

UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

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LONG ISLAND LIGHTING COMPANY, :
a New York Public Service : Civil Action No.
Corporation, : 85 CIV 6892 (GLG)
:
Plaintiff, :
:
-against- : LILCO'S FIRST SET
:
TRANSAMERICA DELAVAL, INC., : OF INTERROGATORIES
a Delaware corporation, : AND REQUEST FOR PRO-
:
Defendant. : DUCTION OF DOCUMENTS TO
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Long Island Lighting Company (LILCO), by counsel,
propounds to Transamerica DeLaval, Inc. (TDI), the following
Interrogatories, answers to which must be served in accordance
with Rules 26 and 33 of the Federal Rules of Civil Procedure,
and the following Request for Production of Documents, a
response to which must be served on LILCO in accordance with
Rules 26 and 34 of the Federal Rules of Civil Procedure.

DEFINITIONS

(1) All references to Transamerica DeLaval, Inc. (TDI)
in these Interrogatories and Request for Production shall be
construed to include any parent and all subsidiaries,
affiliates and divisions of TDI and any representative, agent,
employee, attorney, expert, investigator, consultant or other
person acting on behalf of any of the foregoing.

(2) "Document" means any written, recorded or graphic matter however produced or reproduced, including but not limited to letters, correspondence, memoranda, notes, work papers, tapes, charts, reports, books, ledgers, drawings, design drawings, sketches, photographs, records, lists, telegrams, telexes, schedules, sound recordings, books of account, catalogues, brochures, written statements of witnesses or other persons having knowledge of the pertinent facts, or drafts, copies or reproductions of any of the foregoing, irrespective of form, in the possession, custody or control of TDI.

If you consider any document requested to be privileged from production, include in your response a list of such documents, identifying each document by date, custodian, addressee, author, title and subject matter. In addition, identify all recipients and all other persons to whom the document or its contents have been disclosed, and state the grounds upon which each document is considered privileged.

(3) "Identify" or "Identification" when used in reference to an individual person means to state his full name, his present home address, his present business address and his present or last known position and business affiliation. When used in reference to a present or former TDI employee, the

terms "Identify" or "Identification" mean to state, in addition to the above:

- (a) the date the person was first employed by TDI;
- (b) the title of all jobs held at TDI from the date of initial employment to the present, and the dates of each job;
- (c) a brief description of the duties and responsibilities of each job.

(4) Whenever an Interrogatory asks for the description or identification of a document, the answer shall state the following information with respect to each document:

- (a) the date of the document, or if it has no date, the date or approximate date the document was prepared;
- (b) the date the document was executed, if different from the date it bears;
- (c) the identifying or descriptive code number, file number, title or label of such document;
- (d) the nature and contents of the document;
- (e) the name, address and position of the signer of the document, and if it was not signed, the name, address and position of the author;

- (f) the name, address and position of the addressee, if any, and the name, address and position of each person other than the addressee to whom the document, or copies of it, were sent;
- (g) the present location of the document and the name, present address and position of the person having present custody of the document; and
- (h) whether or not any draft, copy or reproduction of the document contains any postscript, notation, change or addendum not appearing on the document itself.

The foregoing information shall be given in sufficient detail to enable a party or person to whom a subpoena is directed fully to identify the document sought to be produced and to enable counsel for LILCO to determine that the document produced is in fact the document described.

(5) Any reference to the "Shoreham EDGs," "LILCO's EDGs," "LILCO's diesel generators," or the "Shoreham diesel generators," shall mean the three model DSR-48 engines (engine numbers 74010-12) manufactured by TDI for use in LILCO's Shoreham Nuclear Power Station (Shoreham).

(6) Any reference to "R-4 series engines" is not limited to model DSR-4 engines but shall include all DSR-4, DMR-4, DGSR-4, DSRV-4, DMRV-4 and DGSRV-4 engines ever manufactured by TDI. The term shall also include all configurations of each of the above types of engines, i.e., in-line 6, in-line 8, vee 12, vee 16, vee 20, and any other number and/or configuration of cylinders.

(7) The term "component," when used in reference to the Shoreham EDGs, shall mean the original components that were contained in the engines when they were shipped to Shoreham. Replacement or new components for the Shoreham EDGs will be specifically identified.

