

LILCO, June 19, 1984

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)	
)	
LONG ISLAND LIGHTING COMPANY)	Docket No. 50-322-OL-4
)	(Low Power)
(Shoreham Nuclear Power Station,)	
Unit 1))	

RESPONSE TO SUFFOLK
COUNTY'S FIRST DISCOVERY REQUEST TO LILCO
RELATING TO LILCO'S APPLICATION FOR EXEMPTION

Long Island Lighting Company (LILCO), by counsel, responds as follows to Suffolk County's First Discovery Request to LILCO Relating to LILCO's Application for Exemption (the First Discovery Request).

General Objections

1. In its Memorandum and Order Scheduling Hearing on LILCO's Supplemental Motion for Low Power Operating License dated April 6, 1984, at page 16, the Licensing Board directed that discovery in this case consist of document requests and depositions only. It prohibited the use of interrogatories. Accordingly, to the extent that the First Discovery Request seeks information not contained in documents properly

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discoverable from LILCO, it includes interrogatories which are beyond the scope of permitted discovery in this proceeding. To the extent that LILCO has advised the County that the information requested can be found in certain documents which have been or will be made available, LILCO does not waive its objection to the interrogatories.

2. LILCO objects to the production of all drafts and copies of each document requested as unduly burdensome and oppressive. Given the breadth of the County's request, it is not feasible to search for every copy or every draft. A good faith effort will be made to produce at least a final version of all responsive documents.

3. LILCO objects to the request that it supply documents "in the possession or subject to the control of LILCO's consultants, persons under contract with LILCO and vendors of equipment or services to LILCO." Such a request is not only burdensome and oppressive, but exceeds the scope of document requests permitted by 10 CFR § 2.741 in that it is not limited to documents which are in the possession, custody or control of LILCO. LILCO will produce such documents as may have originated with vendors, but which are in the possession, custody or control of LILCO.

4. LILCO objects to the request that it identify specific documents among those produced to the County on April 13 through 16 which may be responsive to the First Discovery Request and further objects to producing those documents again. This discovery request is burdensome and oppressive, as well as unnecessary. The County has had equal access to those documents and is equally capable of identifying which may be responsive to its First Discovery Request.

5. LILCO objects to the production of any documents protected by the work-product, trial preparation or attorney-client privileges. Such documents as are withheld under that claim are identified in Attachment A hereto and will be further identified, if necessary, if additional responses to the First Discovery Request are made. LILCO continues its objection to the production of those documents withheld as privileged and identified in LILCO's Response to Suffolk County's April 11, 1984 Document Discovery Requests and LILCO's Response to Suffolk County's April 12, 1984 Document Discovery Requests.

6. LILCO objects that the entire First Discovery Request is not timely. It was sent by Federal Express to LILCO on May 30 and, accordingly, responses are not due until after the discovery cutoff. In order to facilitate the County's

preparation for hearings, LILCO is responding early where it is able. By so doing, LILCO does not waive its objection to the untimeliness of the First Discovery Request.

Responses

Subject to the foregoing objections, LILCO provides the following responses.

1. Identify the names, occupations and affiliations of the witnesses who will be providing testimony on behalf of LILCO in support of the Application for Exemption dated May 22, 1984 (hereinafter, the "Application").

RESPONSE: LILCO has previously identified its potential witnesses in the June 13, 1984 letter of Robert M. Rolfe to Lawrence Coe Lanpher. Supplemental testimony by the witnesses previously called by LILCO during the initial part of these proceedings on April 24 and 25 may be submitted if necessary.

2. For each witness identified in response to item 1, provide a copy of his or her resume.

RESPONSE: Resumes of LILCO's witnesses having testified during the initial part of these proceedings on April 24 and 25 had previously been provided. As to the

additional witnesses identified in the June 13 letter, LILCO will provide their resumes at their depositions, following the practice employed by Suffolk County in response to LILCO's request for production of documents.

3. Provide 6 copies of Attachment 3 to the Testimony of W. G. Schiffmacher, dated April 20, 1984.

RESPONSE: LILCO objects to this request. It has already provided a copy of Attachment 3 to the testimony of W.G. Schiffmacher to the County when that testimony was filed. It is unduly burdensome for LILCO to incur the expense of reproducing six additional copies for the County. In order for LILCO to do so, it would have to have the exhibit professionally reproduced and similar means are available to Suffolk County.

4. With respect to the small building located immediately to the east of the four GM EMD DG units, and identified by LILCO personnel during last week's site visit as the EMD Control Cubicle, provide the following information:

a. The total weight of the cubicle including all necessary equipment inside it and other equipment that is part of, attached to, or directly supported by the cubicle.

b. The exterior dimensions of the cubicle.

c. Identify the location of the center of gravity of the cubicle, with all necessary equipment inside it and other equipment that is part of, attached to, or directly supported by the cubicle.

d. Describe the design of the foundation supporting the cubicle and the means, if any, by which the cubicle is anchored to the foundation. Provide copies of all drawings and other documents, if any, which describe or depict the foundation or anchorage devices.

e. Identify, describe and state the location of all fixed fire detection and mitigation systems and equipment in the cubicle. Provide copies of all documents and drawings describing or depicting such systems and equipment. If any such documents or drawings were provided in response to item 15 of the County's April 11, 1984 Document Request, identify such documents or drawings.

f. Identify, describe and state the location of all electrical protection devices (e.g. under frequency protection) employed in the cubicle, and identify the setpoints of each such device. Provide copies of all documents and drawings depicting or describing such devices.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

5. With respect to each EMD diesel generator unit or module (each "unit" being defined to include the diesel engine, the generator, the surrounding housing, and enclosed equipment and materials), provide the following information:

a. The total weight of the EMD DG unit, including a full supply within the units of necessary fuel, lubricants, coolant, and other materials.

