

50-269/270/287

## NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

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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

lp

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:

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## INTERNAL DISTRIBUTION

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| <input type="checkbox"/> CASE                       | <input type="checkbox"/> SIHWEIL        | <input type="checkbox"/> OPERATING REACTORS | <input type="checkbox"/> SPANGLER                  |
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| <input type="checkbox"/> P. COLLINS                 | <input type="checkbox"/> ROSZTOCZY      | <input type="checkbox"/> BAER               | <input type="checkbox"/> SITE ANALYSIS             |
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| <input type="checkbox"/> PETERSON                   | <input type="checkbox"/> AT & I         | <input type="checkbox"/> GRIMES             | <input type="checkbox"/> BUNCH                     |
| <input type="checkbox"/> MELTZ                      | <input type="checkbox"/> SALTZMAN       |   | <input type="checkbox"/> J. COLLINS                |
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may

# 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

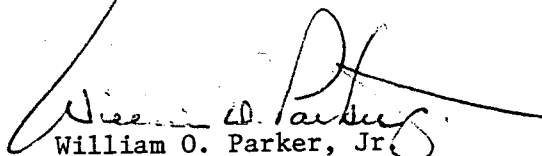
Reference: Oconee Nuclear Station  
Docket Nos. 50-269, -270, -287



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.

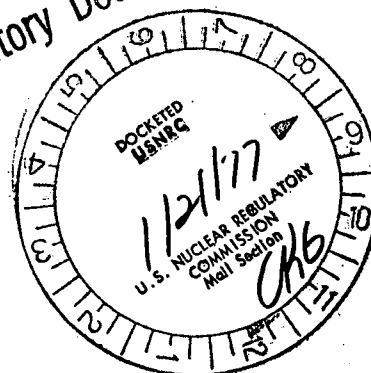
Very truly yours.

  
William O. Parker, Jr.

MST:ge

Attachment

Regulatory Docket File



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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.