(8) "Person" shall mean and include any individual, sole proprietorship, partnership, corporation or association.

(9) These Interrogatories are continuing in nature and should be supplemented up to the time of trial in accordance with Rule 26 of the Federal Rules of Civil Procedure.

INTERROGATORIES

1. For each component listed below that was or could have been used in the Shoreham EDGs, please provide the following information:

COMPONENT LIST

1. Crankshaft
2. Cylinder block
3. Cylinder head
4. Piston
5. Turbocharger (including prelubrication system)
6. Jacket water pump
7. Cylinder liner
8. Intermediate connecting push rods
9. Cylinder head studs
10. Connecting rod bearing shells
11. Air start valve capscrews
12. Fuel oil injection tubing
13. Main push rods
14. Generator drive coupling and overspeed trip
15. Generator controls
16. Subcover
17. Base and bearing caps
18. Turbocharger bracket
19. Air start check valve
20. Camshaft
21. Connecting rod
22. Air start valve
23. Piston rings

- a) Identify all persons who participated in any manner in the original design or analysis or any redesign or reanalysis of the component used in the Shoreham EDGs;
- b) Provide the number and date of all design drawing for the component used in Shoreham EDGs;
- c) Provide the number and date of all prior design drawings for the component;

- d) Provide the number and date of all subsequent design drawings for the component;
- e) Identify all vendors who supplied any of the components, or any raw materials or subcomponents used in the components for the Shoreham EDGs;
- f) Identify all persons responsible for testing each component for the Shoreham EDGs and provide a brief description of their responsibilities;
- g) Identify all persons responsible for quality assurance or quality control of the design or manufacture of each component in the Shoreham EDGs;
- h) Identify all persons with knowledge of quality control problems associated with the manufacture of any component for the Shoreham EDGs;
- i) Describe all documents containing, reflecting, discussing or pertaining to manufacturing quality control associated with any component in the Shoreham EDGs;

- j) Identify all written failure analysis reports relating to any component listed above and identify the author of each report;
- k) Identify all persons responsible for the fabrication and manufacture of each component in the Shoreham EDGs.

2. Identify all persons responsible for the overall design of the Shoreham EDGs.

3. As to the parent and each division, subsidiary or affiliate of TDI, state the following:

- (a) its name, state of incorporation and location of its principal place of business;
- (b) its relationship to TDI;
- (c) the names of all officers and directors and whether any of those persons hold any position with any other division, subsidiary or affiliate.

4. State the names, titles and employment duties and responsibilities of all officers of TDI for the period from January 1, 1973 through the present. In addition, state whether any of these officers has or has had any position with Transamerica Corporation or any other subsidiary of Transamerica Corporation.

5. Identify all persons who have held the positions of foundry manager, plant metallurgist, and foundry quality control manager for TDI from January 1, 1970 through the present, and the dates each person held each position.

6. Describe all documents that TDI maintains constitute the contract between it and LILCO for the design, manufacture and sale and provision of associated services for the Shoreham diesel generators.

7. Describe all documents that TDI maintains modify the contract between it and LILCO described in Interrogatory 6 above.

8. Identify all contracts between LILCO and TDI subsequent to the contract described in Interrogatory 6 above. For each subsequent contract, state the date of the contract and describe all documents that TDI maintains constitute such contracts.

9. Identify all present or former TDI employees who have had any responsibility for negotiating any contract terms with LILCO or Stone & Webster concerning the Shoreham EDGs, including negotiations concerning the specifications, TDI's bid proposal, price negotiations, the purchase of replacement parts, the provision of any service by TDI, warranty provisions, the modification of any contract terms or any other types of negotiations.

10. Identify all persons responsible for the decision to use 13" by 11" crankshafts in the Shoreham EDGs.

11. Identify all persons responsible for the decision to increase the size of the crankshaft in TDI's R-48 engines from 13" by 11" to 13" by 12", and state the date the decision was made to increase the size of the crankshaft in the R-48 engines from 13" by 11" to 13" by 12".

12. State the date and drawing number of all design drawings for all 13" by 11" and 13" by 12" crankshafts used in R-48 engines.

