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UNITED STATES

NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

November 11, 1975

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

5 Youth WE am-147 APR-47 Ch-191

Duke Power Company

ATTN: Mr. William O. Parker, Jr.

Vice President Steam Production

Post Office Box 2178 422 South Church Street Charlotte, North Carolina 28242

Gentlemen:

The Commission has issued the enclosed Amendment No. 14, Technical Specification Change No. 24 for License No. DPR-38; Amendment No. 14 Technical Specification Change No. 19 for License No. DPR-47; and Amendment No. 11, Technical Specification Change No. 11 for License No. DPR-55, for the Oconee Nuclear Station, Units 1, 2, and 3. These amendments are in response to your request dated January 15, 1975.

These amendments allow the momentary passage of personnel through the outer door of a containment hatch which is inoperable due to a failed inner door gasket. The momentary passage would be permitted for repair or test of the inner door.

Copies of the related Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

Robert A. Purple, Chief Operating Reactors Branch #1 Division of Reactor Licensing

Enclosures:

- 1. Amendment No. 14 to DPR-38
- 2. Amendment No. 14 to DPR-47
- 3. Amendment No. 11 to DPR-55
- 4. Safety Evaluation
- Federal Register Notice

cc /W/enclosures: See next page

cc w/enclosures:
Mr. William L. Porter
Duke Power Company
P. O. Box 2178
422 South Church Street
Charlotte, North Carolina 28242

Mr. Troy B. Conner Conner, Hadlock & Knotts 1747 Pennsylvania Avenue, NW Washington, D. C. 20006

Oconee Public Library 201 South Spring Street Walhalla, South Carolina 29691

Honorable Reese A. Hubbard County Supervisor of Oconee County Walhalla, South Carolina 29621

cc w/enclosures & incoming:
Mr. Elmer Whitten
State Clearinghouse
Office of the Governor
Division of Administration
1295 Pendleton Street
4th Floor
Columbia, South Carolina 29201

Mr. Dave Hopkins Environmental Protection Agency 1421 Peachtree Street, NE Atlanta, Georgia 30309

DUKE POWER COMPANY

DOCKET NO..50-269

OCONEE NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 14 License No. DPR-38

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated January 15, 1975, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations; and
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.
- 2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 3.B of Facility License No. DPR-38 is hereby amended to read as follows:



"B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. 24."

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Purple, Chief

Operating Reactors Branch #1 Division of Reactor Licensing

Attachment: Change No. 24 to the Technical Specifications

Date of Issuance: November 11, 1975

DUKE POWER COMPANY

DOCKET NO. 50-270

OCONEE NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 14 License No. DPR-47

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated January 15, 1975, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations; and
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.
- 2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 3.B of Facility License No. DPR-47 is hereby amended to read as follows:



"B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. 19."

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Purple, Chief

Operating Reactors Branch #1

Division of Reactor Licensing

Attachment:

Change No. 19 to the

Technical Specifications

Date of Issuance: November 11, 1975

DUKE POWER COMPANY

DOCKET NO. 50-287

OCONEE NUCLEAR STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 11 License No. DPR-55

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated January 15, 1975, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations; and
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.
- 2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 3.B of Facility License No. DPR-55 is hereby amended to read as follows:



"B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. 11."

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Purple, Chief

Operating Reactors Branch #1 Division of Reactor Licensing

Attachment: Change No. 11 to the Technical Specifications

Date of Issuance: November 11, 1975

ATTACHMENT TO LICENSE AMENDMENTS

- AMENDMENT NO. 14 TO FACILITY LICENSE NO. DPR-38
 CHANGE NO. 24 TO TECHNICAL SPECIFICATIONS;
- AMENDMENT NO. 14 TO FACILITY LICENSE NO. DPR-47 CHANGE NO. 19 TO TECHNICAL SPECIFICATIONS;
- AMENDMENT NO. 11 TO FACILITY LICENSE NO. DPR-55
 CHANGE NO. 11 TO TECHNICAL SPECIFICATIONS

DOCKET NOS. 50-269, 50-270, AND 50-287

Revise Appendix A as follows:

Remove pages 3.6-1 and 3.6-2 and insert identically numbered pages.

REACTOR BUILDING

Applicability

Applies to the containment when the reactor is subcritic. by less than 1% Ak/k.

Objective

To assure containment integrity during startup and operation.

Specification

- Containment integrity shall be maintained whenever all three (3) 3.6.1 of the following conditions exist:
 - a. Reactor coolant pressure is 300 paig or greater
 - Reactor coolant temperature is 200°F or greater
 - c. Nuclear fuel is in the core
- Containment integrity shall be maintained when the reactor coolant 3.6.2 system is open to the containment atmosphere and the requirements for a refueling shutdown are not met.
- The containment integrity shall be intact whenever positive 3 6.3 reactivity insertions which would result in the reactor being subcritical by less than 1% $\Delta k/k$ are made by control rod motion or boron dilution.
- Exceptions to 3.6.1, 3.6.2, and 3.6.3 shall be as follows: 3.6.4
 - If either the personnel or emergency hatches become inoperable, except as a result of an inoperable door gasket, the hatch shall be restored to an operable status within 24 hours, or the reactor shall be in cold shutdown within the next 36 hours.

