

official file

MAR 0 4 1988

Duke Power Company
ATTN: Mr. H. B. Tucker, Vice President
Nuclear Production Department
422 South Church Street
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NOS. 50-269/87-49, 50-270/87-49 AND 50-287/87-49

Thank you for your response of January 28, 1988, to our Notice of Violation issued on December 29, 1987, concerning activities conducted at your Oconee facility. We have evaluated your response and found that it meets the requirements of 10 CFR 2.201. We will examine the implementation of your corrective actions during future inspections.

Regarding your comments on the term "containment integrity", we agree that use of the term in the context of the violation was inappropriate. Our records will be revised to delete the use of this term. Enclosed are revised copies of the Notice of Violation and appropriate pages from the inspection report to update your records.

We appreciate your cooperation in this matter.

Sincerely,

C. W. Hehl / for

Luis A. Reyes, Director
Division of Reactor Projects

Enclosures:

- 1. Revised Notice of Violation
- 2. NRC Inspection Report - Revised Pages

cc w/encls:

~~M.~~ S. Tuckman, Station Manager

bcc w/encls:

~~NRC~~ Resident Inspector
~~DRS~~ Technical Assistant
~~M.~~ Pastis, NRR
State of South Carolina
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ENCLOSURE 1

NOTICE OF VIOLATION

Duke Power Company
Oconee Units 1, 2, and 3

Docket Nos. 50-269, 270, and 287
License Nos. DPR-38, DPR-47, and DPR-55

During the Nuclear Regulatory Commission (NRC) inspection conducted November 20 - December 7, 1987, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1986), the violation is listed below:

Oconee Nuclear Station Technical Specification (TS) 3.8.6 states "During the handling of irradiated fuel in the reactor building, at least one door on the personnel and emergency hatches shall be closed. The equipment hatch cover shall be in place with a minimum of four bolts securing the cover to the sealing surface." An Oconee Nuclear Station Technical Specification interpretation for TS 3.8 explains that, in addition to the requirements of TS 3.8.6, any other pathway other than the hatches listed shall be covered, sealed or isolated with the intent to prevent air flow from inside the Reactor Building at normal atmospheric pressure.

10 CFR 50, Appendix B, Criterion III, Design Control states that design changes shall be subject to design control measures commensurate with those applied to the original design and be approved by the organization that performed the original design unless the licensee designates another responsible organization.

Technical Specification 6.4.1 states that the station shall be operated and maintained in accordance with approved procedures.

Contrary to the above requirements:

- a. In the periods of September 24-28 and October 10-12, 1987, refueling operations were conducted at Oconee Unit 1 with gaps totalling 3 to 4 square inches in the emergency hatch seals and equalization valve. Also in the periods of February 23 to March 13, 1986, (Unit 1), August 19 to February 27, 1986, (Unit 2) and December 30, 1986, to March 9, 1987, (Unit 3) refueling operations were carried out with the one-inch equalizing valves open in the emergency hatches, thus negating containment isolation.
- b. The Emergency Hatch Temporary Modification ONTM-0297 was not adequately prepared nor reviewed, in that it was not taken into consideration that unlocking the equipment hatch doors automatically cammed open the one-inch equalization valves.

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Duke Power Company
Oconee Units 1, 2, and 3

2 Docket Nos. 50-269, 270, and 287
License Nos. DPR-38, DPR-47, and
DPR-55

- c. The procedure for foaming closed penetrations through the emergency hatch was not adequate in that it did not adequately describe how the job was to be performed and was not provided to the workmen performing the job.

This is a Severity Level IV Violation (Supplement I). This violation applies to Units 1, 2 and 3.

Pursuant to the provisions of 10 CFR 2.201, Duke Power Company is hereby required to submit a written statement or explanation to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector, Oconee, within 30 days of the date of the letter transmitting this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) admission or denial of the violation, (2) the reason for the violation if admitted, (3) the corrective steps which have been taken and the results achieved, (4) the corrective steps which will be taken to avoid further violations, and (5) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time. If an adequate reply is not received within the time specified in this Notice, an order may be issued to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken.