13. State the dates of all torsional analyses and torsionograph tests performed on or for any of the Shoreham EDGs before they were shipped to LILCO, describe all documents reflecting, discussing or containing the results of such tests or analyses, or correlations between tests and analyses, and identify all persons who conducted or reviewed the tests or analyses.

14. Identify all suppliers of material used by TDI for cast iron castings from January 1, 1973 through January 1, 1976.

15. Describe all documents relating to or containing information regarding the source, nature and composition of the material used to cast each of the original cylinder blocks for the Shoreham EDGs.

16. Describe all documents containing information regarding the dates that each of the original cylinder blocks for the Shoreham EDGs was cast.

17. Describe all documents relied on by TDI from January 1, 1973 through January 1, 1976 setting forth or describing the method or procedure for casting cylinder blocks.

18. Identify the persons responsible for ensuring that the quality of the material used to cast the cylinder blocks for the Shoreham EDGs met the specifications.

19. Identify all persons responsible for determining what material was selected for inclusion in the heats that were used to pour each of the cylinder blocks for the Shoreham EDGs.

20. Identify the persons responsible for ensuring that all contaminants or unacceptable material were removed from material included in the heats used to pour each of the cylinder blocks for the Shoreham EDGs.

21. Describe all documents containing information regarding the present location of the test bars for each of the cylinder blocks for the Shoreham EDGs, and identify the custodian of the test bars.

22. Describe all documents containing information regarding the tested tensile strength of the test bars for each of the original cylinder blocks for the Shoreham EDGs.

23. Describe all documents containing information regarding all chemical analyses and any other type of tests that were performed on the heats used to pour each of the cylinder blocks for the Shoreham EDGs.

24. Describe all documents containing information regarding all chemical analyses and any other type of tests that were performed on each of the cylinder blocks for the Shoreham EDGs before they were shipped to LILCO.

25. Describe all documents containing information regarding the tested tensile strength of the test bars for all other castings during the period January 1, 1970 through January 1, 1976 that were specified as ASTM Class 40 gray cast iron.

26. Describe all documents containing information regarding the date that any TDI employee or consultant first learned of the presence of Widmanstaetten Graphite or Degenerate Widmanstaetten Graphite in any casting manufactured by TDI.

27. Describe all documents containing information regarding all components manufactured by TDI (including component name, identifying number and date of casting) in which Widmanstaetten Graphite or Degenerate Widmanstaetten Graphite has been discovered.

28. Identify all consultants hired between January 1, 1970 and the present to study, analyze or advise TDI with regard to any aspect of TDI's business relating to the design, manufacture and operation of diesel generators. For each consultant identified, briefly state the areas of his study, analyses or advice.

29. Identify all experts you have retained or specially employed in anticipation of or preparation for this litigation, regardless of whether you intend to use the expert as a witness at trial.

30. Identify all experts you may call as witnesses at the trial of this case. For each expert you identify, please state:

- (a) the subject matter about which each expert will testify;
- (b) the substance of the facts and opinions about which each expert will testify;
- (c) a summary of the grounds for each opinion; and,
- (d) a summary of each expert's educational and professional background.

31. Describe any insurance policies that do or might provide coverage for any of the claims stated in the complaint. For each policy, provide the policy number and the name of the

insurer, and describe all documents containing or reflecting or discussing coverage provided by such policy for claims made or anticipated by LILCO against TDI in any way relating to the Shoreham EDGs.

32. Describe all documents that contain information regarding any and all lawsuits that have been filed against TDI after January 1, 1970 by a purchaser or user of a TDI engine, in which the purchaser or user claimed damages based upon allegations of defective design, defective manufacture or defective testing. For each lawsuit, state the docket number, the court, the name and address of all parties and the status or disposition.

33. Identify all persons supplying any information for the responses to the foregoing Interrogatories, specifying which person or persons provided information for each individual Interrogatory or part thereof.

REQUEST FOR PRODUCTION OF DOCUMENTS

Pursuant to Rule 34 of the Federal Rules of Civil Procedure, LILCO requests that TDI produce the following documents for copying and inspection at a time and place to be mutually agreed upon by the parties.