- b. The exterior dimensions of the EMD DG unit.
- c. The center of gravity of the EMD DG unit including a full supply within the unit of necessary fuel, lubricants, coolant, and other materials.
- d. Describe the design of the foundation supporting the EMD DG unit, and the means, if any, by which the unit is anchored to the foundation. Provide copies of all drawings and documents depicting or describing the foundation and anchorage devices.
- e. Identify, describe and state the location of all fixed fire detection and mitigation systems and equipment in each EMD DG unit. Provide copies of all documents and drawings describing or depicting such systems and equipment. If any such drawings or documents were provided in response to item 15 of the County's April 11, 1984 Document Requests, identify such documents or drawings.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

6. Provide copies of all electrical and mechanical drawings depicting the details of the electrical output connections:

- a. among the 4 EMD DG units;
- b. between the EMD DG control cubicle and each EMD DG unit; and,
- c. between the EMD DG control cubicle and 4 KV Bus 11.

RESPONSE: Documents containing the information requested (to

the extent that information is reflected in documents) were produced to the County on June 13.

7. With respect to the fuel pipeline serving the EMD DG units, provide the following information:

a. The specifications of the pipe, including the material, pipe thickness and diameter, and the exact centerline dimensions of each leg of the pipeline, including curvature radii of the elbows.

b. Copies of all drawings or other documents depicting the piping layout from the tank truck to the point of entry to each EMD DG unit.

c. Descriptions and specifications of the supports for the fuel pipe including material, dimensions, details of the connection of each support to the pipe, and the locations of the supports along the pipeline.

d. Detailed specifications and the locations of the flexible joints in the fuel pipeline for the EMD DG units, including the design displacements and rotations of the flexible joints.

e. The specifications of the means of connecting the pipe to each of the EMD DG units. Provide copies of drawings and documents depicting or describing such means of connection.

f. The location or locations from which the tank truck will transfer fuel into the EMD DG fuel pipeline. Provide copies of all drawings and documents depicting or describing such location(s).

g. For each location identified in response to (f), provide the specifications of the means of (i) connecting the tank truck to the pipeline and (ii) transferring fuel from the tank truck into the pipeline.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

8. Provide copies of all studies or analyses of, or other documents relating to the potential effects of seismic events on:

- a. Any or all of the EMD DG units.
- b. The EMD DG control cubicle.
- c. The fuel line serving the EMD DG units.

If any such documents were provided in response to items 26 or 31 of the County's April 11, 1984 Document Request, please identify such documents.

RESPONSE: On June 14, 1984, LILCO produced to counsel for the County a report by Sargent & Lundy entitled "Shoreham Nuclear Power Station: Seismic Survivability Study for MP-45 Diesel Generators." Other documents responsive to this request were produced in response to the County's April 11 and April 12 document requests.

9. Provide copies of all electrical and mechanical drawings and specifications of the battery system for the EMD DG units, including documents depicting the connection of the battery to each separate DG unit.

RESPONSE: Documents responsive to this request were produced to the County on June 13, 1984.

10. Provide all documents, drawings and specifications depicting or describing the fuel pumping system for the EMD DG units, including that located in the "mother" diesel unit 402.

RESPONSE: Documents responsive to this request were produced to the County on June 13, 1984.

11. With respect to the fuel oil system for each EMD DG unit provide the following information:

a. Copies of all drawings and other documents depicting or describing the fuel oil supply and transfer system, including the interconnections between each EMD DG units.

b. Copies of all drawings and other documents depicting or describing the fuel oil tank on each EMD DG unit, including the level alarms, and where they are fitted.

c. Copies of all drawings and other documents depicting or describing the fuel oil transfer pump for each EMD DG unit.

d. Identify the capacities and ratings of the fuel oil transfer pump for each EMD DG unit.

e. Identify the fuel oil consumption rates for each postulated load for each EMD DG unit.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

12. With respect to the jacket cooling water system for each EMD DG unit, provide copies of all drawings and other documents concerning the jacket cooling water system.

RESPONSE: Documents responsive to this request were produced to the County on June 13, 1984.

13. Identify, describe, and state the location of all instrumentation on each EMD DG unit, including thermometers, pressure gauges, manometers, pyrometers, level switches and gauges, and all alarm systems. Provide copies of all drawings and documents which describe or depict such instrumentation.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

14. Provide a detailed description and the design specifications of the starting and charging systems for each EMD DG unit, including, but not limited to: (i) manufacturer, (ii) material, (iii) circuitry, (iv) component parts, (v) model number, (vi) operation limitations, (vii) operating mechanisms for the (a) starting motors, (b) battery, (c) its charger, (d) the auxiliary transformer supplying the charger, and (e) the distribution system supplying the auxiliary transformer. Specify the number of battery cells, and describe and provide drawings depicting the intercell electrical connections. Provide copies of any drawings or documents depicting or describing each system.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

15. Provide copies of all records and performance kept during all biweekly tests performed by LILCO for each EMD unit.

RESPONSE: There are no such documents at this time.

16. Identify the location(s) of storage place(s) for lubrication oil for the EMD DG units, and state the amount of lubrication oil for the EMD DG units stored in each such location.

RESPONSE: To the extent there are documents containing the requested information, LILCO produced them on June 13.

17. Identify the lubrication oil storage capacity of each EMD DG unit.

RESPONSE: To the extent there are documents containing the requested information, LILCO produced them on June 13.

18. With respect to the tank truck that will be used to store fuel oil for the EMD units, provide the following information:

a. Total weight, when the tank is fully loaded, or (i) the tank and (ii) the entire tank truck.

b. The exterior dimensions of the tank and the entire tank truck.

c. The location of the center of gravity of the tank and of the fully loaded truck.

d. Copies of all analyses or studies, related to the seismic characteristics or capabilities of (i) the entire tank truck, (ii) the tank located on the truck and (iii) the transfer connecting the tank to the EMD fuel line.

e. The drawings and design details of fire detection and mitigation equipment located on the tank truck.

f. The design drawings, dimensions and capacity of the catch basin, if any, which will surround the tank truck.

RESPONSE: LILCO has no such documents at this time.

