NRC FORM 195 (2-76) U.S. NUCLEAR REGULATORY COMMISSION

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

DOCKET NUMBER: 50-269/270/287
FILE NUMBER:

TO: MR B C RUSCHE

FROM: DUKE POWER COMPANY
CHARLOTTEE, NC

W O PARKER, JR

DATE OF DOCUMENT: 5-6-76

DATE RECEIVED: 5-10-76

LETTER ☐ NOTORIZED ☐ ORIGINAL ☒ UNCLASSIFIED ☐ COPY

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DESCRIPTION

LTR REF OUR 12-18-75 LTR..... AND THEIR LTR 2-19-76.....FURNISHING RESULTS OF INVESTIGATION AS TO THE SAFETY-RELATED HYDRAULIC SHOCK SUPPRESSOR AT OCONEE AS TO THE TYPE OF MATERIAL THAT IS BEING USED IN EACH SUPPRESSOR.....

ENCLOSURE

DO NOT REMOVE

ACKNOWLEDGED

PLANT NAME: OCONEE 1-2-3

FOR ACTION/INFORMATION

SAFETY		ENVIRO 5-13-76 RB
ASSIGNED AD :		ASSIGNED AD :
✓ BRANCH CHIEF :	PURPLE	BRANCH CHIEF :
PROJECT MANAGER:		PROJECT MANAGER :
✓ LIC. ASST. :	SHEPPARD	LIC. ASST. :

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SKOVHOLT	SALTZMAN	ANALYSIS	
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EXTERNAL DISTRIBUTION

✓ LPDR: WALHALLA, SC	NATL LAB	BROOKHAVEN NATL LAB	CONTROL NUMBER
✓ TIC	REG. V-IE	ULRIKSON (ORNL)	4670
✓ NSIC	LA PDR		
ASLB	CONSULTANTS		
ACRS 16 HOLDING CYS			

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

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

May 6, 1976

Mr. Benard C. Rusche
Director of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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

Dear Mr. Rusche:

Your letter dated December 18, 1975 requested that model Technical Specifications relating to hydraulic shock suppressors be adopted for use at Oconee Nuclear Station. One of the provisions of the model specifications required all hydraulic suppressors whose seal materials are other than ethylene propylene or are other material that has not been demonstrated to be compatible with the operating environment to be visually inspected for operability every 31 days. The compatibility of seal materials refers to that seal material which has not been demonstrated by operating experience, lab tests or analysis to be compatible with the operating environment.

In our response dated February 19, 1976, it was stated that the provision for monthly testing of suppressors was being deleted since it was considered that all Oconee suppressors were compatible with the operating environment on the basis of operating experience. Subsequent suppressor inspections on all three Oconee units has revealed eight suppressors on Oconee 1 and one suppressor on Oconee 3 whose cylinder end cap "O" ring seals have become embrittled, resulting in the suppressors becoming inoperable.

An investigation has been performed to determine the material in each safety-related hydraulic shock suppressor at Oconee. This investigation has revealed that the majority of this material is of a polyurethane type; however, the specific composition of the polyurethane in each suppressor cannot be determined. Only the end cap "O" ring material in a specific type of suppressor has been observed to become embrittled and result in a suppressor becoming inoperable. There are 53, 51, and 27 of this type suppressor in Oconee 1, 2, and 3 respectively. No embrittlement of sealing material in the other suppressor cylinders or snubber valves has been experienced.

It is currently planned to replace all material in all safety-related hydraulic shock suppressors at the Oconee Nuclear Station. However, availability of materials will prohibit the accomplishment of this goal until each of the Oconee unit's next refueling shutdown. In the interim, the suppressor cylinder seal material will be replaced for those cylinders which have been identified as possibly defective on Oconee 1 and 2 (both currently in an outage) prior to startup. For Oconee 3, the suppressors were last inspected on March 26, 1976. A shutdown will occur no later than June 20, 1976 during which the seal material on those cylinders which have been identified as possibly defective will be replaced. Due to the failure of only one suppressor on Oconee 3 and the much shorter service life experienced by these suppressors compared with Oconee 1, this course of action is considered acceptable.

Since only one type of suppressor has been identified as not being compatible with the operating environment, and this problem will be rectified in the near future, suppressor surveillance will continue as outlined in our February 19, 1976 letter.

Very truly yours,

William O. Parker, Jr.

MST:mmb

CC Mr. Norman C. Moseley