DUKE POWER COMPANY

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GENERAL OFFICES 422 SOUTH CHURCH STREET

CHARLOTTE, N. C. 28242

February 18, 1985

OGTP-845-N-57

TELEPHONE: AREA 704

373-4011

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

John Hamilton cc w/attachment:

W. W. Laity, PNL H. R. Denton

J. C. Kammeyer

8502200223 850218 PDR ADOCK 05000458

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

Inertia Location	Inertia (1b. ft. sec²)	Stiffness (ft. lb./rad)
Front Gear	6.8	58.1 × 10 <sup>6</sup>
Cylinder No. 1	49.2	84.7 × 106
Cylinder No. 2	47.9	84.7 × 106
Cylinder No. 3	47.9	84.7 × 106
Cylinder No. 4	47.9	84.7 × 106
Cylinder No. 5	47.9	$84.7 \times 10^6$
Cylinder No. 6	47.9	84.7 × 10 <sup>6</sup>
Cylinder No. 7	47.9	84.7 × 106
Cylinder No. 8	50.1	76.9 × 106
Flywheel	426.5	309.7 × 10 <sup>6</sup>
Generator	4976.1	