19. With respect to the structure in which the 20 MW gas turbine is installed, provide the following information:

a. The weight of the structure, including the gas turbine, all enclosed equipment and all other equipment that is part of, attached to, or directly supported by the structure, and a fully supply of necessary fuel, lubricants, coolant and other materials.

b. The exterior dimensions of the structure.

c. Identify the center of gravity of the gas turbine, including the support frame for the turbine, all attached equipment and a full supply of necessary fuel, lubricants, coolant and other materials. Provide copies of all drawings and other documents depicting or describing such center of gravity.

d. Describe the design of the foundation supporting the structure and turbine frame, and the means, if any, by which the structure and the turbine frame are anchored to the foundation. Provide copies of all drawings and other documents depicting or describing such foundation or anchorage devices

e. Identify, describe and state the location of all fixed fire detection and mitigation systems and equipment in the structure. Provide copies of all drawings and other documents depicting or describing such systems and equipment. If responsive documents or drawings were provided in response to item 15 of the County's April 11, 1984 Document Requests, identify such documents or drawings.

f. Identify, describe and state the location of all electrical protection devices (e.g. under frequency protection) employed in the structure, and identify the set points of each such device. Provide copies of all drawings and other documents depicting or describing such devices.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

20. With respect to the building located along side and to the West of the 20 MW gas turbine structure, and identified by LILCO personnel during last week's visit as the "Gas Turbine Control Cubicle," provide the following information:

a. The weight of the cubicle, including all enclosed equipment and all other equipment that is part of, attached to, or directly supported by the cubicle.

b. The exterior dimensions of the cubicle.

c. Identify the location of the center of gravity of the cubicle, including all enclosed equipment and all other equipment that is part of, attached to, or directly supported by the cubicle. Provide copies of all drawings and other documents depicting or describing such center of gravity.

d. Describe the design of the foundation supporting the cubicle, and the means, if any, by which the cubicle is anchored to the foundation. Provide copies of all drawings and other documents depicting or describing such foundation and anchorage devices.

e. Identify, describe and state the location of all fixed fire detection and mitigation systems and equipment in the cubicle. Provide copies of all drawings and other documents depicting or describing such systems and equipment. If responsive drawings or documents were provided in response to item 15 of the County's April 11, 1984 Document Requests, identify such drawings or documents.

f. Identify, describe and state the location of all electrical protection devices (e.g. under frequency protection) devices employed in the cubicle, and identify the setpoints of each such device. Provide copies of all drawings and other documents depicting or describing such devices.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

21. With respect to the bolts or pins supporting the 20 MW gas turbine on the frame inside the gas turbine structure, provide the following information:

- a. The dimensions of all support bolts and pins.
- b. The materials of the bolts and pins.
- c. The design stresses or forces in each such bolt or pin, as well as the actual stresses or forces in the bolts or pins computed for normal operating conditions.

d. Provide copies of all drawings or documents depicting or describing all details of the support frame for the 20 MW gas turbine.

RESPONSE: To the extent there are documents containing the requested information, LILCO produced them on June 13.

22. State the weight of the 20 MW gas turbine including a full supply of necessary fuel, coolant, lubricants, and other materials.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

23. Identify the location of the center of gravity of the 20 MW gas turbine, including a full supply of necessary fuel coolant, lubricants and other materials. Provide copies of all drawings and other documents depicting or describing the location of such center of gravity.

RESPONSE: To the extent there are documents containing the requested information, LILCO produced them on June 13.

24. Describe the design of the foundation supporting the 20 MW gas turbine support frame and the means, if any, by which the turbine support frame is anchored to the foundation. Provide copies of all drawings and other documents describing or depicting such foundation or anchorage devices.

RESPONSE: To the extent there are documents containing the requested information, LILCO produced them on June 13.

25. Provide copies of all analyses or studies, or other documents relating to the potential effects of a seismic event on:

- a. The structure on which the 20 MW gas turbine is located.
- b. The 20 MW gas turbine and its support frame.
- c. The Gas Turbine Control Cubicle.
- d. The fuel line serving the 20 MW gas turbine.
- e. The 900,000 gallon fuel storage tank.

If any such documents were provided in response to items 26 or 31 of the County's April 11, 1984 Document Request, or clarification item 3 of April 13, 1984, please identify such documents.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

26. Provide all qualification data relating to (i) seismic motion and (ii) vibration for the electrical protection equipment, if any, in (a) the EMD DG control cubicle or (b) the 20 MW gas turbine control cubicle. Provide copies of all documents that relate to such qualification data.

RESPONSE: See responses to Requests 8 and 25.

27. With respect to the compressed air storage tank for the 20 MW gas turbine, provide the following information:

- a. The storage capacity (volume under standard conditions) of the compressed air storage tank.
- b. The design storage pressure.
- c. The expected usage of compressed air per start attempt, and the minimum pressure at which a successful start can be made.
- d. Provide copies of any drawings depicting the storage tank and all interconnections, pipes or fittings between the tank and the air compressor.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

28. With respect to the fuel line running from the 900,000 gallon storage tank to the 20 MW gas turbine:

- a. Provide the specifications of the pipe, including material, pipe thickness and diameter, and the exact centerline dimensions of each leg of the pipeline, including curvature radii of the elbows.
- b. Provide copies of all drawings and other documents depicting or describing the piping layout from the 900,000 gallon storage tank to the 20 MW gas turbine.
- c. Provide descriptions and specifications of the supports for the fuel pipe, including material, dimensions, the means of connection of the supports to the pipe, and the exact locations of the supports along the pipeline.
- d. Provide detailed specifications and the locations of all flexible joints in the fuel pipeline connected to the 20 MW gas turbine, including the

design displacements and rotations of the flexible joints.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

29. Provide the following information with respect to each of the following (i) 13 KV to 69 KV transformer in the 69 KV switchyard; (ii) the RSS transformer; and, (iii) the NSS transformer:

- a. Total weight, including internal liquids.
- b. Exterior dimensions.
- c. Describe the design of the foundation supporting the transformer and the means, if any, by which the transformer is anchored to the foundation. Provide copies of all drawings and other documents depicting or describing such foundation and anchorage devices.
- d. Describe the design of the transformer internals (e.g., windings and core), including, the weights and centers of gravity of the internals, and methods of attachment of the internals to the transform base and tank.
- e. Identify the location of the center of gravity of the transformer, including internal liquids. Provide copies of all drawings or other documents concerning the location of such center of gravity.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

30. Provide the following information with respect to (i) insulators of flexible design, and (ii) insulators of rigid design used on the 138 KV transmission lines, including the line connected to the NSS Transformer.

a. The strength and stiffness of the insulators in the axial direction.

