



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA ST., N.W., SUITE 3100
 ATLANTA, GEORGIA 30303

Report Nos. 50-269/79-21, 50-270/79-19 and 50-287/79-21

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

Facility Name: Oconee

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

Inspection at Oconee, Seneca South Carolina

Inspector: Nick Economos 9/7/79
 N. Economos Date Signed

Approved by: A. R. Herdt 9/10/79
 A. R. Herdt, RC&ES Branch Date Signed

SUMMARY

Inspection on August 7-9, 1979

Areas Inspected

This routine, unannounced inspection involved 19 inspector-hours onsite in the areas of IE Bulletin 79-17 related ultrasonic examination of pipe welds in stagnant borated water systems - Unit 3; once through steam generator (OTSG) "1B" tube leak repair record review - Unit 1; reactor vessel internal vent valve exercise record review - Unit 3.

Results

No items of noncompliance or deviation were identified.

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DETAILS

1. Person Contacted

Licensee Employees

- *J. E. Smith, Station Manager
- *J. D. Norton, QA Engineer
- *R. T. Bond, Technical Services Engineer
- *T. C. Matthews Technician Projects

Other Organizations

Babcock and Wilcox Construction Company (B&W)
F. J. Sattler, Manager Inservice Inspection
H. W. Stoppelman, Coordinator
C. E. Thompson, Level II Examiner

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on August 9, 1979 with those persons indicated in Paragraph 1 above. The inspector summarized the scope and findings of the inspection which included; observation of UT examination relative to IE Bulletin 79-17; record review of steam generator "1B" tube leak repair; record review of Unit 3 reactor vessel internal valve exercise. The licensee acknowledged unresolved item number: 50-287/78-21-01 RPV vent valve test results.

3. Licensee Action On Previous Inspection Findings

Not inspected.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve noncompliance or deviations. New unresolved items identified during this inspection are discussed in paragraph 5.a.

5. Independent Inspection Effort

- a. Reactor Pressure Vessel (RPV) Internal Vent Valve Exercise Test Record Review - Unit 3

Paragraph 4.2.12 of the Oconee Technical Specification (TS) requires that all RPV internal vent valves be inspected/tested during each

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refueling outage to confi...that each valve operates freely. This test was performed during the last fuel outage on Unit 3 under maintenance procedure MP/O/A/3000/20. This procedure provides acceptance criteria including limits on the amount of vertical lift force to open the valve - 335 lbs. max. A review of the test data, documented on enclosure 13.1 to the aforementioned procedure, disclosed that valve No. 4 required 370 lbs. force to open or 35 lbs. in excess of of the maximum specified. In response to questioning the licensee could not provide a satisfactory explanation for this procedural deviation but agreed to investigate the matter further and report findings on a subsequent inspection. The inspector identified this as unresolved item 287/79-21-01, RPV Vent Valve Test Results.

b. Steam Generator "1B" Tube Leak Repair - Unit 1

On July 24, 1979 the licensee reported to RII an apparent tube leak in OTSG "1B". In discussing the matter, the licensee stated that the leak was the result of a crack in OTSG "1B" tube 73/130 at the 14th support and that it had been repaired. The repair procedure required that the tube be stabilized and plugged under station modification number 1256 R/2 which referenced maintenance procedures: MP/O/A/1130/11 "OTSG Tube Stabilization" and MP/O/A/1130/01 "OTSG Tube Plugging". B&W'S replacement parts specification 08-1001892-05 dated 2/7/79 provided material, design, fabrication testing, cleaning and shipping requirements for the hardware used in the repair. Sections III and IX (77S78) of the ASME Code were listed as applicable to materials and welding respectively. The inspector reviewed the aforementioned documents along with related QA/QC records including work request package S/N 96773, inspection requirement record (QCF-1A), NDE inspection record (QCI-1A, R/2) material quality records, welder qualifications, weld consumable certifications and receiving reports. The inspector noted that the number of SG tubes out of service at this time includes 50 in SG "1A" and 131 in SG "1B". Within the areas inspected, no items of noncompliance or deviations were identified.

6. IE Bulletins

a. (Open) IE Bulletin 79-17, Pipe Cracks in Stagnant Borated Water Systems-(Unit 3)

In accordance with IE Bulletin 79-17, the licensee was conducting a UT examination of certain suspect pipe welds in critical (non-isolatable) systems in Unit 3. Welds selected for this inspection program were in the high and low pressure injection systems. A total of 18 pipe welds were selected. The selection included various thickness sizes, pipe diameters

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and configurations e.g., pipe to valve, pipe to elbow, etc. Following is a list of welds selected.

Low Pressure Injection System (53B)

<u>Weld</u>	<u>ISO</u>	<u>Description</u>	<u>Size</u>	<u>Comments</u>
7	46	Pipe to Ell	14" X .250"	Clear
8	46	Pipe to Ell	14" X .250"	Clear
12	46	Pipe to Pipe	14" X .250"	Clear
43	39	Pipe to Value	8" X 1.60"	35% of CRT screen height intermitent 360°
41	39	Pipe to Ell	8" X .160"	35% of CRT screen height intermitent 360°
40	39	Pipe to Ell	8" X .160"	45% of CRT screen height intermitent 360°
4	52	Pipe to Pipe	8" X .148"	Clear
4A	52	Pipe to Elbow		Clear

High Pressure Injection System (51A)

<u>Weld</u>	<u>ISO</u>	<u>Description</u>	<u>Size</u>	<u>Comments</u>
37A	61	Pipe to Ell	2½" X .375	Clear
38A	61	Pipe to Ell	2½" X .375"	Clear
43	61	Pipe to Valve	2½" X .375"	Clear
44	61	Pipe to Valve	2½" X .375"	Clear
16AB	62	Pipe to Ell	2½" X .375"	Clear
20A	62	Pipe to Ell	2½" X .375"	Clear
21	62	Pipe to Ell	2½" X .375"	Clear
22	62	Pipe to Ell	2½" X .375"	Clear
25	62	Pipe to Valve	2½" X .375"	Clear
26	62	Pipe to Nozzle	2½" X .375"	Clear

The UT examination of the area in question was performed by B&W with a UT procedure/technique designed to pickup intergranular corrosion type attack within the HAZ of the weld. The examination was performed with a USM-2 Krautkramer-Branson instrument using a 1/4", 50 degree shear wave, 5 MHz transducer. Amplitude cabibration was accomplished using a pipe calibration standard with an I.D. circumferential notch 1" X 1/8" and a depth equal to 5 percent of wall thickness. Maximum signal response was obtained from the notch on the first half of the "V" path and the signal amplitude was set at 80% of CRT screen height.

The inspector observed system calibration, weld examination and recording of discernable reflectors in weld 20A and 40 above. Personnel, equipment, material certifications and examination results were reviewed for completeness and accuracy.

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In a telephone conversation with the licensee's representative on August 14, 1979, the inspector learned that discernable reflectors had been found in welds 41 and 43 of the low pressure injection system. The licensee stated that all reflectors will be evaluated in order to determine their nature. During this conversation the inspector stated that (a) a followup information notice or supplement to IE Bulletin 79-17 would be forthcoming from IE:HQ and (b) examination of welds as stated in part two of IE 79-17, will have to be performed on stagnant water pipe systems with UT procedure ISI-129 Rev. 0, or one comparable.

Within the areas inspected, no items of noncompliance or deviations were identified.

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