If a hatch is inoperable due to an inoperable door gasket:

- The remaining door of the affected hatch shall be closed and sealed. If the inner door gasket is inoperable, momentary passage (not to exceed 10 minutes for each opening) is permitted through the outer door for repair or test of the inner door, provided that the outer door gasket is leak tested within 24 hours after opening of the outer door.
- The hatch shall be restored to operable status within seven days or the reactor shall be in cold shutdown within the next 36 hours.
- b. A containment isolation valve may be inoperable provided either:
 - The inoperable valve is restored to operable status within four hours.
 - 2. The affected penetration is isolated within four hours by the use of a deactivated automatic valve secured and locked in the isolated position. NOV 1 1 1975 3.6 - 1

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- 3. The affected penetration is isolated within four hours by the use of a closed manual valve or blind Flange.
- 4. The reactor is in the hot shutdown conci ion within 12 hours and cold shutdown within 24 hours.
- 3.0.5 The reactor building internal pressure shall not exceed 1.5 psig or five inches of Hg if the reactor is critical.
- 3.6.6 Prior to criticality following refueling shutdown, a check shall be made to confirm that all manual containment isolation valves which should be closed are closed and tagged.

Bases

The Reactor Coolant System conditions of cold shutdown assure that no steam will be formed and hence no pressure buildup in the containment if the Reactor Coolant System ruptures.

The selected shutdown conditions are based on the type of activities that are being carried out and will preclude criticality in any occurrence.

The reactor building is designed for an internal pressure of 59 psig and an external pressure 3.0 psi greater than the internal pressure. The design external pressure of 3.0 psi corresponds to a margin of 0.5 psi above the ferential pressure that could be developed if the building is sealed with an internal temperature of 120°F with a barometric pressure of 29.0 inches of Hg and the building is subsequently cooled to an internal temperature of 80°F with a concurrent rise in barometric pressure to 31.0 inches of Hg. The weather conditions assumed here are conservative since an evaluation of National Weather Service records for this area indicates that from 1918 to 1970 the lowest barometric pressure recorded is 29.05 inches of Hg and the highest if 30.85 inches of Hg.

Operation with a personnel or emergency hatch inoperable does not impair containment integrity since either door meets the design specifications for structural integrity and leak rate. Momentary passage through the outer door is necessary should the inner door gasket be inoperative to install or remove auxiliary restraint beams on the inner door to allow testing of the hatch. The time limits imposed permit completion of maintenance action and the performance of a local leak rate test when required or the orderly shutdown and cooldown of the reactor. Timely corrective action for an inoperable containment isolation valve is also specified.

When containment integrity is established, the limits of 10CFR100 will not be exceeded should the maximum hypothetical accident occur.

REFERENCES

AR, Section 5

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 14 TO FACILITY LICENSE NO. DPR-38 CHANGE NO. 24 TO TECHNICAL SPECIFICATIONS;

AMENDMENT NO. 14 TO FACILITY LICENSE NO. DPR-47
CHANGE NO. 19 TO TECHNICAL SPECIFICATIONS;

AMENDMENT NO. 11 TO FACILITY LICENSE NO. DPR-55
CHANGE NO. 11 TO TECHNICAL SPECIFICATIONS

DUKE POWER COMPANY

OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3

DOCKET NOS. 50-269, 50-270 AND 50-287

Introduction

By letter dated January 15, 1975, Duke Power Company (the licensee) requested a change in the Technical Specifications of Licenses No. DPR-38, DPR-47, and DPR-55, for the Oconee Nuclear Station, Units 1, 2, and 3. The proposed amendments would allow the momentary passage of personnel through the operable door of a containment hatch which is inoperable due to a failed door gasket. The momentary passage would be allowed to repair and test the inoperable door and to expedite the return of the hatch to an operable status.

Discussion

The present Technical Specifications contain requirements to assure containment integrity during plant startup and operation. The requirements are imposed to assure that, in the event of the maximum hypothetical accident, the consequent release of radioactive contamination and resultant personnel exposures would be less than the limits of 10 CFR Part 100.

The containment structure for each of the Oconee units has a personnel hatch for normal access and an emergency hatch for use in the event the personnel hatch becomes inoperable. Operation of either of the hatches during time periods when containment integrity is required is possible since either the inner or outer door of the hatch meets the design specifications for structural integrity and leak rate requirements.