b. Quantify the maximum calculated forces to which the insulators within the boundaries of the Shoreham site are subjected (i) due to normal operating loads and (ii) due to seismic ground motion.

c. Identify the locations of those insulators within the boundaries of the Shoreham site, which experience the maximum forces identified in response to subpart b above.

d. Provide copies of drawings and design specifications, including overall and cross-sectional dimensions, of the transmission poles, towers or other structures which support the insulators identified in response to subpart c above.

e. Identify the materials of which the transmission poles, towers and other supports described in response to subpart d above are made.

f. Describe the methods of fastening the insulators identified in response to subpart c above to the transmission poles, towers or other structures that support them.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

31. With respect to the oil circuit breakers located on the 138 KV lines between the 138 KV switchgear incoming lines and the nonemergency switchgear room, provide the following information:

- a. The weight of each such circuit breaker when filled.
- b. The exterior dimensions of each such circuit breaker.
- c. Describe the design of the foundation for each such circuit breaker, and the means, if any, by which each such circuit breaker is anchored to its foundation. Provide copies of all drawings and other documents depicting or describing such foundations and anchorage devices.
- d. Identify the location of the center of gravity of each such circuit breaker when filled. Provide copies of all drawings and other documents depicting or describing the location of the center of gravity of each such circuit breaker.
- e. Identify the maximum stress calculated in the insulator bushings for each such oil circuit breaker during a DBE.
- f. Provide the acceleration (in g's) at which such oil circuit breaker insulators are calculated to fail, and all documents which concern derivation or calculation of this predicted failure point.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

32. With respect to the metal support post supporting the output connections and devices of the 20 MW gas turbine at the point of transition from overhead conductors to buried cables, provide the following information:

- a. The weight, dimensions, wall thickness, materials, and all other design data relating to the post.
- b. Describe the loads and stresses, both static and dynamic, calculated to be experienced by this post. State the locations of each such load and stress. Provide copies of all documents and drawings which depict or describe such loads and stresses.
- c. State the dimensions and design specifications of the concrete foundation of the post. Provide copies of all drawings and other documents depicting or describing the foundation.
- d. Describe the means by which the post is fastened to its foundation. Provide copies of all drawings and other documents depicting or describing such means of fastening, such as anchor bolts.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

33. With respect to the 900,000 gallon fuel storage tank provide the following information:

- a. Height and diameter.
- b. Thickness of its wall.
- c. The material of which it is made.
- d. Provide detailed specifications of the foundation of the storage tank.

e. Describe the method of anchoring the storage tank to its foundation. Provide copies of all drawings and other documents depicting the foundation and anchorage devices.

f. Provide copies of all drawings and other documents depicting the storage tank.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

34. Provide copies of all studies or analyses of, or other documents relating to possible effects of seismic events on the towers carrying the 69 KV or 138 KV transmission lines that enter the Shoreham plant. If documents responsive to this request were provided in response to items 26 or 31 of the County's Request of April 11, 1984, or clarification item 3 of April 12, 1984, please identify those documents.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

35. Describe in detail the sequence of events required to activate the 69 KV alternate line. Provide copies of all drawings and other documents that depict or describe such sequence of events, or equipment or systems used to implement such activation. Identify and describe all components or devices required to implement such activation.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

36. With respect to the study titled "Seismic Fragilities of Structures and Components at the Shoreham Nuclear Power Station," Report No. SMA 14304-01, performed by Structural Mechanics Associates (SMA), for the NUS Corporation:

a. Was this work performed as a subcontract to NUS under a prime contract between NUS and LILCO? If not, who sponsored the NUS work?

b. Provide a copy of the latest version of the SMA report.

c. Describe the scope and status of the NUS probabilistic risk assessment for SNPS which is referred to in the SMA study.

d. Provide a copy of the NUS risk assessment and all analyses and data pertaining to it.

RESPONSE: The only document in LILCO's possession, custody or control is a draft entitled "Fire Hazard Assessment for the Shoreham Nuclear Power Station, Progress Report" authored by NUS for LILCO and dated February, 1984. It contains proprietary information and LILCO objects to its production except pursuant to a protective order or nondisclosure agreement.

37. Provide a copy of all draft and final versions of the Severe Accident Risk Assessment ("SARA") for Shoreham.

RESPONSE: See response to Request 36.

38. With respect to the Severe Accident Risk Assessment for Shoreham, provide:

- a. A statement of work and schedule for its completion.
- b. A description of its current status, and copies of all available analyses and data relating to that study, and
- c. A description of any analysis in the SARA which addresses off-site or on-site power loss.

RESPONSE: See response to Request 36.

39. Provide a detailed master diagram(s) of the circuitry connecting the main transformers, the normal station service (NSS) and reserve station service (RSS) transformers, 69 KV and 138 KV switchyards, the 4160-V and 480-V AC Systems, and DC-Bus Systems by division, the 20 MW and 55 MW gas turbines and their common transformer, the 20 MW gas turbine starting system components (including battery, charger, air compressor, and auxiliary transformer), diesel generators, and batteries and accessors (detailing devices including circuit breakers, switches, and specifying voltage and current limitations, and device identifiers.) The diagrams should be legible (unlike Exhibit C and Attachment 9 of the Affidavit and Testimony of W.G. Schiffmacher, respectively).

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

40. Provide (i) maintenance records, schedules, and procedures; and (ii) test results, schedules and procedures, for:

- a. The RSS transformer;
- b. The NSS transformer; and
- c. The 13 KV to 69 transformer in the 69 KV switchyard.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

41. Provide a detailed diagram of the 69 KV lines that bypasses the 69 KV switchyard.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

42. Provide, where applicable, the (i) manufacturer, (ii) material, (iii) circuitry, (iv) component parts, (v) model number, (vi) operation limitations, (vii) operating mechanism, and (viii) any other distinguishing specifications for the following items:

a. The cooling system for each EMD DG unit, including coolant source(s), any intake or discharge facilities, and pumping equipment and power sources. Also state and describe the cooling cycle type.

b. Electrical and mechanical connections between the diesels, the components of the starting mechanisms, fuel lines, sources and pumps, and cooling cycle, coolant source(s) and pumps. (Also provide copies of any line diagrams showing such electrical and mechanical connections and power supply sources and connections for the battery.)

c. The following circuit breakers:

1. Numbers ACB-1, 2, 3 and 4 (between each of the mobile diesel generators and the bus shared by them).

2. Number 11.1B (between the diesel generators' bus and the 4 KV Bus Number 11).

3. All 4 KV circuit breakers in the 4 KV switchgear (Numbers 400, 410 through 417, 420, 424, 430, 435, 440, 444, 450, 460, 464, 470 and two unidentified breakers between the 480 V switchgear and buses 11 and 12).

