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August 21, 1984

In the Matter of Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1) Docket No. 50-322-1- (OL)

Hon. Lawrence Brenner, Esq. Administrative Judge Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Hon. Dr. George A. Ferguson Administrative Judge School of Engineering Howard University 2300 - 6th Street, N.W. Washington, D.C. 20059

Hon. Dr. Peter A. Morris Administrative Judge Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C.

List of Errata for Lilco's Testimony

Dear Administrative Judges:

I am enclosing a list of errata for Lilco's testimony on crankshafts, cylinder heads, pistons and cylinder blocks. In those instances where corrections are made to exhibits, a copy of the corrected exhibit is attached to this letter.

8408230231 840821 PDR ADDCK 05000322 PDR

Crankshafts

Testimony of McCarthy, Johnson, Montgomery and Chen

Page 4, Line 13--The word "industry" should read "industries."

Page 41, Line 18--The phrase "would my opinion" should read "would be my opinion."

Crankshafts

Testimony of Wells, Johnson, Wachob, Seaman, Cimino and Burrell on Shot-Peening

Page 11, Line 15--The word "insure" should read "ensure."

Page 16, Line 13--"Exhibit #C-33" should read "Exhibit #C-31." After the reference to "Exhibit #C-31," the following sentence should be inserted: "LILCO's ultrasonic testing as well as magnetic particle and liquid penetrant testing likewise revealed no relevant inclusions or voids. See Exhibit #C-33 and Exhibit #C-32, respectively."

Page 17, Line 9-- The word "journels" should read "journals."

Cylinder Heads

Testimony of Seaman, Youngling, Kammeyer, Wells, Swanger, Wallace, Mathews and Pischinger

Page 12--The word "occured" should read "occurred."

Page 47, Lines 13 and 14--The words "predominently" should read "predominantly."

Page 78, Line 21--The phrase "in hort" should read "in short."

Pistons

Testimony of McCarthy, Pischinger, Seaman, Swanger and Youngling

Page 23, Line 17-- "Exhibit P-9" should read "Exhibit P-10."

Page 31, Line 18--"Exhibit P-9" should read "Exhibit P-10."

Cylinder Blocks

Testimony of McCarthy, Rau, Wells, Wachob, Johnson, Taylor, Seaman, Youngling and Schuster

Page 12, Lines 18, 19 and 20--The phrase "and 92.5 hours occurred at load levels between 100% and 110% of full load" should read "63 hours occurred at load levels between 100% and 110%, and 29.5 hours were in excess of 110% load."

Page 29, Line 26--The word "the" should be deleted between the words "whether" and "differences."

Page 30, Line 21--The word "graphite" should be inserted between "Widmanstaetten" and "is."

Page 37, Line 20--"Exhibit B-41" should read "Exhibit B-43."

Page 37, Line 23--"38 ksi" should read "33 ksi."

Page 40, Line 7-- "Exhibit Q" should read "Exhibit B-44."

Page 52, Line 19--The word "loss" should read "law."

Page 63, Line 14--The word "minimal" should be inserted before the words "crack extension."

Page 72, Line 19--The words "Technical Specifications" should be replaced with "operating procedures."

Page 76, Line 19 -- The word "incapable" should read "capable."

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Exhibits B-13, B-14, B-15, B-26, B-49 and B-50 should be replaced with the corrected versions attached to this letter.

Thank you for your consideration of this matter.

Very truly yours,

F. Milton Farley, III

Attachments

cc: Service List

SERVICE LIST

I hereby certify that copies of the attached letter were served this date upon the following by first-class mail, postage prepaid:

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DATED: August 21, 1984

Exhibit B-13

ENGINE 101 LOAD HISTORY SHOREHAM NUCLEAR POWER STATION

Event and Date						
	L<75	75 <l<100< th=""><th>L=100</th><th>100<l<110< th=""><th>L>110</th><th>Total Hours, All Loads</th></l<110<></th></l<100<>	L=100	100 <l<110< th=""><th>L>110</th><th>Total Hours, All Loads</th></l<110<>	L>110	Total Hours, All Loads
Original Cranksh	aft					
Hours	164.0	262.5	188.5		19.0	634
Crankshaft replace Restart 12/29/83 Testing Hours		179.0	20.0	91.0	4.5	372.5
Outage 3/18/84 Block Inspection	3/20/84					
Qual. Testing Hours 4/10/84	43.0	10.0	29.5	.5	2.0	85
Total	285.0	451.5	238.0	91.5	25.5	1091.5

