

P. O. BOX 33189

**DUKE POWER COMPANY**  
**GENERAL OFFICES**  
422 SOUTH CHURCH STREET  
**CHARLOTTE, N. C. 28242**

TELEPHONE: AREA 704  
373-4011

February 18, 1985

OGTP-845-N-57

50-458

Mr. C. H. Berlinger  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

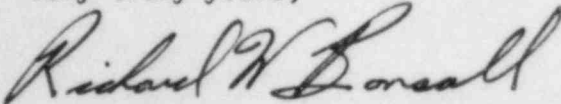
Re: TDI Diesel Generator Owners Group  
Request for Additional Information  
File: MTS-4086

Dear Mr. Berlinger:

Per a verbal request from your staff, enclosed is additional information regarding the torsional dynamic analysis of the Riverbend crankshaft.

Should you have any questions, please call R. J. Deese at (704) 373-3489.

Very truly yours,



C. L. Ray, Jr.  
Technical Program Director  
TDI Diesel Generator Owners Group

CLR/RJD/cr

cc w/attachment: John Hamilton  
W. W. Laity, PNL  
H. R. Denton  
J. C. Kammeyer

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DUKE | MANAGEMENT AND  
POWER | TECHNICAL SERVICES

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TABLE 2.1  
STIFFNESS AND INERTIAS FOR TORSIONAL DYNAMIC ANALYSIS OF  
DSR-48 13-INCH BY 12-INCH CRANKSHAFT AT RIVERBEND

Inertia Location	Inertia (lb. ft. sec <sup>2</sup> )	Stiffness (ft. lb./rad)
Front Gear	6.8	$58.1 \times 10^6$
Cylinder No. 1	49.2	$84.7 \times 10^6$
Cylinder No. 2	47.9	$84.7 \times 10^6$
Cylinder No. 3	47.9	$84.7 \times 10^6$
Cylinder No. 4	47.9	$84.7 \times 10^6$
Cylinder No. 5	47.9	$84.7 \times 10^6$
Cylinder No. 6	47.9	$84.7 \times 10^6$
Cylinder No. 7	47.9	$84.7 \times 10^6$
Cylinder No. 8	50.1	$76.9 \times 10^6$
Flywheel	426.5	$309.7 \times 10^6$
Generator	4976.1	