4. All 480 V circuit breakers in the normal 480 V system.

5. All 480 V circuit breakers supplying the emergency 480 V buses.

6. All 69 KV circuit breakers (Numbers 8Z-110 and 640, and the supply breaker to the 20 MW gas turbine GT-002).

7. Also with respect to each circuit breaker listed in Subparts 1 through 6 above, identify and describe any dual-coil features, operation and automatic transfer capability.

d. The following switches:

1. Switch between the normal station service transformer (NSST-003) and circuit breaker Number 450 (leading to Bus 11).

2. All other 4 KV switches in the normal 4 KV system.

3. All 480 V switches in the 480 V switchgear.

4. All 69 KV switches (Numbers 63F, 66F, 57F, 613, 616, 617, 623, 633, 640 and 643).

5. The supply switch to the 20 MW gas turbine GT-002.

e. The following buses:

1. The normal large motor 4 KV buses (Numbers 1A and 1B).

2. The normal small motor 4 KV buses (Numbers 11 and 12).

3. The emergency station service 4 KV buses (Numbers 101, 102 and 103).

4. The emergency 480 V buses (Numbers 111, 112 and 113).

5. The 480 V system buses (Number 11A through 11D and 12A through 12D).

6. The mobile diesel generators' 4 KV bus.

7. The 20 MW and 55 MW gas-turbines' 13 KV bus.

f. All voltage regulators to and from any of the buses listed above.

g. The 4 KV-480 V transformers (Numbers T-011A through T-011D, T-012A through T-012D, and T101, T102 and T103).

h. The 13-69 KV step-up transformer for gas turbines GT-001 and GT-002.

i. The 13,800-120/240 V step-down transformer for the 20 MW gas turbine.

j. The air start motor, pressurized air-storage vessel, and air compressor for the 20 MW gas turbine.

k. DC-powered distribution system, and associated battery and its charger for the 20 MW gas turbine.

l. Fuel pumps and sources of pumping power for the 20 MW gas turbine.

m. Auxiliary transformer supplying power to the air compressor, battery charger, and the AC fuel pump.

n. Cooling cycle type, coolant source(s), any discharge or intake facilities, and pumping equipment and power sources for the 20 MW gas turbine.

o. Line diagram showing electrical and mechanical connections between the 20 MW gas turbine, its transformer, the components of the starting mechanism, fuel lines, sources and pumps, and cooling cycle, coolant source(s) and pumps. (Also indicate, describe and state location of power supply sources and connections for the battery, air compressor, and AC fuel pump).

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

43. Provide detailed information, line diagrams, and physical layout maps of any changes in the proposed alternate ac power sources made or intended to be made in response to the requirements specified by the NRC staff in Supplement Number 5 of the Safety Evaluation Report, April 1984, Docket No. 50-322, including, but not limited to:

a. Details of all circuit modifications, specifying the affected switches, circuit breakers, and buses and providing the information items listed in Discovery Request Number 41.

b. A listing and copies of the updated final emergency operation procedures for the proposed alternate ac power sources, including the 20 MW gas turbine and the EMD DGs, and specifying the sequences of actions and the progression of the positions of the circuit breakers and switches throughout the emergency period. Identify all devices mentioned in the procedures and provide copies of all drawings or line diagrams depicting such devices.

RESPONSE: LILCO has not completed its search for these documents at this time and will supplement this response when such search is completed.

44. Provide structural design specifications for both sections of the underground 69 KV line (from Wildwood to the Shoreham 69 KV switchyard and from there on to the reserve station service (RSS) transformer).

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

45. With respect to the four EMD DG units, provide:

a. Number of times each unit has undergone engine overhaul or repowering, time elapsed between each such service, parts replaced and age of replacement.

b. The operational configurations of the units during their deployment at the Connecticut site including the starting equipment and connections to load.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

46. For the 20 MW gas turbine, provide:

a. Operation and maintenance history (including weekly records) for the gas turbine prior to replacement of the fuel control and the starting air system, i.e., the operation and maintenance history of the 20 MW Pratt-Whitney gas turbine, previously designated as the West Babylon Unit 1; specify failures, failure modes, starting difficulties, and operation policy constraints (if any).

b. Details specifying the modifications made on the West Babylon Unit 1, including replacement parts, age, and reliability.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

47. Provide information on source and location of the source of control power for the following automatic circuit breakers:

a. Numbers 82-100, 11.1B, 640, 1310 and 1330.

b. All the circuit breakers in the 138-KV switchyard.

c. All the circuit breakers in the 4-KV switchgear.

c. Switch breaker for the 20 MW (GT-002) gas turbine.

d. Mobile diesel generators' individual switch breakers.

RESPONSE: Documents containing the information requested (to the extent that information is reflected in documents) were produced to the County on June 13.

48. Provide copies of all documents, responsive to the requests contained in Attachment A to the letter dated April 11, 1984 from Douglas J. Scheidt to T.S. Ellis and attached to the letter dated April 12, 1984 from Douglas J. Schedit to T.S. Ellis, that have been located, generated, created, revised, modified or finalized since the date of LILCO's responses thereto.

RESPONSE: LILCO objects to this request as overly broad, overly burdensome and oppressive and unduly vague. To the extent there are particular documents for which updated versions are sought, if Suffolk County will identify them, LILCO will produce them. Additionally, LILCO will supplement its previous discovery requests to the extent required by the applicable regulations. LILCO objects, however, to incorporation through this request of the 58 paragraphs of requests previously submitted on April 11 and 12 with no attempt being made by the County to determine whether those requests are redundant of the 90 paragraphs (not including subparts) contained in the First Discovery Request.

