A 08/28/78

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50-269/270/287

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DOCTYPE: LETTER NOTARIZED: YES

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SUBJECT:
FORWARDING LIC NOS DPR 38, 47 AND 55 APPL FOR AMEND: TECH SPEC PROPOSED CHANGE CONCERNING REVISION TO VARIOUS TECH SPEC TABLE AS LISTED RE HYDRAULIC SHOCK SUPPRESSORS...NOTARIZED 08/22/78...W/ATT LIC FEES.

PLANT NAME: OCONEE - UNIT 1
OCONEE - UNIT 2
OCONEE - UNIT 3

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NOTES:
1. M. CUNNINGHAM - ALL AMENDMENTS TO FSAR AND CHANGES TO TECH SPECS

GENERAL DISTRIBUTION FOR AFTER ISSUANCE OF OPERATING LICENSE
(DISTRIBUTION CODE A001)

FOR ACTION: BR CHIEF ORB#4 BC**W/7 ENCL

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ACRS CAT B**W/16 ENCL

$$$

DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

August 22, 1978

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. R. Reid, Chief
Operating Reactor Branch #4

Reference: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287

Dear Sir:

Pursuant to 10CFR50, §50.90, please find attached a proposed amendment to the Oconee Nuclear Station Facility Operating License. This proposal revises Oconee Nuclear Station Technical Specification 4.18, deleting notes 3 and 4 of Specification 4.18.1, clarifying the wording of Specification 4.18.2 and correcting an error in the Bases. Additionally, Table 4.18-1 has been revised to reflect a suppressor which is especially difficult to remove and to delete several hydraulic suppressors which were replaced by mechanical suppressors during the recent Oconee Unit 3 refueling outage.

This proposal has been determined to consist of one Class II and two Class I amendments in that the requested action is administrative in nature and has no safety or environmental significance. Accordingly, and pursuant to 10CFR 170, §170.12, a check in the amount of $2,000 is provided as the licensing fee for this request.

Very truly yours,

William O. Parker, Jr.

RLG:scs
Attachment

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WILLIAM O. PARKER, JR., being duly sworn, states that he is Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this request for amendment of the Oconee Nuclear Station Technical Specifications, Appendix A to Facility Operating Licenses DPR 38, DPR 47 and DPR-55; and that all statements and matters set forth therein are true and correct to the best of his knowledge.

William O. Parker, Jr., Vice President

Subscribed and sworn to before me this 22nd day of August 1978.

Notary Public
Vivian B. Robbins

My Commission Expires:

February 15, 1982

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:

Number of Suppressors Found Inoperable During Last Inspection	Next Required Inspection Interval
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3,4	4 months ± 25%
5,6,7	2 months ± 25%
≥8	1 month ± 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.

Bases

All safety-realted 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 compatability 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 installation.

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 impractibility 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)

Sketch/Hanger No.	System	Suppressors Especially Difficult To Remove	Suppressors Inaccessible During Normal Operation	Suppressor in High Radiation Area During Shutdown*
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				

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

Sketch/Hanger No.	System	Suppressors Especially Difficult To Remove	Suppressors Inaccessible During Normal Operation	Suppressor in High Radiation Area During Shutdown*
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	