



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

Report Nos. 50-259/79-24, 50-260/79-24 and 50-296/79-24

Licensee: Tennessee Valley Authority
500A Chestnut Street Tower II
Chattanooga, Tennessee 37401

Facility Name: Browns Ferry Nuclear Plant

License Nos. DPR-33, DPR-52 and DPR-68

Inspection at Browns Ferry site near Athens, Alabama

Inspector: D. S. Price
D. S. Price

24 SEP 79
Date Signed

Approving by: H. C. Dance
H. C. Dance, Section Chief, RONS Branch

9/24/79
Date Signed

Date of Inspection: September 4-7, 1979

Areas Inspected:

This routine unannounced inspection involved 30 inspector-hours onsite in the areas of Secondary Containment leak rate testing, Emergency Core Cooling System response times, standby liquid control system surveillance testing, surveillance instructions, monthly reports, and IE Bulletin followup.

Results

Of the six areas inspected, no apparent items of noncompliance or deviations were identified in five areas; one apparent item of noncompliance was found in one area (Deficiency - failure to submit a Unit 2 License Event Report, paragraph 8).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*H. L. Abercrombie, Plant Superintendent
J. L. Harness, Assistant Plant Superintendent
R. Hunkapillar, Assistant Operations Supervisor
*J. A. Teague, Maintenance Supervisor, Electrical
*R. G. Metke, Results Section Supervisor
J. R. Pittman, Maintenance Supervisor, Instrument
W. C. Thomison, Assistant Results Supervisor
*R. E. Burns, Instrument Engineer
*R. T. Smith, Quality Assurance Supervisor
J. D. Glover, Shift Engineer, Training

Other licensee employees contacted included two instrument maintenance foremen.

NRC Resident Inspector

*R. F. Sullivan

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on September 7, 1979, with those persons indicated in Paragraph 1 above.

With regard to the item of noncompliance of failure to submit an event report pertaining to an inoperable hydrogen sensor, the licensee stated that because the hydrogen sensor was being calibrated it did not fall under the criteria required for report submission. The inspector's findings in paragraph 8 were discussed.

3. Licensee Action on Previous Inspection Findings

(Open) Deficiency (259/79-03-01): Failure to properly document test results. The inspector reviewed revised Surveillance Instruction (SI) 4.4.A.2, standby liquid control system functional test, and a completed data sheet from this SI for Unit 2. This data sheet, dated May 10, 1979, instructed the operator to test the 'B' squib valve on even numbered operating cycles of which this was number two. The 'A' squib valve was recorded on the data sheet as having been tested. A review of the previous data sheet for this SI on Unit 2 revealed that squib 'B' had been tested - thus Technical Specification 4.9.A.2.b had been satisfied in that both squib valves had been tested in the course of two operating cycles. It is apparent, though, that the wording of this SI must be revised so that it will require that the proper squib valve be tested each operating cycle. In the test of



May 10, although the procedural error contained in the surveillance instruction was recognized by operating personnel and the correct valve tested, a temporary change to the procedure was not used to administratively correct this problem. This area, the use of temporary changes to procedures, will be reviewed in subsequent inspections. This noncompliance remains open pending final revision to the surveillance instruction.

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.

5. Secondary Containment Leak Rate Testing

The inspector reviewed the following Browns Ferry Nuclear Plant Secondary Containment Leak Rate Test 90-Day Reports, to ascertain that the information reported by the licensee satisfied the reporting requirements established in Technical Specification 6.7.3.C.1.a:

Unit 2 report dated March 14, 1979

Unit 3 report dated March 14, 1979

Unit 2 report dated June 19, 1979

The earliest Unit 2 test listed above had been performed approximately one year prior to its submission date. The Unit 3 test had been performed about six months earlier. Technical Specification 6.7.3.C.1.a requires that these reports be submitted within 90 days of completion. The licensee had identified this item. Corrective action to insure timely reporting has been taken by including this test on the Master Refuel Test Instruction to serve as a reminder to the Results Section Supervisor that the report is required.

