



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

Report Nos.: 50-269/84-15, 50-270/84-14, and 50-287/84-18

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

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

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

Facility Name: Oconee Nuclear Station Units 1, 2, and 3

Inspection Dates: June 11 - July 10, 1984

Inspection at Oconee site near Seneca, South Carolina

Inspectors: Vergil H. Brownlee for 7/19/84
J. Bryant Date Signed
Vergil H. Brownlee for 7/19/84
K. Sasser Date Signed

Accompanying Personnel: C. Burger

Approved by: Vergil H. Brownlee 7/19/84
V. Brownlee, Section Chief Date Signed
Division of Reactor Projects

SUMMARY

Scope: This routine announced inspection involved 320 resident inspector-hours on site in the areas of operations, maintenance, surveillance, Engineered Safety Features (ESF), emergency drills and fuel handling.

Results: Of the five areas inspected, no items of noncompliance or deviations were identified.

REPORT DETAILS

1. Persons Contacted

- *M. S. Tuckman, Station Manager
- J. N. Pope, Superintendent of Operations
- T. Barr, Superintendent of Technical Services
- J. Davis, Superintendent of Maintenance
- *R. Bond, Compliance Engineer
- *T. Matthews, Compliance Engineer

Other licensee employees contacted included technicians, operators, mechanics, and staff engineers.

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on July 7, 1984, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Enforcement Matters

Not inspected

4. Unresolved Items

No unresolved items were not identified during this inspection.

5. Plant Operations

The inspectors reviewed plant operations throughout the reporting period to verify conformance with regulatory requirements, technical specifications, and administrative controls. Control room logs, shift turnover records and equipment removal and restoration records were reviewed routinely. Interviews were conducted with plant operations, maintenance, chemistry, health physics and performance personnel.

Activities within the control rooms were monitored on an almost daily basis. Inspections were conducted on day and on night shifts, during week days and on weekends. Some inspections were made during shift change in order to evaluate shift turnover performance. Actions observed were conducted as required by Section 3.18 of the station directives. The complement of licensed personnel on each shift inspected met or exceeded the requirements of technical specifications. Operators were responsive to plant annunciator alarms and appeared to be cognizant of plant conditions.

Plant tours were taken throughout the reporting period on a routine basis. The areas toured included the following:

- Turbine Building
- Auxiliary Building
- Units 1, 2 and 3 Electrical Equipment Rooms
- Units 1, 2 and 3 Cable Spreading Rooms
- Station Yard Zone within the Protected Area
- Units 1, 2 and 3 Spent Fuel Pool Areas

During the plant tours, ongoing activities, housekeeping, security, equipment status, and radiation control practices were observed.

Units 1, 2 and 3 operated at essentially full power throughout the report period, June 11-July 10. On July 3, Oconee Unit 2 exceeded the B&W plant record for continuous on-line operation of 206.7 days.

On June 21, Unit 3 gave the first indication of a steam generator tube leak. On June 22, off gas activity was measured at 1800 cpm and leakage calculated at 0.008 gpm. On July 8, these values had increased to 19,500 cpm and 0.023 gpm; however, on July 10, the calculated leak rate was 0.01 gpm. The leakage has been determined as originating in 3A steam generator.

Prior to the weekend of July 7-8, leakage had apparently leveled off at 0.015 gpm. Over the weekend, main steam stop valve tests were performed. This possibly influenced the increase to 0.023 gpm. At present, no decision has been reached as to when the reactor will be shut down for repair of the steam generator.

6. Surveillance Testing

The surveillance tests listed below were reviewed and/or witnessed by the inspectors to verify procedural and performance adequacy.

The completed tests reviewed were examined for necessary test prerequisites, instructions, acceptance criteria, technical content, authorization to begin work, data collection, independent verification where required, handling of deficiencies noted and review of completed work.

The tests witnessed, in whole or in part, were inspected to determine that approved procedures were available, test equipment was calibrated, prerequisites were met, tests were conducted according to procedures, test were acceptable and system restoration was completed.