1. All documents that TDI claims constitute the contract between TDI and LILCO for the design, manufacture and sale and provision of associated services to LILCO of three emergency diesel generators for use in LILCO's Shoreham Nuclear Power Station.

2. All documents that TDI claims modify in any manner the contract between TDI and LILCO.

3. All documents reflecting, discussing or pertaining in any manner to the contract between TDI and LILCO, including all internal TDI communication concerning the contract or contract terms.

4. All documents that TDI claims constitute any other contracts between TDI and LILCO.

5. All invoices, statements, bills or demands for payment TDI has sent to LILCO or Stone & Webster, without regard to whether TDI has received payment, for the original purchase price of the diesels, replacement or spare parts, labor, service, and any and all other charges connected in any way whatsoever with the three emergency diesel generators sold to LILCO.

6. All documents containing, reflecting, discussing or pertaining to communication between TDI and the American Bureau of Shipping (ABS) from January 1, 1970 through the present.

7. All documents containing, reflecting, discussing or pertaining to communication between TDI and any classification society other than ABS from January 1, 1970 through the present, concerning the R-4 and R-5 series engines or any component that could be used in an R-4 series engine.

8. TDI organization charts that accurately reflect at all times between January 1, 1973 and the present, the groups responsible for all phases of engine design, manufacture and marketing, and the names of the persons comprising those groups. The charts should include, but not be limited to, TDI field representatives, service groups, quality assurance groups, design groups, manufacturing groups, quality control groups, failure analysis groups and all other aspects of TDI's diesel engine manufacturing division, detailed through the foreman level.

9. All documents containing, reflecting, discussing or pertaining to all crankshaft calculations performed by or for TDI to the rules of any classification society from January 1, 1970 through the present.

10. All documents containing, reflecting, discussing or pertaining to communication between TDI and the Diesel Engine Manufacturers Association (DEMA), or any member of DEMMA acting in his official capacity, from January 1, 1970 through the present.

11. All documents containing, reflecting, discussing or pertaining to communication between TDI and the Institute of Electrical and Electronics Engineers (IEEE) concerning IEEE Trial Use Standard 387 (1972) or IEEE Standard 387 (1977) from January 1, 1970 through the present.

12. All documents that relate or refer in any way to the decision by TDI to increase the crankshaft size in R-48 engines from 13" by 11" to 13" by 12".

13. All documents that relate or refer in any way to the decision by TDI in 1975 to change the harmonic coefficient (Tn) values used in its torsional analyses of R-4 series engines. This request includes both the initial decision to change the Tn values in 1975 and the second decision in 1975 to change the Tn values. If the decision to change the Tn values was based in any way on test results, also produce the underlying test data, including procedures used and engine test logs.

14. All documents containing, reflecting, discussing or pertaining to the generation or creation of the Tn values that were used in the original torsional analysis of the 13" by 11" crankshafts in the Shoreham EDGs.

15. All documents containing, reflecting, discussing or pertaining to communication between LILCO and TDI.

16. All documents containing, reflecting, discussing or pertaining to communication between Stone & Webster and TDI concerning the Shoreham EDGs or generated as a result of meetings between Stone & Webster and TDI concerning the Shoreham EDGs.

17. All documents that show or discuss the results of tests performed on castings, and the test bars for castings, specified as ASTM Class 40 gray cast iron that were cast by TDI between January 1, 1970 and January 1, 1976.

18. All documents containing, reflecting, discussing or pertaining to communication between TDI and the Nuclear Regulatory Commission (NRC) or any person acting on behalf of the NRC or any entity under the authority or control of the NRC.

19. All Service Information Memos applicable to R-4 and R-5 series engines generated between January 1, 1970 and September 30, 1984.

