



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

July 10, 1979

Dockets Nos.: 50-269
~~50-270~~
and 50-287

Mr. William O. Parker, Jr.
Vice President - Steam Production
Duke Power Company
P. O. Box 2178
422 South Church Street
Charlotte, North Carolina 28242

REGULATORY DOCKET FILE COPY

Dear Mr. Parker:

The Commission has issued the enclosed Amendments Nos. 74, 74, and 71 for 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 and are in response to your requests dated August 22, 1978 and April 30, 1979.

These amendments revise the Technical Specifications by redesignating the inspection category of hydraulic shock suppressor 2-130, deleting hydraulic suppressors replaced by mechanical suppressors, and making error corrections and other minor changes.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Enclosures:

1. Amendment No. 74 to DPR-38
2. Amendment No. 74 to DPR-47
3. Amendment No. 71 to DPR-55
4. Safety Evaluation
5. Notice

cc w/enclosures: See next page

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Duke Power Company

cc w/enclosure(s):

Mr. William L. Porter
Duke Power Company
Post Office Box 2178
422 South Church Street
Charlotte, North Carolina 28242

J. Michael McGarry, III, Esquire
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700 Shoreham Building
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Washington, D. C., 20005

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

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

Director, Technical Assessment
Division
Office of Radiation Programs
(AW-459)
U. S. Environmental Protection Agency
Crystal Mall #2
Arlington, Virginia 20460

U. S. Environmental Protection Agency
Region IV Office
ATTN: EIS COORDINATOR
345 Courtland Street, N.E.
Atlanta, Georgia 30308

U. S. Nuclear Regulatory Commission
Region II
Office of Inspection and Enforcement
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Seneca, South Carolina 29678

Mr. Robert B. Borsum
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Manager, LIS
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cc w/enclosure(s) and incoming
dtd.: 8/22/78 & 4/30/79

Office of Intergovernmental Relations
116 West Jones Street
Raleigh, North Carolina 27603



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. 74
License No. DPR-38

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Duke Power Company (the licensee) dated August 22, 1978, as supplemented April 30, 1979, 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.

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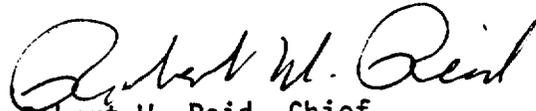
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility Operating License No. DPR-38 is hereby amended to read as follows:

3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 74 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



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 10, 1979



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. 74
License No. DPR- 47

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Duke Power Company (the licensee) dated August 22, 1978, as supplemented April 30, 1979, 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 1;
 - 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.

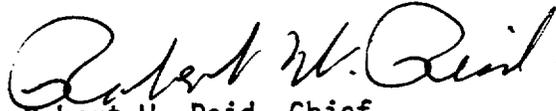
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility Operating License No. DPR-47 is hereby amended to read as follows:

3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 74 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



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 10, 1979



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. 71
License No. DPR-55

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Duke Power Company (the licensee) dated August 22, 1978, as supplemented April 30, 1979, 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.

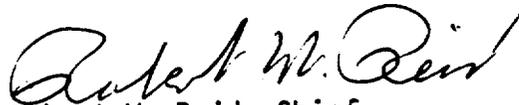
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility Operating License No. DPR-55 is hereby amended to read as follows:

3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 71 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



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 10, 1979

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 74 TO DPR-38

AMENDMENT NO. 74 TO DPR-47

AMENDMENT NO. 71 TO DPR-55

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

Revise Appendix A as follows:

Remove Pages

4.18-1

4.18-1a

4.18-2

4.18-6

4.18-11 & 4.18-11a

Insert Pages

4.18-1 & 4.18-2

-

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4.18-6

4.18-11

Changes on the revised pages are indicated by marginal lines.

4.18 HYDRAULIC SHOCK SUPPRESSORS (SNUBBERS)

Applicability

Applies to hydraulic shock suppressors used to protect the Reactor Coolant System or other safety-related systems.

Objective

To verify that required hydraulic shock suppressors are operable.

Specification

4.18.1 All hydraulic snubbers listed in Table 4.18-1 whose seal material has been demonstrated by operating experience, lab testing or analysis to be compatible with the operating environment shall be visually inspected. This inspection shall include as a minimum hydraulic fluid reservoir, fluid connections, and linkage connections to the piping and anchor to verify suppressor operability in accordance with the following schedule:

<u>Number of Suppressors Found Inoperable During Last Inspection</u>	<u>Next Required Inspection Interval</u>
0	18 months \pm 25%
1	12 months \pm 25%
2	6 months \pm 25%
3,4	4 months \pm 25%
5,6,7	2 months \pm 25%
<u>>8</u>	1 month \pm 25%

- Note: (1) The required inspection interval shall not be lengthened more than one step per inspection.
- (2) Suppressors may be categorized in two groups, "accessible" or "inaccessible", based on their accessibility during reactor operation. These two groups may be inspected independently according to the above schedule.

