DRB-01

August 20, 1986

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

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Mr. Hal B. Tucker
Vice President - Nuclear Production
Duke Power Company
P. O. Box 33189
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

The Commission has issued the enclosed Amendments Nos. 149 , 149 and 146 to Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55 for the Oconee Nuclear Station, Units Nos. 1, 2 and 3. These amendments consist of changes to the Station's common Technical Specifications (TSs) in response to your request dated February 13, 1984.

These amendments revise the TSs to incorporate the fire hose stations (located in the three Oconee reactor buildings) into the limiting conditions for operation and surveillance requirements addressing the fire protection and detection systems. The other two changes requested in your February 13, 1984 application (1) update the TS references to the Oconee Final Safety Analysis Report (FSAR) to ensure consistency with reference to the updated FSAR, and (2) define the terms "accessible/accessibility" to achieve consistency throughout the TSs in their usage. Action 1 has been approved by May 30, 1985 license amendments and Action 2 has been withdrawn by your August 7, 1985 letter.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance of the enclosed amendments will be included in the Commission's biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY

Helen N. Pastis, Project Manager
PWR Project Directorate #6
Division of PWR Licensing-B

Enclosures:
1. Amendment No. 149 to DPR-38
2. Amendment No. 149 to DPR-47
3. Amendment No. 146 to DPR-55
4. Safety Evaluation

cc w/enclosures:
See next page

PBD-6/LA	PBD-6	PBD-6	PBD-6	PBD-6	PBD-6 for OGC
RIngram	HPastis:jak	SWest	CMcCracken	GEdison	JStolz C. Shields
7/31/86	8/1/86	8/12/86	8/12/86	8/13/86	8/13/86 8/15/86

Mr. H. B. Tucker
Duke Power Company

Oconee Nuclear Station
Units Nos. 1, 2 and 3

cc:
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Honorable James M. Phinney
County Supervisor of Oconee County
Walhalla, South Carolina 29621

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

DOCKET NO. 50-269

OCONEE NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 149
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 February 13, 1984, 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;

   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; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-38 is hereby amended to read as follows:

   Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 149 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

L E Echols for

John F. Stolz, Director
PWR Project Directorate #6
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 20, 1986

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

DOCKET NO. 50-270

OCONEE NUCLEAR STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 149
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 February 13, 1984, 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;

   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; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-47 is hereby amended to read as follows:

   Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 149 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

G E Edison for

John F. Stolz, Director
PWR Project Directorate #6
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 20, 1986

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

DOCKET NO. 50-287

OCONEE NUCLEAR STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 146
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 February 13, 1984, 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;

   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; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-55 is hereby amended to read as follows:

   Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 146 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

A E Edison for

John F. Stolz, Director
PWR Project Directorate #6
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 20, 1986

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 149 TO DPR-38

AMENDMENT NO. 149 TO DPR-47

AMENDMENT NO. 146 TO DPR-55

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

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment numbers and contain vertical lines indicating the area of change.

Remove Pages	Insert Pages
3.17-3	3.17-3
3.17-4	3.17-4
3.17-9	3.17-9
4.19-1	4.19-1
4.19-2	4.19-2

3.17.5 The fire hose stations listed in Table 3.17-1 shall be operable or the following action shall be taken:

1. If a fire hose station listed in Table 3.17.1 (except those in the Reactor Building which are inaccessible during power operation) is inoperable, an additional equivalent capacity fire hose of length sufficient to reach the unprotected area shall be provided at an operable hose station within 1 hour.

2. If the inoperable fire hose station cannot be restored to operable status within 14 days, continued operation of the affected unit is permitted provided that within the next 30 days a report is submitted to the Commission outlining the cause of the inoperability, actions taken, and the plans for restoring the system to operable status. Operation under this specification is not considered to be a degraded mode and is not reportable under Tech. Spec. 6.6.2.1.

3. Reactor Building fire hose stations listed in Table 3.17-1 shall be considered operable when water is available to isolation valves LPSW563 and LPSW564. In the event water is not available to these isolation valves, a minimum of 4 portable fire extinguishers shall be available outside containment in the Personnel Hatch area of the Auxiliary Building for fire brigade use upon entering the Reactor Building.

3.17.6 All fire barrier penetrations (including cable penetration barriers, fire doors, fire dampers) protecting safety related areas shall be operable.