It is noted that the above violation was identified by the licensee, was promptly reported to NRC, and resulted in immediate and proper corrective action. Also, an extensive study was made to determine cause and actions to prevent recurrence, which is reported in Licensee Event Report 50-269/87-08.

FOR THE NUCLEAR REGULATORY COMMISSION



Luis A. Reyes, Director
Division of Reactor Projects

Dated at Atlanta, Georgia
this 29 day of December 1987



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

Report Nos.: 50-269/87-49, 50-270/87-49, and 50-287/87-49

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 20 - December 7, 1987

Inspectors: <u><i>Virginia Brunick for</i></u>	<u>12/23/87</u>
J. C. Bryant	Date Signed
<u><i>Virginia Brunick for</i></u>	<u>12/23/87</u>
P. H. Skinner	Date Signed
<u><i>Virginia Brunick for</i></u>	<u>12/23/87</u>
L. D. Wert	Date Signed
Approved by: <u><i>T. A. Peebles for</i></u>	<u>12/23/87</u>
T. A. Peebles, Section Chief	Date Signed
Division of Reactor Projects	

SUMMARY

Scope: This special, unannounced inspection involved resident inspector inspection in the area of containment isolation during refueling operations.

Results: In the area inspected, one violation was identified.

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REPORT DETAILS

1. Licensee Employees Contacted:

- *M. S. Tuckman, Station Manager
- R. L. Sweigart, Operations Superintendent
- C. L. Harlin, Compliance Engineer
- *F. E. Owens, Assistant Engineer, Compliance

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

Resident Inspectors

- *J. C. Bryant
- P. H. Skinner
- L. D. Wert

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on December 7, 1987, with those persons indicated in paragraph 1 above. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection. The following new item was identified: Violation 269,270,287/87-49-01: Failure to Maintain Containment Isolation During Refueling Operations.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Not inspected.

5. Loss of Containment Isolation During Refueling Operations

On October 12, 1987, during reinsertion of fuel into the Unit 1 reactor, the licensee notified the resident inspectors that air inleakage had been detected at the containment emergency hatch through installed temporary seals. Refueling operations had been stopped until the situation was corrected. An investigation of the event was begun by the licensee and findings of the investigation are provided in detail in Licensee Event Report 50-269/87-08 which was issued November 25, 1987.

the sleeves had been foamed from inside the airlock through the inner hatch toward the inside of the containment building. To do this, the workmen had to crawl through the 30 inch diameter outer hatch and around the cables and piping passing through it.

The designer recognized that during this particular outage with the addition of two large pipes for chemical cleaning, it would be impossible for the workmen to crawl through the outer opening to reach the inner hatch. His intent was that the foaming be done into the sleeves from inside the containment building. He had taken pictures of the seal plate with sleeves and labeled them as taken from inside the reactor building to indicate how the foam should be introduced. He was not aware that CMD preferred to avoid taking the foam machine into a contaminated area.

The P&SC was aware that the foam machine would not be taken into containment, but was not aware that, with the additional piping, workers could not enter the air lock from the yard area in order to foam in the same manner as in the past.

The CMD lead man believed he should not take the foam machine inside containment, was told to foam from the outside, and did it in the only manner he was possible. Reaching into the lock through the outer hatch, he constructed two forms around the cables and pipes and foamed in between. The work was done with the general foaming procedure, but without the work package and procedure on hand; however, the general procedure was of little value for this particular job.

Results of Loss of Containment Isolation

There was no release of activity to the environment. As purge normally is maintained during refueling activities, which maintains a slight negative pressure in containment. Also, there was no dropped fuel or other occurrence which released unusual activity during any of the four periods mentioned when integrity was not maintained. LER 50-269/87-08 describes the FSAR analysis of fuel handling accidents. This analysis shows that had a fuel handling accident occurred at the time, the consequences would be bounded by the analysis and that doses at the site boundary would have remained below the limits of 10 CFR 100. This is Violation 269,270,287/87-49-01: Failure to Maintain Containment Isolation During Refueling Operations.