49. State the basis for the assertion in the Application (at page 7) that the activities to be conducted during LILCO's proposed low power testing program "obviously . . . are authorized by law," and provide copies of all documents upon which LILCO relies for support for such assertion.

RESPONSE: LILCO has previously briefed this issue. Those documents which may be responsive include Part 10 of the Code of Federal Regulations as well as applicable NRC precedent. They are in the public domain and LILCO objects to producing them for the County.

50. Identify each of the exceptional circumstances upon which LILCO intends to rely for support of its request that its Application be granted, and provide copies of all documents upon which LILCO relies to support the existence of such exceptional circumstances.

RESPONSE: LILCO objects to this request as being harassing and too broad. The exceptional circumstances upon which LILCO relies have been identified in its Application for Exemption. To the extent that this request seeks documents already identified in the other 90 paragraphs of the First Document Request, it is repetitive and unnecessary. To the extent it seeks production of those documents which LILCO will introduce as exhibits, it improperly seeks the disclosure of attorney-work product. To the extent

that the request seeks documents which any LILCO witness at any time may have consulted to arrive at pertinent conclusions, it is too broad and burdensome.

51. State the basis for LILCO's assertion (at footnote 10, page 15 of the Application) that "nothing in LILCO's exemption request has any impact on . . . security," and provide copies of all documents upon which LILCO relies for support for such assertion.

RESPONSE: LILCO objects to this request. LILCO has previously briefed this issue both in its responses to the unnecessary, frivolous and and procedurally improper series of motions and "requests for clarification" which Suffolk County and New York State filed with the Commission following issuance of the Commission's May 16 Order and in LILCO's Motion for Protective Order and Motion in Limine. Additionally, the County, through the omission of portions of the quoted phrase, has mischaracterized the footnote putatively quoted. LILCO further objects that this request is not relevant to the subject matter of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence.

52. State the basis and provide copies of all documents relied upon for support for the following assertions in the Application:

a. "The Shoreham proceeding has become prejudicially burdensome to LILCO." (p. 17);

b. "Many of LILCO's people have been compelled to devote inordinate amounts of their time and energy to licensing struggles."

c. The Shoreham proceeding "has been prejudicial to LILCO because it has created the perception that licensing litigation over Shoreham may never end" (p. 18);

d. The Shoreham proceeding "has been prejudicial to LILCO because it has created the perception . . . that the plant may never come on line because a merits decision on its operation will be delayed for one reason or another, over and over again." (p. 18);

e. "The prejudice to LILCO caused by the [Shoreham proceeding] is not justified by its substantive results to date." (p. 18).

RESPONSE: LILCO will produce representative documents responsive to this request at the deposition of Brian McCaffrey. To a large extent, however, the conclusions to which the request refers are obvious from a perusal of the voluminous record of the Shoreham licensing proceedings. The County has equal access to that record and LILCO objects to its production again.

53. With respect to the assertion listed in subpart (b) of item 52 above, identify the "LILCO people" who, in LILCO's view, have spent "inordinate" amounts of time on licensing matters, and for each individual identify the time (dates and hours) which LILCO believes to have been "inordinate," and the reason such time is believed to have been "inordinate."

RESPONSE: LILCO objects to this request as unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. To the extent there are summaries of the information requested here, they will be produced at the deposition of Brian McCaffrey. Additionally, the record in these licensing proceedings, which is equally available to Suffolk County, reflects the names of many of those who have participated. Common knowledge as to the extent of preparation necessary prior to participation as well as the time spent in testimony reflects the "inordinate" nature of the effort, especially when considered in conjunction with the fact that Suffolk County has raised contentions repeatedly, but has yet to succeed in any substantial fashion in proving any of their contentions.

54. With respect to the assertion in the Application (at 17-18) that the licensing litigation "has also cost LILCO substantial sums of money," identify the amounts of money spent by LILCO, the dates spent, and the recipients, as follows:

a. legal fees on work relating to NRC licensing proceedings;

b. legal fees on work relating to litigation involving Shoreham other than that before the NRC;

c. consultant and other expert witness fees and related costs for work relating to NRC proceedings involving Shoreham;

d. consultant and expert witness fees and related costs for work relating to litigation, other than before the NRC, involving Shoreham;

e. costs related to the filing of LILCO's 1980 Low Power License Motion;

f. costs related to the filing of LILCO's March 20, 1984 Low Power License Motion and the documents and activities including testimony and hearings, related thereto; and

g. all costs related to LILCO's decision to create the proposed AC system that is the subject of the Application and the implementation of that decision.

RESPONSE: LILCO objects to this request as unduly broad, burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Summaries of the cost to LILCO will be produced at the deposition of Brian McCaffrey. Specific amounts of money spent by LILCO, the dates spent and the recipients are not important to a general realization that a substantial

amount of money has been spent on the licensing litigation.

55. Provide copies of all documents which relate in any way to the answers to the preceding request.

RESPONSE: See response to Request 54.

56. State the basis for the assertion, at p. 20 of the Application, that the requested exception "will accelerate Shoreham's availability to reduce this country's reliance on foreign oil," and provide copies of all documents upon which LILCO relies for support for such assertion.

RESPONSE: To the extent that low power testing may be completed prior to the granting of a full power operation and to the extent that Shoreham does not use oil to generate electricity, the quoted statement is virtually self-evident. LILCO objects that the request for "all documents" upon which it relies to support the assertion is too broad and unduly burdensome. Representative documents will be produced at the deposition of Neil Szabo.

57. By how much time, in LILCO's view, would the granting of an exception from GDC 17 "accelerate" Shoreham's availability? What is the basis for LILCO's view? Provide all documents that relate in any way to this matter.

RESPONSE: LILCO has not yet completed its search for documents which may be responsive to this request to the extent there are any.

58. What constitutes "availability" as used in the statement referenced in item 56 above?

RESPONSE: See objection No. 1.

59. Quantify the assertion, at page 20 of the Application, that "a substantial portion of New York State's electric power" is dependent upon foreign oil imports, and provide copies of all documents upon which LILCO relies for support for such assertion.

RESPONSE: Copies of LILCO's position paper dated May 30, 1984 are in the County's possession. Additionally, documents cited in that position paper at pages 30-41 may be responsive to this request and are in the public domain.

