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TO: Mr Rusche

FROM: Duke Power Company  
Charlotte, NC  
W O Parker Jr

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## DESCRIPTION

Ltr re their 10-7-76 ltr.....trans the follow

1p

PLANT NAME: Oconee 1-3

## ENCLOSURE

Updated tables to seismic qualification of  
transmission path.....(1 cy encl rec'd)

4p

**ACKNOWLEDGED  
DO NOT REMOVE**

## SAFETY

## FOR ACTION/INFORMATION

## ENVIRO

1-25-77

ehf

ASSIGNED AD:

BRANCH CHIEF:

PROJECT MANAGER:

LIC. ASST. :

Schwencer (S)  
Zech  
Sheppard

ASSIGNED AD:

BRANCH CHIEF:

PROJECT MANAGER:

LIC. ASST. :

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NAT. LAB:

REG V. IE

LA PDR

CONSULTANTS:

AS CAT B 1/25/77

BROOKHAVEN NAT. LAB.  
ULRIKSON (ORNL)647  
mm

# DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

January 17, 1977

TELEPHONE: AREA 704  
373-4083

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

Attention: Mr. A. Schwencer, Chief  
Operating Reactor Branch #1

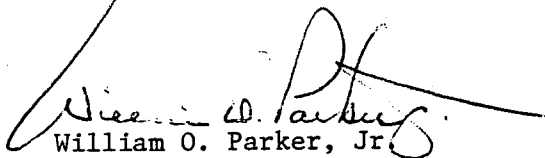
Reference: Oconee Nuclear Station  
Docket Nos. 50-269, -270, -287



Dear Sir:

My letter dated October 7, 1976 described the seismic qualification of the overhead transmission path from Keowee Hydro Station to Oconee Nuclear Station. The attached tables provide an updated status of this qualification effort. Changes in status have been indicated by vertical lines in the margin by the affected item. Additional supplementary reports will be submitted to appraise you of our progress in this endeavor.

Very truly yours.

  
William O. Parker, Jr.

MST:ge

Attachment

Regulatory Docket File



647

TABLE 1  
KEOWEE-OCONEE OVERHEAD EMERGENCY  
POWER PATH STRUCTURES QUALIFICATION SUMMARY

Sheet 1 of 2

STRUCTURE	QUALIFIED	METHOD	BASIS OF QUALIFICATION
1. Keowee Main Step-up Transformer Base	See Note 1	Analysis	0.15g Ground Motion
2. Oconee Startup Transformer Bases	See Note 2	Analysis	0.15g Ground Motion
3. Keowee 230 KV Line Pulloff Structure	Yes	Analysis	0.15g Ground Motion
4. 230KV Transmission Line and Towers from Keowee to Oconee	Yes	Analysis	0.15g Ground Motion
5. Oconee 230KV Strain Structures	Yes	Analysis	0.15g Ground Motion
6. Oconee 230KV Swyd. Bus Support Structure	Yes	Analysis	0.15g Ground Motion
7. Oconee 230KV Swyd. Wave Trap Support Structure	Yes	Analysis	0.15g Ground Motion
8. Oconee 230KV Swyd. Lightning Arrestor Support Structure	Yes	Analysis	0.15g Ground Motion
9. Oconee 230KV Swyd. Coupling Capacitor Potential Devices (CCPD) Support Structure	Yes	Analysis	0.15g Ground Motion
10. Oconee 230KV Swyd. Disconnect Switch Support Structure	See Note 5	Analysis	0.15g Ground Motion
11. Oconee 230KV Swyd. PCB Support Structure	See Note 6	Analysis	0.15g Ground Motion
12. Oconee 230KV Swyd. Relay House	See Note 7	Analysis	0.15g Ground Motion
13. Oconee 230KV Swyd. Relay House Equipment Anchoring	See Note 7	Analysis	0.15g Ground Motion
14. 230 KV Lines from Oconee 230KV Switchyard to Startup Transformers	Yes	Analysis	0.15g Ground Motion
15. Oconee Powerhouse 230KV Line and Shield Wire Pulloff Structures	Yes	Analysis	0.15g Ground Motion

- Note 1: Additional base restraints are to be added. Modification design completed.
- Note 2: Additional base restraints to be added as results of analysis and design. Modification design completed.
- Note 5: Analysis is being conducted on disconnect switch support structure base original soil. These tests are scheduled for completion by February 1, 1977.
- Note 6: Analysis scheduled for completion March 1, 1977.
- Note 7: The relay house structure is qualified. Modifications are to be made to cable trenches, concrete block walls, and the anchorage of some equipment. The completion of the design for these modifications is scheduled for February 1, 1977.

TABLE II  
KEOWEE-OCONEE OVERHEAD EMERGENCY  
POWER PATH EQUIPMENT SEISMIC QUALIFICATION SUMMARY

Sheet 1 of 2

EQUIPMENT TYPE	IDENTIFICATION	QUALIFIED	METHOD	BASIS OF QUALIFICATION
1. Keowee Main Stepup Transformer	Transformer No. 1	Yes	Manufacturer Test/Analysis	0.36g
2. Oconee Startup Transformers	CT1, CT2, CT3	Yes	Manufacturer Test/Analysis	0.36g
3. 230KV Disconnect Switches		Yes	Manufacturer Test/Analysis	0.36g
4. Oconee 230KV Swyd. Bus Conductor System		See Note 1	Analysis	0.36g
5. 230KV Power Circuit Breakers (PCB's)	PCB Nos. 8, 9, 12, 15, 17, 18, 21, 24, 26, 27, 28, 30, 33	See Note 2	Test/Analysis	0.36g
6. 230KV Swyd. Coupling Capacitor Potential Devices		Yes	Manufacturer Test/Analysis	0.36g
7. 230KV Swyd. Lightning Arrestors		Yes	Manufacturer Test/Analysis	0.36g
8. 230KV Swyd. DC Distribution Centers	Nos. SY-DC1, SY-DC2	Yes	Test	0.36g
9. 230KV Swyd. DC Panelboards	Nos. DYA, DYB, DYC, DYD, DYE, DYF, DYG, DYH	Yes	Manufacturer Test	0.36g
10. 230KV Swyd. Control Power Batteries	Nos. SY-1, SY-2	Yes	Manufacturer Test	0.36g
11. 230KV Swyd. Battery Chargers	Nos. SY-1, SY-2, SY-S	Yes	Manufacturer Test	0.36g
12. 230KV Swyd. Relay House Lighting System		Yes	Analysis	0.36g

TABLE II

Sheet 2 of 2

EQUIPMENT TYPE	IDENTIFICATION	QUALIFIED	METHOD	BASIS OF QUALIFICATION
13. 230KV Swyd. Relay Panels & Equipment		See Note 3	Test/Analysis	0.36g
14. 230KV Swyd. Relay House Roof Drain Pipe		See Note 4	Analysis	0.36g
15. 230KV Swyd. Relay House HVAC Duct		See Note 4	Analysis	0.36g
16. 230KV Swyd. Relay House Air Handling Unit		See Note 4	Analysis	0.36g

Note 1: Analysis incomplete. Scheduled to be completed by March 1, 1977.

Note 2: Analysis incomplete. Scheduled to be completed by March 1, 1977.

Note 3: Analysis complete. Modification design to be completed by February 1, 1977.

Note 4: Minor field modifications are to be made. Modification design completed.