UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-269/87-47, 50-270/87-47, and 50-287/87-47

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 1, 2, and 3

Inspection Conducted: November 30 - December 4, 1987

Inspector: N. E. Economos — 12-28-87 Date Signed

Approved by: J. J. Blake, Chief — 12-28-87 Date Signed
Materials and Processes Section
Engineering Branch
Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection was in the areas of licensee action on previous open items, Unit 1 inservice inspection (ISI) review of rejected radiograph and corrective action; licensee action on Temporary Instruction (TI) 2500/26, IE Bulletin 87-02; inservice inspection testing (IST) pumps, valve repairs, and testing.

Results: In the areas inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

T. A. Barron, Technical Support Supervisor
*J. Forbes, Maintenance Engineer
W. W. Gallman, Nuclear Maintenance Mechanical Engineer
*C. L. Harlin, Compliance Engineer
W. R. Hunt, ISI Coordinator, Oconee
*R. H. Ledford, Surveillance Supervisor, QA
M. J. Robinson, Nuclear Production Engineer
*R. Sweigart, Oconee Superintendent, Operations
M. S. Tuckman, Station Manager

NRC Resident Inspectors

*J. C. Bryant, Senior Resident Inspector
*T. A. Peebles, Projects Section Chief
*L. W. Wert, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on August 7, 1987, with those persons indicated in paragraph 1. The inspector described the areas inspected and discussed in detail the inspection findings. Dissenting comments were not received from the licensee.

Proprietary information is not contained in this report.

3. Licensee Action on Previous Enforcement Matters (92701)

(Closed) Violation 269, 270, 2987/87-01-01, Criteria for Cold Springing of Pipe during Field Installation.

The licensee's letter of response dated July 16, 1987, has been reviewed and determined acceptable by Region II. The inspector held discussions with the Licensee's cognizant engineer and examined the corrective actions as stated in the letter of response. The inspector concluded that the licensee has determined the full extent of the subject noncompliance, performed the necessary followup actions to correct the present conditions, and developed the necessary corrective conditions. The corrective actions identified in the letter of response have been implemented.

(Closed) Unresolved Item (UNR) 269/87-37-01, Procedure Hydrostatic Boundaries Uncertain.

This item was identified when the inspector noted that hydrostatic records being examined lacked sufficient information needed to determine whether valve 1RC-46 should have been identified in the hydrostatic testing procedure TT/1/A/450/25 dated December 24, 1981, Enclosure 13.1, as an isolation boundary. The inspector's position, at the time, was that the aforementioned valve should have been used to isolate an instrument line and the reactor building component drain header during the hydrostatic test. To resolve the issue, the inspector requested that the licensee provide marked up PO drawings for review on a future inspection. During the present inspection, the licensee provided information (Dwgs. PO-100A-1, Rev. 22, and Rev. 27) which showed the piping had been recognized as being part of the inspection boundaries and valve 1RC-46 was closed per OP/1/A/1103/02.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Followup on IE Bulletins

(Open) IE Bulletin 87-02: Fastener Testing to Determine Conformance with Applicable Material Specifications, Units 1, 2 and 3 (25026)

In response to the subject IE Bulletin and the accompanying Temporary Instruction TI-2500/26, the inspector accompanied by the site resident inspector discussed with the licensee's cognizant engineer the plan for selecting the sample of fasteners to be tested. Sample selection came from a computer printout which listed all safety and nonsafety nuts and bolts/studs in the Oconee warehouse inventory. The sample population varied by size, material specification popularity/use and vendor. The inspectors toured the warehouses to inspect storage conditions, verify size, manufacturer's markings, grade marking or specification and related site QA traceability code. During this work effort, the inspectors selected at random a total of ten nuts and bolts for review of quality records on hand. This sample was as follows:

BOLTS

3/4 - 10x3 1/2	SA-193/B8	QA #52294
7/8 - 9x6 1/2	A-325	MMIS #0262399N
3/4 OTSG SEC	100668-001 MK # 145	QA #54760
3/4 - 10 (Threaded Rod)	SA-193 GR/B7	QA #54889
1/2 - 13x2	A-325	QA #42221
8 - 1x3 1/2	SA-193 B/7	QA #010526

NUTS

7/16 - 20	SA-194 GR8	QA #47300
3/8 - 16	A-194 GR B8M	QA #53319
3/4 - 10	A-194 GR 8M	QA #54463
*1 - 8	SA-194 GR B/7CS	QA #39323

*This nut has been marked with "J" and, therefore, was added to the population of test samples. The inspectors reviewed the licensee's receipt inspection procedure applicable to fasteners to ascertain whether inspection requirements were consistent with those described under the action section of the subject bulletins. Procedures reviewed were as follows:

Materials Manual

4.4 Material Receiving
4.5 Issue of Stock and Non Stock S.R. Materials
4.6 Issue of Stock Nonsafety-Related or ATWS Materials
4.7 Marking of QA Material

Quality Control Procedure(s)

QCG-1, Rev. 28, Receipt Inspection and Control of QA Condition Material Parts and Components except Nuclear Fuel

The resident inspector will continue to monitor the licensee's efforts to comply with the Bulletins' requirements and report the results.

6. Inservice Testing (ISI) of Pumps and Valves Units 1, 2 and 3 (73756)

The controlling document for testing of pumps and valves is the Oconee Nuclear Station Inservice Inspection Program Revision No. 13. This document delineates performance test requirements contained in Section 4.0.4 of the Oconee Station Technical Specification.