20. All files, personal or otherwise, maintained between January 1, 1974 and the present by the following TDI employees that contain documents relating to the Shoreham EDGs:

- (a) Ron Asazawa
- (b) Theron Barger

- (c) Hank Bollweg
- (d) Pat Cross
- (e) Roger Davidson
- (f) Roseann Feinstein
- (g) Bob Gray
- (h) Don Hayhurst
- (i) Bryan Hunt
- (j) Robert Johnston
- (k) Steve Jubert
- (l) Sue Keisner
- (m) Ted Kemp
- (n) Carl McClaney
- (o) Lanny McHugh
- (p) Mike Monahan
- (q) Otis Newsome
- (r) Ray Ortiz
- (s) Billy Pope
- (t) John Roundtree
- (u) Andy Rush
- (v) Don Schmitz
- (w) Steve Schumacher
- (x) Al Scott

- (y) Jay Siegel
- (z) Harry Treed
- (aa) John Wilder
- (bb) David Wulf

21. All files, personal or otherwise, maintained between January 1, 1970 and the present by the following TDI employees:

- (a) Alan Barich
- (b) Greg Beshouri
- (c) Bob Bezzini
- (d) Richard Boyer
- (e) Tom Bridge
- (f) Edward Dobrec
- (g) Al DiGioralamo
- (h) Vince Dilworth
- (i) Lee Duck
- (j) Bert Durie
- (k) Al Fleischer
- (l) John Gee
- (m) Harold Helgerson
- (n) Jim Hill
- (o) Geoff King
- (p) Ken Kropf

- (q) Maurice Lowrey
- (r) Pat Maslen
- (s) Clinton Mathews
- (t) Carl Moeller
- (u) Dick Pratt
- (v) Harold Schilling
- (w) Wayne Trusedale
- (x) Bud Trussell
- (y) Gene White
- (z) Eugene Wilson
- (aa) Roland Yang

22. All files, personal or otherwise, maintained between January 1, 1970 and the present by the following persons that contain documents relating to TDI's diesel engine manufacturing division:

- (a) Donald Bixby
- (b) Truman W. Netherton

23. All insurance policies that do or might provide coverage for any of the claims stated in the complaint.

24. All documents containing, reflecting, discussing or pertaining to communication between TDI and any of its insurers concerning the Shoreham EDGs or any other R-4 or R-5 series engine.

25. All documents containing, reflecting, discussing or pertaining to communication between TDI and Professor John Wallace.

26. All documents containing, reflecting, discussing or pertaining to reports or analyses of any type concerning the Shoreham EDGs.

27. All documents containing, reflecting, discussing or pertaining to failure analysis reports concerning any component in any R-4 and R-5 series engine.

28. All documents containing, reflecting, discussing or pertaining to the supply of materials used in cast iron castings from January 1, 1973 through January 1, 1976. This request shall not be construed to apply only to documents dated between January 1, 1973 through January 1, 1976.

29. All documents containing, reflecting, discussing or pertaining to communication between TDI and the TDI Owners Group.

30. All documents containing, reflecting, discussing or pertaining to business evaluations conducted by TDI prior to entering the nuclear business and all business evaluations conducted since then concerning TDI's supply of diesel generators for use in nuclear power plants.

31. All 10 CFR Part 21 reports, all drafts of such reports and all notes, memoranda or other documents concerning such reports.

32. All documents containing, reflecting, discussing or pertaining to any decision not to file 10 CFR Part 21 reports regarding any component in any R-4 or R-5 series engine.

33. All documents pertaining to, discussing or generated as a result of all meetings between TDI and LILCO or TDI and the NRC.

34. Any list which contains the following information for all in-line 8 cylinder engines with a nominal 17" bore and 21" stroke manufactured by TDI after 1960: series number, engine model number, owner, date of shipment, RPM and KW rating, maximum allowable cylinder firing pressure at rated load, BMEP and crankshaft size.

35. Any list which contains the following information for all TDI engines manufactured by TDI after 1960 that contained 13" x 11" crankshafts: series number, engine model number, owner, date of shipment, RPM and KW rating, maximum allowable cylinder firing pressure at rated load, number of cylinders and BMEP.

36. All documents pertaining to any crankshaft that ever failed or was ever replaced in any engine ever manufactured by TDI, regardless of cause, including torsional analyses, torsigraph tests, failure analysis reports and any other documents discussing or pertaining to the crankshaft failures.

37. All documents containing, pertaining to, discussing or generated as a result of torsional analyses performed by or for TDI at any time for the 13" by 11" crankshafts used in the Shoreham EDGs.

38. All documents containing, pertaining to, discussing or generated as a result of torsigraph tests performed by or for TDI at any time for the 13" by 11" crankshafts used in the Shoreham EDGs.