If a fire barrier protecting a safety-related area is determined to be inoperable, the operability status of the fire detection instrumentation for the affected safety related area(s) shall be determined within 1 hour, and the following action shall be taken:

1. If the fire detection instrumentation for the affected area(s) is operable, a fire watch patrol shall be established to inspect the area at least once per hour.

2. If the fire detection instrumentation is inoperable, a continuous fire watch shall be established within the next hour on at least one side of the affected penetration fire barrier. The non-functional fire barrier penetration(s) shall be restored to functional status within 7 days.

3. If the non-functional fire barrier penetration(s) cannot be restored to functional status within 7 days, continued operation of the affected unit is permitted provided that within the next 30 days, a report is submitted to the Commission outlining the cause of the inoperability and the plans for restoring the system to operable status. Operation under this specification is not considered to be a degraded mode and is not reportable under Technical Specification 6.6.2.1.

Bases

Operability of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to operability.

The operability of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The fire suppression system consists of the water system spray and/or sprinklers, fire hose stations, and penetration fire barriers. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued operation of the nuclear plant.

The functional integrity of the penetration fire barriers ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishment. The penetration fire barriers are a passive element in the facility fire protection program and are subject to periodic inspections.

During periods of time when a barrier is not functional, a fire watch patrol will be required to inspect the affected area frequently as a precaution in addition to the fire detection instrumentation in the area. If fire detection instrumentation in the area is not operable, a continuous fire watch is required to be maintained in the vicinity of the affected barrier until the barrier is restored to functional status.

TABLE 3.17-1 (cont'd)

C. Fire Hose Stations

Location No.	Valve No.	Area or Component Protected
3-J-28	2HPSW-241	1&2 3rd Floor Switchgear
3-M-43	3HPSW-339	3 3rd Floor Switchgear, 600V Load Center
AX-22	1HPSW-440	1 Battery Room
AX-20	2HPSW-440	2 Battery Room
AX-18	3HPSW-440	3 Battery Room
1RBH1	1LPSW-471	Ground Floor Level - East Side
2RBH1	2LPSW-471	Basement Floor Level - East Side
3RBH1	3LPSW-471	Basement - East Side
1RBH2	1LPSW-473	Intermediate Floor Level - East Side
2RBH2	2LPSW-473	Intermediate Floor Level - East Side
3RBH2	3LPSW-473	Intermediate Floor Level - East Side
1RBH3	1LPSW-475	Top of Shielding Floor Level - East Side
2RBH3	2LPSW-475	Top of Shielding Floor Level - East Side
3RBH3	3LPSW-475	Top of Shielding Floor Level - East Side
1RBH4	1LPSW-465	Top of Shielding Floor Level - West Side
2RBH4	2LPSW-465	Top of Shielding Floor Level - West Side
3RBH4	3LPSW-465	Top of Shielding Floor Level - West Side
1RBH5	1LPSW-467	Intermediate Floor Level - West Side
2RBH5	2LPSW-467	Intermediate Floor Level - West Side
3RBH5	3LPSW-467	Intermediate Floor Level - West Side
1RBH6	1LPSW-469	Ground Floor Level - West Side
2RBH6	2LPSW-469	Basement Floor Level - West Side
3RBH6	3LPSW-469	Basement - West Side

Basement - EL. 777'-6"
Ground - EL. 797'-6"
Intermediate - EL. 825'-0"
Top of Shielding - EL. 861'-0"

Keowee Hydro Station

Operating Deck (NW)	NA	Operating Floor
Operating Deck (NE)	NA	Operating Floor
Operating Deck (SW)	NA	Operating Floor
Operating Deck (SE)	NA	Operating Floor
Control Room	NA	Control Room
Mechanical Equipment Gallery	NA	Mechanical Equipment Gallery

4.19 FIRE PROTECTION AND DETECTION SYSTEM

Applicability

This specification applies to fire protection and detection systems which protect systems and equipment required for safe shutdown.

Objective

To verify the operability of fire protection and detection systems.

Specification

4.19.1 Fire Detection Systems

a. Each of the fire detection instruments listed in Table 3.17-1 shall be tested for operability at least once per 6 months by performance of a Channel Functional Test, except as noted in part b.

b. The testing interval for detectors specified in Table 3.17-1 which are inaccessible during power operation may be extended until such time as the detectors become accessible for a minimum of 36 hours. The testing interval shall not extend past a refueling outage.