This document defines the components subject to the IST program at Oconee and indicates the various required tests. Also included are references to various documents explaining why some components (pumps, valves) were not considered subject to the program. The ASME Boiler and Pressure Vessel code Section XI 1980 Edition through Winter 1980 Addenda (80W80), has been identified as applicable to this activity.

The inspector reviewed procedures and pertinent quality records, as indicated below, to determine whether inservice testing regulatory requirements and licensee commitments were being met. Components selected for this work effort was as follows:

Pumps	Procedure	Performance Test Date
Spent Fuel Pool Cooling (1A) Unit 1	PT/1/A/0251/02	1/7/87; 4/10/87; 7/7/87; 9/19/87
Turbine Emergency Feedwater (1) Unit 1	PT/1/A/0600/12	2/13/87; 5/13/87; 8/11/87; 11/16/87
SSFRC Makeup Pump Unit 2	PT/2/A/0400/07	12/17/86; 3/18/87; 6/23/87; 9/23/87
Low Pressure Service Water (3A) Unit 3	PT/3/A/0251/01	3/7/87; 5/6/87; 7/6/87; 10/12/87

For these pumps, the inspector reviewed completed procedures for the dates indicated to ascertain whether inservice data was evaluated by qualified personnel and appropriate followup action taken as required; that the data reflected the requirements of the applicable code including but not limited to frequency of testing and changes thereof; justification for changes to acceptance criteria; evaluation of vibration data; reference speed; test instrument calibration and appropriate testing following maintenance/modification to determine operability as applicable.

Valve Maintenance/Replacement

In Inspection Report No. 50-287/87-06, the inspector discussed maintenance work performed on valves 3 MS-83 and 85 in the mainsteam to emergency feedwater pump line 01A-4. The valves were cut out to machine the seating surfaces and reinstalled/welded back into the system. The applicable code(s) controlling this activity included USAS B31.1 Power Piping and ASME Section XI Class C. Because of piping configuration, second valve off Steam Generator, DPC determined that it was impractical to hydrostatically test inlet and outlet welds. As an alternative to this code requirement, DPC radiographed all newly fabricated welds and examined them for leakage at operating pressure and temperature. Code relief for omitting the hydrostatic test, was requested from the Commission. This matter is discussed in paragraph 8 of this report. During this inspection, the inspector requested and the licensee provided records of the completed system pressure and leakage test. These were reviewed to ascertain whether test parameters i.e., pressure, time and temperature were consistent with IWA-5211(C) of the applicable code.

Within these areas, no deviations or violations were identified.

7. Inservice Inspection Data Review and Evaluation Unit 1 (73755)

Discussions with cognizant QA/ISI personnel disclosed that a review of ISI radiographs for weld joint item no. C05.021.104 or weld no. 1-03-3-30B of the feedwater system identified a rejectable linear indication, near the root of the weld joint that was approximately 1½" long. The weld in question was on a 14" ø carbon steel pipe, 3/4" thick, fabricated in March of 1971. The indication was identified as lack of fusion and, therefore, not service related. A review of the original/construction film, verified the presence of the indication, which was obviously missed by the reviewer at the time. At the time of this inspection, the weld had been repaired, radiographed and leak tested. Because the plant was operating, it was not feasible to inspect the weld at this time. Alternatively, the inspector reviewed the weld repair package - Work Request No. 54685F to verify compliance with requirements of the applicable codes. The original and repair weld was fabricated in accordance with USAS B31.1 1967, Power Piping Code requirements. Inspection and testing following the repair was controlled by ASME Section XI IWA 5211(C). The DPC procedure used to control the welding was MP/0/A/1810/14, "Valve and for Piping - Welded Removal and Replacement - Class A through F." Procedure MP/0/A/1720/16 was used to perform the leakage test at operating pressure and temperature. Also, the inspector reviewed the radiographs of the original and repair welds and noted that the length of the indication in the original film was essentially the same as that on the film taken for ISI purposes during this outage.

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

8. Inspector Followup Items (IFI)

(Closed) IFI 287/87-01-01: ISI Examination of Reactor Coolant Pump B1 Casing

By memorandum dated February 9, 1987, the licensee submitted a request to the Commission for relief from IWB-2420 requirement of Section XI of the ASME Code, thus, permitting volumetric examination of the pressure retaining weld in Reactor Coolant Pump 3B1 instead of 3A1, during the first inspection period of the second ten year interval. Availability of access was used as the basis for this request. Because of this change in the Oconee 3 ISI plan, the inspector requested that a relief from the IWB-2420 code requirement be submitted to the Commission.

(Closed) IFI 50-287/87-06-02, Code Relief for Omitting Hydrostatic Test on Valves 3MS-83 and 3MS-85.

This item was identified when the inspector ascertained that the code required hydrostatic test, on a pipe line in the mainsteam to Emergency Feedwater Pump Turbine System would not be performed at this time. The decision to forego the hydro test resulted from the fact that the configuration of the line made the test impractical.

As an alternate examination, the new welds were radiographed and visually examined for leakage at operating pressure and temperature. Following discussions on this subject, the licensee committed to inspect the subject welds as part of the ten year ISI plan to hydrostatic test the mainsteam line. Therefore, DPC submitted a request for relief from the code requirement in favor of the aforementioned alternate examination.

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