60. Identify the total quantities and types of foreign petroleum products used by LILCO, from 1981 to date, to generate electricity, and provide the following information concerning such foreign petroleum products used by LILCO:

a. The quantity and prices of such foreign petroleum products actually consumed on a monthly basis (from 1981 to date) in each of LILCO's power plants.

b. The nations in which such petroleum products were produced.

c. The quantities of the products that were produced in each nation.

d. The nations in which such products were refined.

e. The quantities of the products refined in each nation.

f. The name and location of each of LILCO's suppliers of the products.

RESPONSE: LILCO has not yet completed its search for documents which may be responsive to this request. LILCO objects, however, to producing information in the detail requested or with respect to years going back to 1981. Given the detail requested, this discovery request is not reasonably calculated to lead to the discovery of admissible evidence.

61. Identify the quantities and prices of domestic (including Alaska) petroleum products consumed, on a monthly basis, in each of LILCO's power plants from 1981 to date.

RESPONSE: LILCO has not yet completed its search for documents which may be responsive to this request. LILCO objects, however, to producing information in the detail requested or with respect to years going back to 1981. Given the detail requested, this discovery

request is not reasonably calculated to lead to the discovery of admissible evidence.

62. Identify the type and volume of petroleum products LILCO has had in storage from 1981 to date, and identify the storage locations and storage costs.

RESPONSE: LILCO objects to producing information in the detail requested or with respect to years going back to 1981. Given the detail requested, this discovery request is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, documents responsive to his request were sent to Suffolk County on June 18.

63. Identify the quantities and locations of all crude oil reserves and crude oil production owned by LILCO at any time during the period 1981 to date.

RESPONSE: LILCO objects to producing information in the detail requested or with respect to years going back to 1981. Given the detail requested, this discovery request is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, documents responsive to his request were sent to Suffolk County on June 18.

64. Of the quantities of (a) foreign and (b) domestic, petroleum products consumed in LILCO's power plants from 1981 to date, what quantity per year has been purchased by LILCO under firm contracts and what quantity per year under spot market contracts?

RESPONSE: LILCO has not yet completed its search for documents which may be responsive to this request. LILCO objects, however, to producing information in the detail requested or with respect to years going back to 1981. Given the detail requested, this discovery request is not reasonably calculated to lead to the discovery of admissible evidence.

65. Identify the quantity of natural gas consumed by each of LILCO's power plants from 1981 to date, and state the names of the suppliers of such natural gas and the prices paid.

RESPONSE: LILCO objects to producing information in the detail requested or with respect to years going back to 1981. Given the detail requested, this discovery request is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, documents responsive to his request were sent to Suffolk County on June 18.

66. Identify the quantity and prices of coal consumed by each of LILCO's power plants from 1981 to date, and state the names of the suppliers of such coal.

RESPONSE: LILCO objects to producing information in the detail requested or which respect to years going back to 1981. Given the detail requested, this discovery request is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, documents responsive to his request were sent to Suffolk County on June 18.

67. Provide all documents which relate in any way to items 60-66 above.

RESPONSE: See responses to Requests 60-66.

68. At pages 19-20 of the Application, LILCO asserts "the plant is now ready to load fuel and conduct low power testing." Based on observations made during a site visit on May 24, the County assumes the assertion is not literally true. Identify all activities or approvals which must be undertaken, accomplished, completed, or obtained before (i) fuel loading, and (ii) low power testing could actually commence, and for each such activity or approval, state:

- a. who must perform or approve it;
- b. what is involved in the activity or approval;
- c. how long LILCO believes the activity or approval would take.

RESPONSE: LILCO objects that this discovery request is not reasonably calculated to lead to the discovery of admissible evidence. The information sought is beyond the scope of the issues raised by LILCO's Application for Exemption and those issues defined by any pending contentions of Suffolk County.

69. State the basis, and all underlying assumptions, for LILCO's assertion, at pages 20-21 of the Application, that approval of the exemption request "will result in economic benefits of \$90-135 Million," and provide copies of all documents upon which LILCO relies for support or which relate in any way to this assertion.

RESPONSE: LILCO has not yet completed its search for any such documents. LILCO will produce responsive documents at the deposition of Tony Nozzolillo.

70. With respect to the assertion referenced in item 69 above, state:

a. To whom is the referenced "benefit" expected to accrue?

b. When is the referenced "benefit" expected to accrue?

RESPONSE: See objection No. 1.

71. Provide copies of all documents which relate in any way to subparts a or b of item 70.

RESPONSE: See responses to requests 69 and 70 above.

72. Provide copies of all analyses or studies of, or other documents relating to the cost of decommissioning Shoreham if the plant operated at five percent power but not at any higher power levels.

RESPONSE: LILCO objects to this discovery request because it is not relevant to the subject matter of this proceeding and it not reasonably calculated to lead to the discovery of admissible evidence.

73. State the basis for the assertion, at page 21 of the Application, that "[i]f the low power testing program is already completed [by the end of 1984], several months can be cut off the time it would otherwise take to achieve commercial operation," and provide copies of all documents upon which LILCO relies for support for such assertion.

RESPONSE: See response to No. 57.

74. With respect to the assertion referenced in item 73 above, identify all assumptions which underlie the assertion, including all prerequisites which LILCO believes must be satisfied in order "to achieve commercial operation."

RESPONSE: See objection No. 1.

75. State the basis for LILCO's assertion, at pages 21-23 of the Application, that GDC 17 is an "unnecessary regulatory requirement" which should be eliminated, and provide copies of all documents upon which LILCO relies for support of this assertion.

RESPONSE: LILCO has fully explained its position concerning GDC 17 and its applicability to low power testing numerous times in motions, pleadings and other writings filed incident to its low power license request subsequent to March 20, 1984. Those documents are in the public domain and LILCO will not reproduce them for the County. LILCO objects that this discovery request is, therefore, burdensome and intended as harassment.

76. Provide copies of all documents upon which LILCO relies for support for its assertion, at page 23 of the Application, that there is an "internal inconsistency between the Commission's regulation promoting low power licensing and the now-mandated inflexibility of GDC17."

RESPONSE: See response to No. 75.

