

RELATED CORRESPONDENCE

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
LONG ISLAND LIGHTING COMPANY)	Docket No. 50-322
)	
(Shoreham Nuclear Power Station,)	
Unit 1))	

SOC's FOURTH SET OF
INTERROGATORIES AND REQUEST FOR PRODUCTION
OF DOCUMENTS TO LONG ISLAND LIGHTING COMPANY

I.

The Shoreham Opponents Coalition (SOC) serves on the Long Island Lighting Company (LILCO) the interrogatories and requests for production of documents that appear below. A sworn response to them must be provided to SOC in accordance with the terms of 10 CFR Section 2.740(b) and 2.741(d). If the answer to any question is not known when the response is filed, the answer must be provided as soon as the missing information becomes available.

As used in the interrogatories and request for production of documents, the following definitions apply as indicated:

1. "LILCO," means Long Island Lighting Company, its officers, agents, employees, and consultants.
2. "Facts," include the calculational or other assumptions, if any, underlying various assertions of fact. "Including" and

"include," as used in these interrogatories, mean "including but not limited to."

3. "Document" or "documents," means any handwritten, typed, printed, recorded or graphic matter however produced or reproduced, including material stored for use in automatic data processing systems, whether or not in the possession, custody or control of LILCO and whether or not claimed to be privileged against discovery on any ground, including: reports; records; lists; memoranda; correspondence; telegrams; schedules; photographs, sound recordings; films; hand, machine and computer calculations; computer codes; data; and written statements of witnesses or other persons having knowledge of the facts.

4. "Studies or observations," include physical, empirical, calculational, assumptional, and other types of work, whether recorded in writing or not.

Please provide answers to the following questions which pertain to specific SOC contentions in Docket No. 50-322.

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SOC CONTENTION 3

1. Please provide a copy of any and all correspondence or other documents between LILCO and the NRC which relate to Regulatory Guide 1.97, Rev. 2 since date of LILCO's motion for summary disposition. This should include but not be limited to any correspondence between LILCO and GE equipment suppliers, NRC, ACRS and BWR owners' groups.
2. Please provide a cross-reference between the individual items in each of the two tables attached to the LILCO Motion for Summary Disposition on Contention 3 (Table 1 and Table 2), and the items listed in Regulatory Guide 1.97, Rev. 2.
3. What is the LILCO scheduled date of implementation for each of the pieces of equipment identified in Regulatory Guide 1.97, Rev. 2 as applicable to BWR's?
4. Please provide a description of each piece of equipment which is presently or planned to be provided to meet Regulatory Guide 1.97, Rev. 2, Table 1, Type A equipment requirements.
5. For the systems which LILCO plans to use for measuring Iodine release from Shoreham, what is the overall accuracy of measuring the total release of particulate and gaseous forms of Iodine during an accident? Please also give numerical values for sample accuracy, sample monitoring frequency, sample monitoring accuracy and model accuracy used to calculate the total discharge of Iodine.-
6. Are the accuracies given in response to the above interrogatories applicable to all possible release points at Shoreham? If not, specifically identify which release points they apply to and state the accuracy of measurement of Iodine release from other release points.
7. What, if any, effort is being made by LILCO to locate continuous Iodine monitoring equipment (see 0578, p. A-38 and II.F.1-7 of 0737)?
8. Identify all equipment located in the secondary containment which is classed as a) important-to-safety, or b) Class IE, or c) Design Class 1?

9. What equipment in the secondary containment is required by the Emergency Operating Procedures to be operated or monitored by the operator during or following a transient or accident?
10. Please provide a copy of all Emergency Operating Procedures for the Shoreham plant.
11. Assuming there were a need for operators to go to the secondary containment during or following an accident, how would the requirements of 1.97, Rev. 2, Table 1, Type E, Radiation Exposure Rate Monitoring, be satisfied? Describe the equipment to be used and the availability of the equipment.
12. Please provide a copy of all documents which LILCO is relying upon to establish the state revised criteria for Environs and Radiation Exposure Rate Monitoring in the secondary containment.
13. What will be the location of the portable effluent monitoring equipment in the secondary containment (LILCO Motion for Summary Disposition, Table 2, item 17)?
14. What is the justification for not providing ARM in the secondary containment (LILCO Motion for Summary Disposition, Table 2, item 17)?
15. Assuming LILCO meets its September, 1982 fuel load schedule, what equipment in Reg. Guide 1.97, Rev. 2 will not be installed by that date?
16. What "high range survey equipment" (as stated in LILCO's Motion for Summary Disposition, Table 2, Item 45) is being added to the Shoreham design? How many devices are provided? Describe the devices and their range.
17. Please provide the details which support the conclusions in SNRC 608 regarding the sampling system.
 - A. Please include data on the sampling rate, reliability, measurement accuracy, and the specified environmental qualification.
 - B. What are the shielding requirements for the Sampling Building?
18. For each item in LILCO's Table 2 (attached to LILCO Motion for Summary Disposition for Contention 3) which states that the instrument is a) not being provided or, b) is to be a GE generic solution, provide the details of how and when the equipment is being implemented or the justification for not supplying the equipment.