- 4.18.2 All hydraulic snubbers with seal material not fabricated from ethylene propylene or other materials demonstrated compatible with the operating environment shall be visually inspected for operability once every month.
- 4.18.3 A representative sample of 10 hydraulic shock suppressors or approximately 10 percent of the hydraulic suppressors installed, whichever is less, shall be functionally tested for operability each refueling outage. This test shall include verification of proper piston movement, lockup and bleed. For each suppressor determined to be inoperable, an additional 10 percent or 10 suppressors, whichever is less, shall be tested until no more failures are found or all suppressors have been tested. Suppressors with a rated capacity greater than 50,000 lbs. are exempted from this requirement.

Amendments Nos. 74, 74, & 71

Bases

All safety-related hydraulic suppressors are visually inspected for overall integrity and operability. The inspection will include verification of proper orientation, adequate hydraulic fluid level and proper attachment of suppressor to piping structures.

The inspection frequency is based upon maintaining a constant level of suppressor protection. Thus, the required inspection interval varies inversely with the observed inoperable suppressors. The number of inoperable suppressors found during a required inspection determines the time interval for the next required inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

Experience at operating facilities has shown that the required surveillance program should assure an acceptable level of snubber performance provided that the seal materials are compatible with the operating environment.

Snubbers containing seal material which has not been demonstrated by operating experience, lab tests or analysis to be compatible with the operating environment should be inspected more frequently (every month) until material compatibility is confirmed or an appropriate changeout is completed.

Examination of defective snubbers at reactor facilities and material tests performed at several laboratories⁽¹⁾ has shown that millable gum polyurethane deteriorates rapidly under the temperature and moisture conditions present in many snubber locations. Although molded polyurethane exhibits greater resistance to these conditions, it also may be unsuitable for application in the higher temperature environments. Data are not currently available to precisely define an upper temperature limit for the molded polyurethane. Lab tests and in-plant experience indicate that seal materials are available, primarily ethylene propylene compounds, which should give satisfactory performance under the most severe conditions expected in reactor installations.

To further increase the assurance of snubber reliability, functional tests should be performed once each refueling cycle. These tests will include stroking of the snubbers to verify proper piston movement, lock-up and bleed. Ten percent or ten snubbers, whichever is less, represents an adequate sample for such tests. Observed failures on these samples should require testing of additional units. Those snubbers designated in Table 4.18-1 as being in high radiation areas or especially difficult to remove need not be selected for functional tests provided operability was previously verified. Snubbers of rated capacity greater than 50,000 lbs. are exempt from the functional testing requirements because of the impracticability of testing such large units.

REFERENCES

- (1) Report H. R. Erickson, Bergen Paterson to K. R. Goller, NRC, October 7, 1974
Subject: Hydraulic Shock Sway Arrestors

**TABLE 4.18-1
Unit 2 Safety Related Shock Suppressors (Snubbers)**

<u>Sketch/Hanger No.</u>	<u>System</u>	<u>Suppressors Especially Difficult To Remove</u>	<u>Suppressors Inaccessible During Normal Operation</u>	<u>Suppressor in High Radiation Area During Shutdown*</u>	
2-124	Main Steam Line (01A)		X		
2-125(A&B)			X		
2-127					
2-128					
2-129					
2-130			X		
2-132(A,B,C,D)				X	
2-134					
2-135					
2-147					
2-149(A&B)				X	
2-151					
2-152					
H 2A				X	
H 8A			X		
H 2B			X		
H 8B			X		
2-941	Main Steam Bypass to Condenser (01A-1)				
2-944					
2-945					
2-3135	Main Steam Supply to Auxiliary Equipment (01A-3)				
2-1309	Main Steam Supply to Emergency Feedwater Pump Turbine (01A-4)				
2-1322					
2-1323					
2-1324					
2-1326					
2-1327					
2-1329					
2-1333					

Amendments Nos. 74, 74, 74, & 71

4.18-6

TABLE 4.18-1
Unit 3 Safety Related Shock Suppressors (Snubbers)