Exhibit B-14

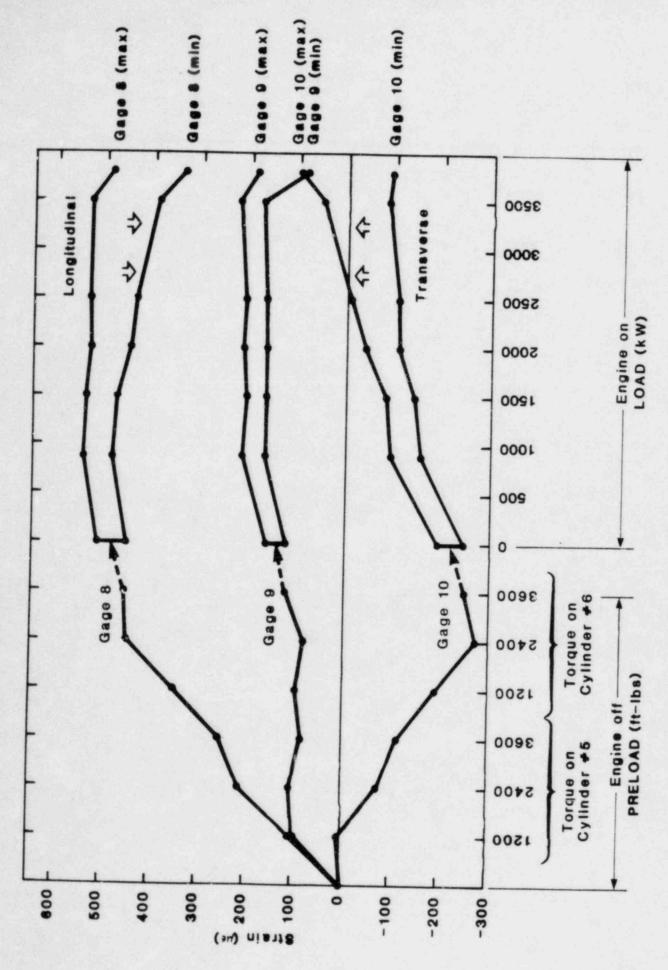
ENGINE 102 LOAD HISTORY SHOREHAM NUCLEAR POWER STATION

Event and Date						
	L<75	75 <l<100< th=""><th>L=100</th><th>100<l<110< th=""><th>L>110</th><th>Total Hours, All Loads</th></l<110<></th></l<100<>	L=100	100 <l<110< th=""><th>L>110</th><th>Total Hours, All Loads</th></l<110<>	L>110	Total Hours, All Loads
Original Cranks	haft					
Hours	83.0	325.0	259.0	22.0		689
Crankshaft Repl Restart 12-22-8	3					
Testing Hours	34.5	183.0	36.5	41.0	29.0	324
Outage 2/09/84 Block Inspection	n 2/10/84					
Qual. Testing Hours	90.0	3.5	16.0	-	0.5	110
Block Inspection	n 3/08/84					
Total Hours	207.5	511.5	311.5	63.0	29.5	1123

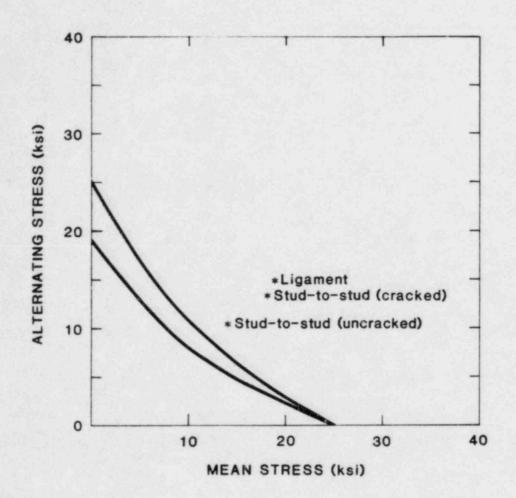
Exhibit B-15

ENGINE 103 LOAD HISTORY SHOREHAM NUCLEAR POWER STATION

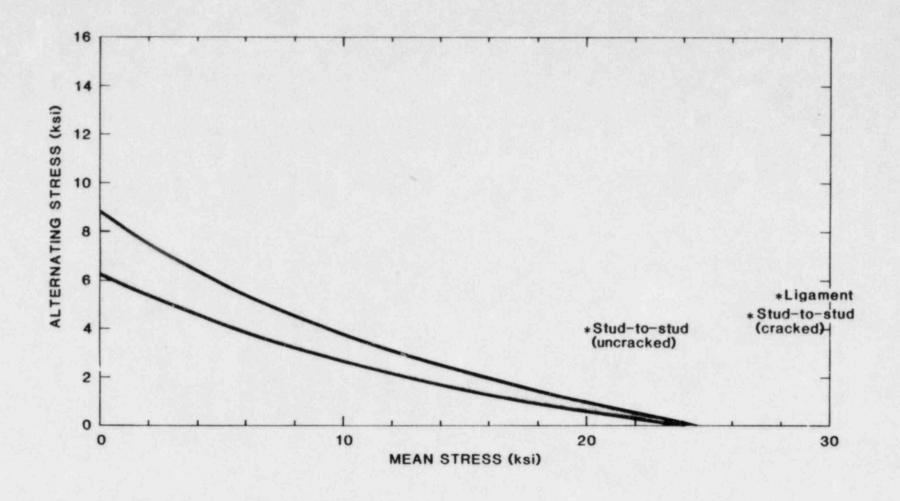
Event and Date	Hours at Load, L (%)					
	 L<75	75 <l<100< th=""><th>L=100</th><th>100<l<110< th=""><th>L>110</th><th>Total Hours, All Loads</th></l<110<></th></l<100<>	L=100	100 <l<110< th=""><th>L>110</th><th>Total Hours, All Loads</th></l<110<>	L>110	Total Hours, All Loads
Original Cranksha Hours	ft 103.0	432.0	257.0		23.0	815
Crankshaft Replace Restart 12/17/83 Testing Hours	67.0	170.5	69.0	34.5	6.0	347
Outage 3/11/84 Block Inspection :	3/11/84					
Qual. Testing Hours	64.5	5.5	24.5	13.0	1.0	108.5
Block Failure 4/14 Block Inspection						
Total Hours	234.5	608.0	350.5	47.5	30.0	1270.5



Strain vs. load for Gages 8, 9, and 10 (located on engine centerline).



Goodman-Smith diagram for low cycle fatigue (100 cycles) at 100% load for Shoreham engines DG101 and DG102.



Goodman-Smith diagram for high cycle fatigue (> 10^6 cycles) at 100% load for Shoreham engines DG101 and DG102.