On the June 19 report it was noted that the test was performed at greater than the allowable wind speed. An analysis used to demonstrate that the test results were valid was included in the report. Specification 4.7.C.1.b requires that the test demonstrate secondary containment capability to maintain 1/4 inch of water vacuum under calm wind (less than five miles per hour) conditions. The test was performed with a wind speed of eight miles per hour. Standard Technical Specifications for General Electric Boiling Water Reactors, dated January 2, 1979, has no wind speed requirements for performance of this test. The licensee is investigating a Technical Specification change to delete the wind speed requirement. The NRC Region II office is pursuing the validity of the calculations used by the licensee to justify test performance at greater than calm wind conditions.

Unresolved Item: This matter of performance of the Unit 2 Secondary Containment Leak Rate Test at greater than a calm wind speed is considered an unresolved item pending followup, by the inspector, of the validity of the licensee's supporting calculations (260/79-24-01).



6. Emergency Core Cooling System (ECCS) Response Times

Region II Inspection Report Nos. 50-259/79-1, 50-260/79-1 and 50-296/79-1, Paragraph 7, reported that the licensee was investigating his ability to verify ECCS response times (259/79-1-1, 260/79-1-1, and 296/79-1-1). The licensee has concluded that performance of SI's which measure valve stroking times for the ECCS systems are sufficient to confirm that system response times given by the Final Safety Analysis Report are being met. This item is closed.

7. Surveillance Instructions

Region II Inspection Report Nos. 50-259/79-5, 50-260/79-5, and 50-296/79-5, Paragraph 8, noted that in the performance of various SI's, management policy differed from the written instructions of the procedure. The matter was left open pending revision to the SI's (50-259/79-05-01). The inspector reviewed the changes to the SI's and completed data sheets and verified that procedural compliance was being adhered to. This item is considered closed.

8. Monthly Operating Reports

The inspector reviewed the Monthly Operating Report for Browns Ferry Nuclear Plant Units 1, 2 and 3 for the months of April and May, 1979 to verify that the reporting requirements of Technical Specification 6.7.1.c were being met. During this review it was noted that the Unit 3 instrument maintenance summary for the month of April showed that hydrogen monitor H2M-76-38 was replaced on April 23 due to sensor failure. Investigation of this occurrence showed that at about 2300 hours on April 22, the torus hydrogen monitor indication began increasing. A Trouble Report (TR) was initiated and maintenance personnel began calibrating the instrument. The TR (number 128082) indicated that calibration was completed on April 25 after the sensor had been switched with a redundant sensor. Review of the operator's journal and instrument calibration record, and discussions with the instrument maintenance supervisor and two instrument foremen also appear to confirm that this course of action took place. SI-2, Instrument Checks and Observations, shows no value logged for torus hydrogen concentration on April 23-25 due to instrument calibration. The strip chart record for this channel shows erratic indications during this time interval with most values greater than four percent. Based upon this inability to monitor torus hydrogen concentration for a period of about three days it is concluded that the instrument was not operational during this time.

Technical Specification 3.7.H.4 allows operation in a degraded mode, for thirty days, with the torus hydrogen sensing circuit not operable for monitoring the torus. Technical Specification 6.7.2.b.(2) requires that a thirty-day written report be submitted for conditions leading to operation in a degraded mode permitted by a limiting condition for operations. As the licensee did not consider the hydrogen monitor to be inoperable. No written report was made.



This finding of failure to report operation in a degraded mode caused by loss of the torus hydrogen monitor constitutes noncompliance with the requirements of Technical Specifications 6.7.2.b.(2) which requires submission of a thirty-day written report to the Director of the Region II office (260/79-24-02).

9. IE Bulletin 79-10, Requalification Training Program Statistics

The inspector performed a followup review of the licensee's response to the subject Bulletin. This review included examination of records to verify the accuracy of information given in the licensee's written response and an interview with the shift engineer, responsible for generating the report. The inspector had no further questions.

1



2

