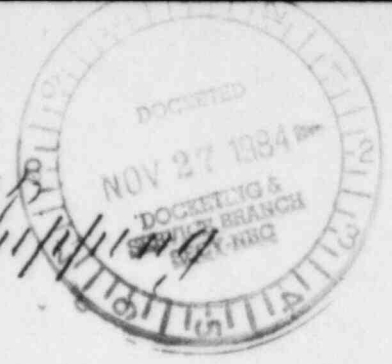


American Bureau of Shipping

100 Pine Broadway
New York, N.Y. 10015



3 May 1984

RTW:ml
T8-3

Transamerica Delaval DSR-48 Diesel Engine/Generator
for Long Island Lighting Company Shoreham Plant
Report on Crankshaft Torsional Stresses.

Transamerica Delaval Inc.
Engine & Compressor Division
550 85th Avenue
P. O. Box 2161
Oakland, CA 94621

Attention: Mr. Roland T. M. Yang
Manager Applied Mechanics.

Gentlemen:

We have your letter of 3 April 1984 submitting copies of the above subject report for our review, and with regard thereto have to advise as follows:

We note from the submitted report that the torsional vibration stress in the crankshaft for the first mode $5\frac{1}{2}$ order critical speed (422 RPM) was expected to approach or exceed that permitted by the Rules for the submitted crankshaft material.

We further note from the submitted report that tests were conducted to determine the actual stresses in the crankshaft, and that these tests indicated a substantial margin of safety against fatigue failure due to torsional vibration.

Based on the submitted test data, and on submitted service experience with similar engines having similar torsional critical speed arrangements, we advise that we would have no objection to the submitted torsional critical speed arrangement for use on diesel generator sets on an ocean going vessel, insofar as our classification requirements for marine service are concerned.

Three (3) copies of the subject report, stamped to indicate our review, are being returned.

Very truly yours,

G.E.T. A.R.F. M.H.L.
S.O. R.T.Y. C.R.C.

AMERICAN BUREAU OF SHIPPING

RECEIVED

W. M. HANNAN
Vice President

TICKLER MAY 07 1984 UPDATE

ENGINEERING

CIRC. FORWARD COPY
TO FILE: SEE ME

cc: LILCO. (E. Montgomery)
Accounting Dept. w/enclosure
Legal Dept. (M. Adams)
Subject File 460

by: Robert A. Giuffra
Robert A. Giuffra
Principal Surveyor - Machinery

A12782