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19. Please identify all potential leak paths on Shoreham. For each path, describe the instruments which will be used to monitor the release (and include an identification corresponding to the item numbers in LILCO's Table 2, Motion of Summary Disposition of SOC Contention 3.

SOC CONTENTION 6(a)1

1. QA Program and Implementing Procedures

Provide copies of the AQ program manual and associated implementation procedures for the following entities: LILCO, Stone & Webster, Courter, Comstock & Jackson, and Dravo for the period beginning with the commencement of each entity's activities on the Shoreham project to 1982 year to date or the completion of each entity's activity on the Shoreham project, if earlier.

2. Audit and Surveillance Results

Provide all audit and surveillance findings and observations for the QA criteria set forth in Contention 6(a)1 for the period 1977 to 1982 year to date which address:

- a) QA program adequacy;
- b) Effectiveness of program implementation;

for LILCO, Stone and Webster, Courter, Comstock and Jackson and Dravo.

3. Please provide nonconformance/noncompliance logs or listings showing the dates at which each nonconformance/noncompliance was entered and cleared for the following:

- a. LILCO's quality assurance program;
- b. Stone & Webster's quality assurance program;
- c. The quality assurance program for the prime contractors (Courter, Comstock & Jackson and Dravo).

4. Please provide the audits and/or other documentation supporting the initiation and closing of any and all nonconformances/noncompliances listed in response to question 3 of this set of interrogatories.

5. Please provide any and all monthly and yearly management audits concerning the adequacy and/or effectiveness of the project quality assurance program, trends in QA program implementation of Stone & Webster, LILCO and the prime contractors (Courter, Comstock & Jackson and Dravo).

6. Please provide copies of any and all documents pertaining to the QA/QC audit and inspection performed by the NRC at the Shoreham site during February, 1982.

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SOC CONTENTION 7A(1)

1. Please provide the assumptions and details which are used in assessing the resolution of NUREG-0373, item II.K.3.21 (restart of low pressure injection and core spray). Also, for the conditions analyzed:
 - a. What other systems are assumed available?
 - b. What equipment is assumed inoperative?
 - c. What operator errors are assumed in the analyses?
2. Please provide a copy of NEDO-24951 (June, 1981) which is stated to contain reference material pertinent to II.K.3.21.

SOC CONTENTION 7A(2)

1. Please provide the justification and reasoning applied for each of the high-priority items in the original control room audit report which has not yet been corrected.
2. What actions or changes have resulted from the recent (February, 1982) LILCO/NRC meeting on Human Factors? Provide a copy of all correspondence or other documents between LILCO and the NRC which pertains to that meeting.
3. Does LILCO intend to leave ADS and S/RV controls and pressure and temperature indicators in their present positions despite the concerns expressed by the NRC Control Room/Human Factors Audit?
4. If the answer to 3 is affirmative, state the reasons and justifications for doing so.
5. If the answer to 4 is negative, state what changes will be made and provide new drawings showing the revised location of equipment.
6. Provide up-to-date as-built drawings which show the ADS and S/RV equipment locations with sufficient information to determine the function of the device.

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7. What is the specified availability of GE supplied process computer at Shoreham?
8. What indication of first-out annunciators is planned at Shoreham?
9. Which of the criteria of NUREG-0700 were not applied during the control room audit at Shoreham?
10. Is it LILCO's position that the NRC Control Room Audit was adequate to assess the Human Factors design of the Shoreham Control Room?
11. Please provide a copy of the full list of criteria applied to the NRC Control Room Audit.

SOC CONTENTION 7A(3)

1. Please provide a copy of all recent documents and correspondence regarding the location of the monitors for radiation release measurements at Shoreham.
2. Has there been any change in the monitor locations? If the answer is affirmative, please describe the equipment involved and the changes in location. If the answer is negative, please provide the drawings which show the present or planned locations of the monitors.

SOC CONTENTION 7A(4)

1. What is the reliability and availability specified for the Safety Parameter Display Console (SPDC)?
2. Does the interim design of the SPDC rely on the Plant Process Computer for its data? Explain the dependence of the SPDC on the Plant Process Computer, if any.
3. Please provide a copy of SNRC 585 which is purported to describe the permanent SPDC design.

SOC CONTENTION 7A(5)

1. Please provide a copy of all documents and correspondence which describe the tests and results of the Safety/Relief Valve testing for BWR's and for the Shoreham plant, specifically.
2. Please provide a copy of SNRC 647 (December, 1981).

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3. Please provide a copy of any letters from McCaffrey to Denton regarding the S/RV tests. Please also provide a copy of any BWR Owner's Group documents which pertain to the S/RV tests.
4. What ATWS conditions are not covered in the tests completed to date for BWR S/RV's of the type used in the Shoreham design?
5. What ATWS conditions are covered in the present or past S/RV tests?
6. What tests have been performed to show that the BWR Owner's Group test results are applicable to the Shoreham-specific S/RV design?