<u>Sketch/Hanger No.</u>	<u>System</u>	<u>Suppressors Especially Difficult To Remove</u>	<u>Suppressors Inaccessible During Normal Operation</u>	<u>Suppressor in High Radiation Area During Shutdown²</u>
H 7A	Main Feedwater Line (03)		X	
H 6B			X	
H 40A			X	
H 4B			X	
3-1274	Emergency Feedwater Line (03A)			
3-1379				
3-1280				
3-5606				
3-5624				
3-5628				
H 1A			X	
H 11	OTSG Recirculation System (04)		X	
H 46			X	
H 50			X	
H 52			X	
H 1	Reactor Coolant System (50)		X	
H 3			X	
H 4			X	
H 5			X	
H 7			X	
H 8			X	
H 9			X	
H 10			X	
H 11			X	
H 12			X	
H 1A			X	
H 2A			X	
H 3A			X	
H 13A		X		

Amendments Nos. 74, 74, & 71

4.18-11



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 74 TO FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 74 TO FACILITY OPERATING LICENSE NO. DPR-47

AMENDMENT NO. 71 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 August 22, 1978, as supplemented April 30, 1979, the Duke Power Company (DPC or the licensee) proposed changes in Technical Specification (TS) 4.18. The proposed changes would: (1) correct an error in the TS in regard to a suppressor designation; (2) clarify the TS; and (3) delete hydraulic suppressors replaced in service by mechanical snubbers.

Evaluation

The licensee requested that hydraulic suppressor (snubber) 2-130 in Oconee Unit No. 2 be redesignated as, "especially difficult to remove," in TS Table 4.18-1. This designation would exempt a snubber from functional testing, i.e., piston movement, lock-up and bleed, but not from the remaining surveillance requirements of fluid level, fluid line connections, linkage connections and anchorage connections. The exemption would prevail only if a snubber were demonstrated operable during its previous functional tests. DPC in their letter of April 30, 1979 stated:

"Snubber 2-130 is located on the pier supporting the main steam line from the 'B' steam generator outside containment. This suppressor is approximately 29 feet from the ground. Special equipment is required to lift personnel to the installed snubber in order to perform the required surveillance. This same snubber is already listed as "especially difficult to remove" in the tables for Units 1, 3 and is considered an administrative error that it was omitted from the Unit 2 listing."

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Based on the above, we conclude snubber 2-130 should be redesignated "especially difficult to remove." The licensee also requested that hydraulic snubbers that were replaced by mechanical snubbers be deleted from the TS. We do not have any inspection requirements for mechanical snubbers; thus, it is proper to delete these snubbers from the TS. We have underway a generic study to formulate an inspection program for mechanical snubbers. We asked the licensee if the replacement snubbers performed in a no less conservative manner than the old snubbers. DPC replied in their April 30, 1979 letter, "The use of mechanical snubbers to replace hydraulic snubbers does not negate the original piping analysis." Based on the above, we conclude that deletion of the hydraulic snubbers replaced by mechanical snubbers from the TS is acceptable. The remainder of the change requests consisted of: deleting Note (3) from TS 4.18.1 because it was no longer timely; deleting Note (4) from TS 4.18.4 which erroneously extended the surveillance interval; deleting TS 4.18.4 that was no longer timely; and correcting an error in designating Table 4.18-1 in the TS Bases. We found these four changes to be of an administrative nature and acceptable. The licensee requested a change in the language of TS 4.18.2. We find the change clarifies the intent of the specification and does not change its requirements and thus is acceptable.

Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do 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.

Dated: July 10, 1979

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKETS NOS. 50-269, 50-270 AND 50-287DUKE POWER COMPANYNOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 74, 74 and 71 to Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55, respectively, issued to Duke Power Company (the licensee), which revised Technical Specifications for operation of the Oconee Nuclear Station, Units Nos. 1, 2 and 3, located in Oconee County, South Carolina. The amendments are effective as of the date of issuance.

The amendments revise the Technical Specifications by redesignating the inspection category of hydraulic shock suppressor 2-130, deleting hydraulic suppressors replaced by mechanical suppressors, and making error corrections and other minor changes.

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 was not required since the amendments do not involve a significant hazards consideration.

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The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated August 22, 1978, as supplemented April 30, 1979, (2) Amendments Nos. 74, 74 and 71 to Licenses Nos. DPR-38, DPR-47 and DPR-55, respectively, 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, N.W., Washington, D.C., and at the Oconee County Library, 201 South Spring Street, Walhalla, South Carolina. 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 Operating Reactors.

Dated at Bethesda, Maryland, this 10th day of July 1979.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors