of March 29. The inspector had no questions regarding the station's surveys and handling of the shipment.

7. Correlation of Radiation Monitors

An inspector reviewed Station Directive 3.8.6, dated 6/10/77, "Radiation Monitor Responsibilities", which categorizes the various station radiation monitors and assigns responsibility for calibration, correlation, set-points, etc. The inspector reviewed HP/0/B/1000/60/F, "Procedure for Correlation of Effluent RIA Monitors", dated 7/30/76. A licensee representative stated that this procedure was not sufficiently detailed to accomplish its purpose, and that a draft of an extensive revision had been completed. He said the revised procedure was expected to be approved within about two weeks. An associate health physicist has been assigned to develop the procedure and coordinate the correlation of monitor readouts with laboratory analyses and, where needed, coordinate the resolution of monitor problems. The inspector reviewed selected correlation data collected

under the revised (draft) procedure for RIA-33, RIA-37, RIA-38, RIA-40, and RIA-44. The inspector stated that this item would remain unresolved until all effluent and area gaseous RIA monitors have been correlated in accordance with the revised procedure, and reasonable results obtained. (73-12-01).

8. Sampling of Oil Collection Basin

Duke's letter of June 24, 1977, in response to noncompliance item 1 of IE Rpt Nos. 50-269, 50-270, 50-287/77-1, stated in part that, in the event a primary to secondary leak is identified, the oil collection basin is initially sampled every two hours and analyzed for tritium and gamma isotopes. This requirement is incorporated in procedure HP/0/B/1000/62/Q, "Environmental Surveillance Following a Primary to Secondary Leak". The inspector reviewed turbine building sump and yard drain (oil collection basin) sample records subsequent to an indicated Unit 2 primary to secondary leak on September 27, 1977. Sampling of the turbine building sump appeared to be in accordance with the licensee's procedure and commitment; these samples indicated the presence of cobalt and cesium activity. Yard drain samples and results for September 27 and September 28 were as follows:

Date	Time	Results
9/27	2047	No detectable activity
9/28	0001	No detectable activity
9/28	1130	Xe-133, Co-60, Cs-134
9/28	1530	Co-60
9/28	1930	Cs-134
9/28	2330	No detectable activity

Based on the above data, the inspector stated that the failure to collect yard drain samples at 2-hour intervals until the activity stabilized was a deviation from the commitment in Duke's letter of June 24, 1977. (78-07-02).

9. Exit Interview

The inspector met with management representatives (denoted in paragraph 1) on March 31, 1978, and summarized the scope and findings of the inspection. Items discussed included one new noncompliance item and a deviation from licensee commitment, as well as status of previously identified noncompliance and unresolved items. Additional discussions with management were held by telephone on April 3, 1978 and April 4, 1978.