In the event either the personnel or emergency hatch becomes inoperable as the result of a failed or inoperable door gasket, the present Technical Specifications require the following:

- (1) The remaining door of the affected hatch shall be closed and sealed, and
- (2) The hatch shall be restored to operable status within seven days or the reactor shall be in cold shutdown within the next 36 hours.

A failed gasket is most likely to be identified during the performance of a hatch leak rate test which is required to be performed periodically in order to verify that the design criteria continue to be met.

In the event a containment hatch becomes inoperable due to a failed door gasket, the licensee's proposal would allow momentary passage of personnel through the operable door in order to repair and test the inoperable door.

Evaluation

The licensee's original proposal of January 15, 1975, described a potential problem which appeared to cause some inconvenience but did not preclude the timely completion of repairs. We initially concluded that in the event a containment hatch became inoperable due to a failed door gasket, an alternate means of personnel access would be available through the other containment hatch (personnel or emergency) which was still operable. This appeared to provide both access to the containment as plant operation required, and in the event the failed gasket was on the inner door, access to that area to effect repairs. By letter dated February 19, 1975, we advised the licensee of our concern and requested that the proposal be reevaluated with a view toward furnishing additional analysis and justification to assure no undue risk to public health and safety.

By letter dated June 27, 1975, the licensee responded to our request and provided a more detailed evaluation of the problem. As described by the licensee, the hatch leak rate tests are performed by pressurizing the hatch between the inner and outer doors to the test pressure of 59 psig. This tends to seat the outer door and unseat the inner door. In order to perform the test, it is therefore necessary to install a restraint or strongback on the hatch side of the inner door to keep the inner door seated. Should the leak rate test fail due to an inoperable inner door gasket, it would not be possible to enter the hatch (1) from the Reactor Building side because of the strongback installed on the hatch side of the door; and (2) from the outer door side because of the current Technical Specifications which restrict access through the outer door, as discussed earlier. Since repair of the inner door gasket is not possible under these conditions, the hatch cannot be restored to an operable status and shut down and cooldown of the reactor would be required.

Should a failure of the outer gasket occur during a leak rate test, an access problem would not exist as the inner door would provide the containment integrity required while the outer door gasket is repaired. The licensee has agreed to make the proposed change applicable only to those situations in which the inner door gasket has failed. The proposed amendment has been modified to reflect this agreement.

By allowing momentary passage of personnel through the operable door of the hatch, as is proposed by the licensee, repairs to the inner door gasket would be possible followed by a verifying leak rate test. In reevaluating the proposed amendment, the following points were determined to be pertinent and significant.

- (1) The hatch leak rate tests are performed quarterly and the inner door gasket does not fail frequently during the test.
- (2) The probability of an accident that would require containment integrity during the brief interval that the outer door is open is very remote.
- (3) The inner door of the hatch would remain shut during the brief interval the outer door is open and, even with a failed gasket, would limit containment leakage in the unlikely event of an accident requiring containment integrity. Additionally, the pressures involved in such an accident would tend to seat the inner door and further limit leakage.
- (4) The hatch interlock system prevents opening both the outer and inner door at the same time.
- (5) All other specifications would remain in effect, in particular the requirement to commence shut down and cooldown if the hatch cannot be restored to operation within seven days.
- (6) In order to provide further assurance that containment outer door integrity is maintained when the inner door seal is inoperable, we have added the requirement, with which the licensee agrees, that the outer door gasket be leak-tested within 24 hours after opening of the outer door while the inner door gasket is being repaired.

In view of the above, we have concluded that allowing the momentary passage of personnel under the conditions described does not constitute an undue risk to the public health. We, therefore, find the proposed amendment to be acceptable.

Conclusion

We have concluded, based on the considerations discussed above, that:
(1) because the change does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the change does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: November 11, 1975

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-269, 50-270 AND 50-287

DUKE POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Amendments No. 14, 14, and 11 to Facility Operating Licenses No. DPR-38, DPR-47, and DPR-55, respectively, issued to Duke Power Company which revised Technical Specifications for operation of the Oconee Nuclear Station, Units 1, 2, and 3, located in Oconee County, South Carolina. The amendments are effective as of the date of issuance.

These amendments allow the momentary passage of personnel through the outer door of a containment hatch which is inoperable due to a failed inner door gasket. The momentary passage would be permitted for repair or test of the inner door.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments is not required since the amendments do not involve a significant hazards consideration.

For further details with respect to this action, see (1) the application for amendments dated January 15, 1975, (2) Amendments No. 14, 14, and 11 to Licenses No. DPR-38, DPR-47, and DPR-55, with Changes No. 24, 19, and 11, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. and at the Oconee County Library, 201 South Spring Street, Walhalla, South Carolina 29691

A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Reactor Licensing

Dated at Bethesda, Maryland, this 11th day of November 1975.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Purple, Chief

Operating Reactors Branch #1 Division of Reactor Licensing