39. All documents containing, pertaining to, discussing or generated as a result of calculations performed by or for TDI at any time concerning the torsional adequacy of the 13" by 11" crankshafts in the Shoreham EDGs.

40. All other documents analyzing or discussing the failure of the 13" by 11" crankshafts in the Shoreham EDGs.

41. All documents containing, pertaining to, discussing or generated as a result of analyses of the cracking in the original 103 block performed by or for TDI at any time.

42. Audited financial statements for TDI for the years 1974-1985.

43. All annual reports prepared by or for TDI for the years 1974-1985.

44. All documents that discuss Widmanstaetten Graphite or Degenerate Widmanstaetten Graphite and its presence in any component cast by TDI for any TDI engine.

45. All documents that relate to the tear-down by LILCO of the Shoreham diesels after crankshaft failure in August 1983, including but not limited to logbooks kept by TDI and personal diaries kept by TDI personnel.

46. All publications sent to any purchaser of any engine from 1974 through 1983.

47. All documents containing, concerning, reflecting, discussing or generated as a result of every policy or instruction by TDI to any of its employees concerning:

- a) communications with LILCO concerning the Shoreham EDGs;
- b) communications with any TDI nuclear customers concerning deficiencies or defects or potential deficiencies or defects found in any TDI engines.

48. Minutes of TDI's Board of Directors meetings from January 1, 1970 through the present.

49. Documents reflecting, containing, or generated as a result of communications with Transamerica concerning the Shoreham EDGs.

50. All documents containing, reflecting, discussing or pertaining to the test procedures, calibration procedures and instrumentation used in conducting torsionograph tests by TDI between January 1, 1973 and the present.

51. All test logs for all tests performed on any of the Shoreham EDGs prior to their shipment to LILCO.

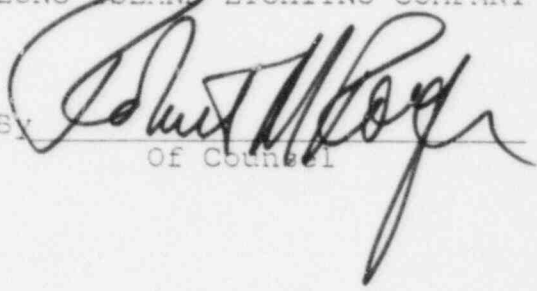
52. All documents containing the results of, reflecting, discussing or pertaining to TDI's Crankshaft Stress Analysis Program that was developed following the failure of the crankshafts in the Shoreham EDGs.

53. All state and federal income tax returns filed by or on behalf of TDI from January 1, 1974 through the present.

54. All documents containing, reflecting, discussing or pertaining to an audit or study of TDI's quality assurance program performed by Management Analysis Company.

55. All documents referred to in the Interrogatories not specifically requested in this Request for Production.

LONG ISLAND LIGHTING COMPANY

BY 
Of Counsel

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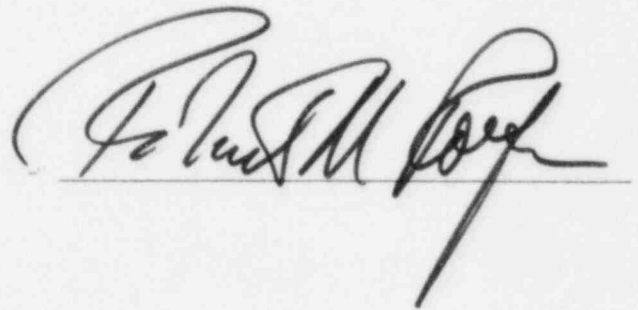
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Counsel

AFFIDAVIT OF SERVICE

I hereby certify that a true copy of the foregoing LILCO'S FIRST SET OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS was served by Express Mail on Robert E. Smith, Esq., Rosenman, Colin, Freund, Lewis & Cohen, 575 Madison Avenue, New York, New York 10022 and to Ira M. Millstein, Esq. and James W. Quinn, Esq., Weil, Gotshal & Manges, 767 Fifth Avenue, New York, New York 10153.

This the 13th day of September, 1985.

A handwritten signature in cursive script, appearing to read "Robert E. Smith", is written over a horizontal line.