

# 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

John F. Stolz, Director

PWR Project Directorate #6 Division of PWR Licensing-B

DE Edison for

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

John F. Stolz, Director

PWR Project Directorate #6 Division of PWR Licensing-B

DE Edison

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

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

A E Edison

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	<u>Insert Pages</u>
3.17-3 3.17-4	3.17-3 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 3-M-43 AX-22 AX-20 AX-18 1RBH1 2RBH1 3RBH1 1RBH2 2RBH2 3RBH2 1RBH3 2RBH3 3RBH3 1RBH4 2RBH4 2RBH4 3RBH4 1RBH5 2RBH5 3RBH5 1RBH6 2RBH6	2HPSW-241 3HPSW-339 1HPSW-440 2HPSW-440 3HPSW-440 1LPSW-471 2LPSW-471 1LPSW-473 2LPSW-473 3LPSW-473 1LPSW-475 2LPSW-475 2LPSW-475 3LPSW-465 2LPSW-465 3LPSW-465 1LPSW-467 1LPSW-467 1LPSW-467 2LPSW-467 1LPSW-469 2LPSW-469	1&2 3rd Floor Switchgear 3 3rd Floor Switchgear, 600V Load Center 1 Battery Room 2 Battery Room 3 Battery Room Ground Floor Level - East Side Basement Floor Level - East Side Basement - East Side Intermediate Floor Level - East Side Intermediate Floor Level - East Side Intermediate Floor Level - East Side Top of Shielding Floor Level - West Side Top of Shielding Floor Level - West Side Top of Shielding Floor Level - West Side Intermediate Floor Level - West Side Ground Floor Level - West Side
3RBH6	3LPSW-469	Basement - West Side
Basement Ground Intermediate Top of Shielding	- EL. 777'-6" - EL. 797'-6" - EL. 825'-0" - EL. 861'-0"	

# Keowee Hydro Station

# 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
    - 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.
- 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

- 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<sub>2</sub> 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  ${\rm CO_2}$  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.