4.19.2 The Fire Suppression Water System shall be documented operable as follows:

a. Monthly

1. A functional test of the high pressure service water pump and associated automatic valve shall be performed.

2. Proper alignment of valves shall be verified.

3. A visual inspection of the fire hose stations listed in Table 3.17-1 (except those located in the Reactor Building which are inaccessible during power operations) shall be performed.

b. Annually

1. Each high pressure service water pump shall be tested to verify flow of 3000 gpm.

2. The sprinkler systems listed in Table 3.17-1 which protect safety-related systems shall be functionally tested, except in the cable spreading rooms, equipment rooms, and cable shafts.

3. The sprinkler system spray headers and nozzles, listed in Table 3.17-1, which protect safety-related systems, shall be inspected.

4. The fire hose stations (except those located in the Reactor Building which are inaccessible during power operations) shall receive a maintenance inspection to include removal and reracking of the hoses and inspection of coupling gaskets.

c. Refueling

1. A visual inspection of each nozzle's spray area will be conducted to verify the spray pattern is not obstructed.

2. Reactor Building fire hose stations which are inaccessible during power operation shall receive a maintenance inspection to include removal and reracking of the hoses and inspection of coupling gaskets.

d. At least once per 3 years:

1. A system flow test shall be performed on the fire suppression water system in accordance with Chapter 5, Section II of the Fire Protection Handbook, 14th Edition, NFPA.

2. The fire hose station valve listed in Table 3.17-1 shall be partial-stroke tested.

3. Each fire hose shall be subjected to a hydrostatic test at a pressure at least 50 psig greater than the maximum pressure at the station.

4.19.3 The high pressure CO_2 System for the generators at the Keowee Hydro Station shall be demonstrated operable as follows:

a. Monthly

1. Each valve in the flow path will be verified to be in its correct position.

b. Semiannually

1. The CO_2 storage tank weight shall be verified to be at least 90% of the full charge weight.

c. Refueling

1. The system shall be verified to actuate manually and automatically, upon receipt of a simulated action signal.

2. A flow test will be performed through headers and nozzles to assure no blockage.

4.19.4 Penetration fire barriers which protect safety-related equipment shall be verified functional by visual inspection at a refueling frequency and prior to declaring a penetration fire barrier functional following repairs or maintenance.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-47

AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-55

DUKE POWER COMPANY

OCONEE NUCLEAR STATION, UNITS NOS. 1, 2 AND 3

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

INTRODUCTION

By letter dated February 13, 1984, Duke Power Company (the licensee) proposed changes to the Technical Specifications (TSs) of Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55 for the Oconee Nuclear Station, Units Nos. 1, 2 and 3. These amendments would consist of changes to the Station's common TSs.

The amendments would revise the TSs to incorporate the fire hose stations (located in the three Oconee reactor buildings) into the limiting conditions for operation (LCO) and surveillance requirements addressing the fire protection and detection systems. The other two changes requested in your February 13, 1984 application (1) update the TS references to the Oconee Final Safety Analysis Report (FSAR) to ensure consistency with reference to the updated FSAR and (2) define the terms "accessible/accessibility" to achieve consistency throughout the TSs in their usage. Action 1 has been approved by a May 30, 1985 license amendment and Action 2 has been withdrawn by your August 7, 1985 letter.

EVALUATION

By letter dated May 15, 1981, the licensee proposed an amendment to the TSs associated with the Oconee fire protection program in response to an NRC letter dated October 7, 1980. The NRC staff approved the amendment request by June 9, 1981 amendments. Recently, the licensee determined that Section 3.17 and Section 4.19 did not address the fire hose stations located in each of the three reactor buildings and considered this to be an error of omission. These amendment requests propose to add those fire hose stations to the list in the LCO and surveillance sections.

These hose stations were installed within the reactor buildings as part of the plant modifications to meet NRC fire protection guidelines. The fire hose modifications were reviewed and found acceptable by the NRC staff in the Fire Protection Safety Evaluation Report of August 11, 1978, Sections 3.1.6, 4.3.1.4, and 5.1.6.

The proposed revisions to Table 3.17-1 would include all of the fire hose stations installed for protection of safety-related equipment within the plants. The licensee has also provided proposed appropriate operability and surveillance requirements for this equipment. The NRC staff has reviewed these proposed TS changes and determined they are needed to correct the current TSs to assure appropriate operability and surveillance requirements. Therefore, the staff finds the proposed changes to the TSs to be acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) 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.

Dated: August 20, 1986

Principal Contributor: W.H. Miller, Jr.