The following completed work requests were reviewed:

- WR55406A - Calibration of spent fuel building radiation monitors
- WR57099A - Control rod drive redundant trip confirmation and source interruption chassis test.

The following performance tests were witnessed in whole or in part and procedures and results reviewed:

PT/3/A/600/12	Unit 3 Turbine Driven Emergency Feedwater Pump Performance Test.
IP/0/A/3800/03C	Safe Shutdown Facility Diesel Generator Tube Oil Pressure Statalarm/Trip Check.
PT/0/A/0620/16	Emergency Start of Keowee Units 1 and 2.

7. Maintenance Activities

Maintenance activities were observed and/or reviewed during the reporting period to verify that work was performed by qualified personnel and that approved procedures in use adequately described work that was not within the skill of the trade. Activities, procedures and work requests were examined to verify proper authorization to begin work, provisions for fire, cleanliness, and exposure control, proper return of equipment to service, and that limiting conditions for operation were met.

The following completed work requests were reviewed:

WR 24744 - Repair coupling leaks on seal injection line for 3A low pressure injection pump.

WR 13599B - Repair north UST manway leak-retorque bolts.

WR 14405B - Change SFP 3B filter per OP/3/A/1104/22

WR 14395B - Change SFP 3B filter per OP/3/A/1104/22

The following maintenance jobs were witnessed in part in the field and in shops over a period of several days. Work procedures and procedure completion were reviewed and discussions held with mechanics.

WR 13603B - Replace 3MS-92 (TDEFWP relief valve).

WR 53313C - Change oil in SSF 16 cylinder diesel generator.

WR 53307C - Change oil in SSF 12 cylinder diesel generator.

In reviewing the in use procedure during the change out of oil in the diesel generators, the inspectors noted two discrepancies in that two steps which were not applicable had not been signed off as N/A by the job supervisor and the actual changing of fresh oil was signed off as the changing began. Other steps in the procedure which were not applicable had been properly signed off by the supervisor.

The above items were not cited as violations since the SSF is not yet in service and is not a part of the technical specifications. The inspectors discussed the matter with the station manager and appropriate action was taken.

As work progressed, the mechanics noted that three drums of oil which had been added were not the oil specified in the job plan. They stopped work and reported it to management and to the inspector.

A diesel vendor representative advised Duke that the oil in the diesel should be replaced to avoid possible invalidation of the warranty, even though the oil used was a superior grade to that required. The oil was drained and replaced.

The inspectors traced the cause of the discrepancy. The program and all controls appear to have been adequate, with a simple human error having been made when the oil to be used was designated to the mechanics. The licensee has taken corrective action.

This item was not cited for the reasons given above.

No violations or deviations were cited.

8. Emergency Feedwater System

During a walkdown and valve position verification of the Unit 1 emergency feedwater system, the inspector noted that Valve 1C-184 (MDEFFWP suction from condenser) was closed and not locked open as shown in the valve lineup procedure.

A review of the removal and restoration log revealed that the valve had been closed due to leakage through a downstream check valve. A review of technical specifications determined that all TS required conditions for flow were met and no violations or deviations existed.

9. Irradiated Materials Shipment Using NAC-1 Cask

The inspectors observed all aspects of the shipment of one spent fuel assembly from the Units 1 and 2 fuel pool to the Unit 3 pool. This included activities inside and outside the spent fuel area. It required an entire shift to load the cask, decontaminate, transport, unload and decontaminate the cask.

No violation or deviations were identified.

10. Emergency Drills

On June 20, the inspectors witnessed an emergency medical drill in which a victim with simulated contamination was taken to a local hospital. On the evening of June 20, the inspectors witnessed a fire drill in which two local fire companies participated.

On June 21, the inspectors participated in a drill in which a General Emergency was simulated on Unit 2. County officials participated and the Technical Support Center was fully manned.

The above drills were carried out as realistically as possible within the scope of the exercise and no major problems were identified. All three drills were monitored by a Regional team and are reported in detail in Report Nos. 50-269/84-12; 50-270/84-12; and 50-287/84-14.