SOC CONTENTION 7A(6)

1. What steps have been taken to reduce the number of challenges to the S/R valves at Shoreham?
2. What procedural steps, if any, have been taken to reduce the number of S/RV challenges? Provide a copy of any procedures used to reduce challenges.
3. Have there been any equipment or system changes to reduce the number of challenges to the S/RV's?

SOC CONTENTION 8

1. What is LILCO's current position regarding the installation of in-core thermocouples to measure the onset of Inadequate Core Cooling (ICC)?
2. What provisions, if any, have been made in the design of Shoreham to eventually include in-core thermocouples?
3. What action has been taken to improve the vessel water level measurement technique on Shoreham?
4. Please provide a copy of LILCO's response to Board Notification 82-08, February 9, 1981, "Errors in BWR Vessel Water Level Indication."
5. For each vessel level instrument state whether Shoreham uses a heated reference leg or cold reference leg design of the types described in BN 82-08.

SOC CONTENTION 9

1. On page 15 of LILCO's response to SOC's 6/24/81 interrogatories, LILCO identified exceptions to compliance with Reg. Guide 1.47. Please describe the justification for not having the equipment comply with Reg. Guide 1.47 in each of the following examples:
 - (a) system inoperative alarms for the screenwell pumphouse vent systems relay,
 - (b) the emergency switchgear room exhaust air systems,
 - (c) the battery room vent systems,
 - (d) the RBSWS chiller equipment room vent systems,
 - (e) diesel rooms emergency vent system.
2. Describe why there is no compliance with Reg. Guide 1.47 on the following systems (ref. FSAR Fig. 7.1.1-2, July, 1981 revision):
 - a) RCIC?
 - b) Standby Liquid Control?
 - c) Fuel pool cooling?
 - d) SRV (air system)?
3. How is the "system degraded" alarm and/or "value [valve] Loss of Control" alarms (as cited in response number 1 to SOC 6/24/81 interrogatories on Contention 9), able to satisfy the Reg. Guide 1.47 criteria?
4. Is the July, 1981 revision of FSAR Fig. 7.1.1-2 the latest revision? If not, please provide a copy of the latest revision.
5. What bypass indications are available on the remote shutdown panel?
6. As a result of Rev. 2 of Reg. Guide 1.97, what systems were added to the list of systems required to comply with Reg. Guide 1.47?

SOC CONTENTION 16

1. Please provide a copy of all GE and LILCO documents prepared since September, 1981 regarding the issues addressed in NUREG-0630. Please provide both generic information and Shoreham specific information.
2. Please provide a description of how the problems identified in NUREG-0630 have been resolved for the Shoreham fuel design.
3. Please provide a copy of all correspondence between LILCO and GE, NRC, ACRS, and BWR Owner's Group regarding the Japanese core spray tests as described in the Board Notification dated 12/3/81.
4. What analysis or testing has LILCO performed to show that the deficiencies identified in the Japanese tests are not applicable to Shoreham?

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SOC CONTENTION 19

On July 29, 1981, SOC served on LILCO its "Third Set of Interrogatories and Request for Production of Documents" pertaining to SOC Contention 19. Formal answers to those interrogatories were deferred pending the outcome of informal discovery meetings between the parties and a ruling by the Board on the December 2, 1981 Motion for Acceptance of SOC Contentions. In view of the Board's acceptance of Contention 19 as stated by the parties in that Motion, SOC hereby formally requests answers to its July 29, 1981 interrogatories and documents requests. In addition, SOC hereby submits the following additional discovery request.

SOC CONTENTION 19(a)

1. Provide copies of any and all correspondence, studies, reports and analyses which pertain to the pre-service inspection of the Shoreham reactor pressure vessel conducted during December of 1981, including any and all reports prepared by any outside consultants retained by LILCO or the NRC for the PSI.

Request for Site Visit To Inspect
Shoreham Systems and Components

Pursuant to 10 CFR Part 2.741, SOC requests permission for its consultants, Greg Minor, Richard Hubbard and Dale Bridenbaugh and its attorneys, Stephen Latham and John Shea, to inspect, measure, survey, test and sample the following areas, systems and components at the Shoreham Nuclear Station:

<u>Contention</u>	<u>Area, System or Component</u>
3	Sampling Station Remote Shutdown Panel Secondary Containment Penetration Exit Points Portable Monitor Locations
6(a) i	QA Records Center As Built Drawing System
7a(2)	Control Room Front & Back Row Panels
7a(3)	Iodine Monitoring - Plant Vent Sampling & Measuring Locations
7a(5)	S/RV Mounting and Piping
8	Control Room--Equipment for ICC Indications
9	Remote Shutdown Panel
19(a)	RPV Accessibility for ISI
19(g)	Cable Spreading Room Steam Tunnel
19(j)	Turbine Room - For Missile Barriers (if any)
Emergency Planning	Emergency Response Facilities & Equipment - TSC, EOF, etc.

In view of the conference of parties scheduled for March 9 and 10 by the Licensing Board in Docket No. 50-322, SOC requests that the date for this inspection be scheduled to begin shortly after the conclusion of that conference on March 10, continuing on March 11 and March 12, if necessary, and beginning at 9:00 a.m. in the morning of each day.