



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

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Report Nos. 50-259/79-36, 50-260/79-36 and 50-296/79-36

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

Facility Name: Browns Ferry Nuclear Plant

Docket Nos. 50-259, 50-260 and 50-296

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

Inspection at Browns Ferry Site near Athens, Alabama

Inspected by: C. Julian 11/27/79
C. Julian Date Signed

Approved by: P. T. Burnett 11-27-79
P. T. Burnett, Acting Section Chief, RONS Branch Date Signed

SUMMARY

Inspection on November 8-9, 1979

Areas Inspected

This routine, unannounced inspection involved 15 inspector-hours onsite in the areas of preparation and execution of refueling activities of Unit 3.

Results

Of the areas inspected, one item of noncompliance was found (Infraction-Failure to lock mode switch in the refuel position during core alterations. See paragraph 5 below).

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DETAILS

1. Persons Contacted

Licensee Employees

- *J. L. Harness, Assistant Plant Superintendent
- *R. T. Smith, Quality Assurance Supervisor
- *J. A. Teague, Maintenance Supervisor, Electrical
- *R. G. Cockrell, Reactor Engineer
- *C. Rozear, Quality Assurance Engineer
- R. Smallwood, Shift Engineer
- J. Johnson, Assistant Shift Engineer

Other licensee employees contacted included various operators, security force members, and office personnel.

U. S. NRC

- *R. F. Sullivan, Lead Reasident Inspector
- *D. S. Price, Reactor Inspector
- *J. W. Chase, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on November 9, 1979 with those persons indicated in Paragraph 1 above. The inspector described two items of potential noncompliance discussed in paragraph 5 below and stated that both would be unresolved pending the inspectors consultation with NRC Region II management for interpretations. Licensee representatives had no comments relative to the policy of leaving the key in the mode switch during refueling. Regarding the question of the requirement for licensed personnel to be continuously present on the refuel floor during refueling, licensee representatives stated they intend to continue their present method of operation until the item is resolved.

On November 14, 1979 the inspector informed the Plant Superintendent that after consulting NRC management, it was determined that failure to remove the mode switch key during refueling is an item of noncompliance. The inspector stated that further review was necessary on the refuel floor manning issue, and that the item would remain unresolved pending NRC management review and interpretation.

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. A unresolved item identified during this inspection is discussed in paragraph 5.

5. Unit 3 Refueling Activities

The inspector observed the Unit 3 refueling activities in progress from the control room and refueling floor. Technically adequate, properly approved procedures were in use in both locations. The inspector examined the operation to determine if all applicable technical specification requirements were being met. The following discrepancies were observed:

Technical specification 3.10.A.1 requires that the reactor mode switch shall be locked in the "Refuel" position during core alterations. The inspector observed that the mode switch was in the refuel position and the key turned to the lock position but the key was left inserted in the lock. Leaving the key in the lock does not meet the intent of the technical specification requirement and is an item of noncompliance (50-296/79-36-01).

Technical Specification 6.8.3 requires that a licensed senior operator shall be in direct charge of a reactor refueling operation; i.e., able to devote full time to the refueling operation. The licensee has designated the assistant shift engineer (ASE) as the senior reactor operator in charge of refueling on Unit 3. The inspector observed that the ASE stations himself primarily in an office on the refuel floor and is not in a position to observe in-vessel work. The ASE communicates with the control room and fuel grapple hoist operators via portable radio. The fuel grapple operators are assistant unit operators (AUO) and are not NRC licensed reactor operators. The ASE is periodically absent from the refuel floor and core alterations continue with no NRC licensed individual present.

The inspector stated that the ASE should position himself on the refuel floor to observe and direct core alterations and be in direct constant communication with the refuel grapple operators. In this way he may observe potential problems, rather than being summoned by radio after a problem occurs in refueling operations. In the necessity of his absence from the refuel floor, another NRC licensed individual should be designated to direct the core alterations. The necessity of having an NRC licensed person present is dictated by the following regulations. 10 CFR 50.54(i) states that except as provided in paragraph 55.9, the licensee shall not permit manipulation of the controls of any facility by anyone who is not a licensed operator or senior operator. 10 CFR 55.9 exempts from licensing requirements any individual who manipulates the controls of a facility as a part of his training to qualify for an operator license while under the



direction and in the presence of a licensed operator or senior operator. Finally both 10 CFR 50.2(t) and 55.4(f) define controls as follows: Controls when used with respect to a nuclear reactor means apparatus and mechanisms the manipulation of which directly affect the reactivity or power level of the reactor.

In the inspectors judgement, the fuel grapple hoist is a control of the reactor when making core alterations in that reactivity is being directly affected. Thus the assistant unit operator, who at Browns Ferry is a potential candidate for obtaining an NRC reactor operator's license, may only operate the fuel grapple hoist to make core alterations while under the direction and in the presence of a licensed operator or senior operator.

The inspector observed on 11/9/79 core alterations being carried out by non-licensed AUO personnel without an NRC licensed person present. This appears to be in noncompliance with 10 CFR 50.54(i) as explained above. The inspector stated, however, that his item will remain unresolved pending NRC managements review of the inspector's interpretation of the regulations as explained above (50-296/79-36-02).

6. Additional Inspection Activities

The inspector observed a startup of the Unit 1 reactor following a scram. A tour was made of various portions of the turbine building and reactor buildings of all three units. No deviations or items of noncompliance were identified in these areas.