77. Is it LILCO's position that the Commission has evidenced an intent to eliminate the requirement set forth in GDC 17 with respect to low power operation? (See Application at 23.) If yes, state the basis for that position and provide copies of all documents upon which LILCO relies for support for such position.

RESPONSE: See response to No. 75.

78. At page 24 of the Application, LILCO asserts that "the Commission should . . . recognize the benefits of interim low power licensing by granting the exemption Identify each and every "benefit" which LILCO asserts would accrue if its requested exemption were granted, and should be "recognized" by the Commission, and for each such benefit, identify (a) the beneficiary, (b) when such benefit would accrue, and (c) the assumptions or prerequisites which must be satisfied in order for the benefit to accrue. Provide copies of all documents upon which LILCO relies for support for its assertions.

RESPONSE: See response to No. 50.

79. State the basis for the assertion, at page 25 of the Application, that "two of the three TDI diesels have successfully completed their preoperational testing," and provide copies of all documents upon which LILCO relies for support for such assertion.

RESPONSE: LILCO has not yet completed its search for any such documents. LILCO believes, however, that most documents pertinent to this request have been produced to the County in connection with the diesel licensing proceeding. To the extent that documents have been produced incident to the diesel licensing proceeding, LILCO objects to producing them again in this proceeding.

8. Provide copies of all documents upon which LILCO relies for support for its assertion that "installation and testing [of the Colt diesels] are expected to be completed by mid-1985." (Application at 25.)

RESPONSE: LILCO has not yet completed its search for any documents responsive to this request. LILCO further objects that the completion date of the Colt diesels is not material to this proceeding and, therefore, this request is not reasonably calculated to lead to the discovery of admissible evidence.

81. Identify all "physical modifications" that (a) are necessary, and (b) "have begun," to accommodate the Colt diesels, as stated at page 25 of the Application.

RESPONSE: See objection No. 1. Additionally, LILCO objects that this request is not relevant to the subject matter of this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence.

82. Is it LILCO's position that the training described at pages 27-28 of the Application will not be conducted if the requested exemption is not granted?

RESPONSE: See objection No. 1.

83. Provide copies of all documents relating to the "standard low power testing program" referenced at page 28 of the Application.

RESPONSE: LILCO has not yet completed its search for any such documents. LILCO believes, however, that documents responsive to this request were produced in response to the County's April 11 and 12 document requests.

84. Identify every difference between the "standard low power testing program" (Application at 28) and the proposed LILCO training program.

RESPONSE: See objection No. 1.

85. Is it LILCO's position that there is no domestic (i.e. U.S. produced and refined) fuel oil available to be used in LILCO's oil-fired power plants? If the answer is "yes," what is the basis for this position? Produce all documents which relate in any way to this position. If the answer is "no," why has LILCO not used such domestic fuel oil for its oil-fired plants? Produce all documents which relate in any way to this position.

RESPONSE: LILCO has not yet completed its search for any documents responsive to this request. LILCO objects, however, that this request is not reasonably calculated to lead to the discovery of admissible evidence.

86. Provide copies of all documents relating to the decision to install the 20 MW gas turbine on the Shoreham site.

RESPONSE: LILCO objects that this request is not reasonably calculated to lead to the discovery of admissible evidence. The reasons relating to the decision to install the 20 MW gas turbine at Shoreham have no relevance to the pending proceedings. Only the characteristics and capabilities of that gas turbine are relevant.

87. With respect to all current LILCO employees who are licensed reactor operators, provide the following information:

a. Identify each such individual by name and current job title. Identify also whether each individual is scheduled to be part of a regular operating shift.

b. State the number of years of actual BWR operating experience for each such individual.

c. State the length of time each such individual has been employed by LILCO.

d. Identify each such individual who has notified LILCO that he or she will leave LILCO's employ, and state the date on which he or she will leave LILCO's employ.

RESPONSE: LILCO objects that this request is not relevant to the subject matter of the pending proceeding and is not reasonably calculated to lead to the discovery of

admissible evidence. Additionally, the request is burdensome insofar as it seeks virtually the entire personnel record of each licensed reactor operator employed by LILCO.

88. With respect to all individuals other than licensed reactor operators who are involved in the management chain of command for SNPS, from operator supervisors through Chairman of the Board, provide the following information:

- a. Identify each such individual by name and current job title.
- b. State the number of years of actual BWR operating experience for each such individual.
- c. State the length of time each such individual has been employed by LILCO.
- d. Identify each such individual who has notified LILCO that he or she will leave LILCO's employ, and state the date on which he or she will leave LILCO's employ.

RESPONSE: See objection to Request 87. LILCO further objects that it will be unduly burdensome to produce the personnel records of all individuals involved in LILCO's management chain of command for Shoreham through the Chairman of the Board.

89. With respect to all individuals who have been hired by LILCO to serve as reactor operators of SNPS, by who have not yet begun working for LILCO at SNPS, provide the following information.

- a. Identify each such individual by name, current employer and current job title.
- b. State the number of years of actual BWR operating experience for each such individual.
- c. State whether each such individual is a licensed reactor operator.
- d. State the date on which LILCO hired each such individual.

RESPONSE: See response to Request 87.

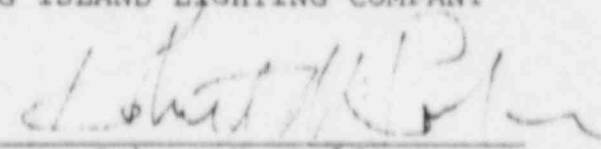
90. At page 21 of the Application, LILCO states that "it costs approximately \$45 Million per month for Shoreham to sit idle . . ." With respect to this assertion, identify all items of cost that comprise the estimated monthly cost of \$45 Million, including (a) the amount of each such item, (b) a description of each such item, and (c) identification of the party or parties to which payment is owed.

RESPONSE: See objection No. 1.

Respectfully submitted,

LONG ISLAND LIGHTING COMPANY

By



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DATED: June 19, 1984

ATTACHMENT ADocuments Withheld Under Claim of Privilege

<u>Request No.</u>	<u>Date</u>	<u>Author/ Recipient</u>	<u>Carbon Copies</u>	<u>Subject Matter</u>	<u>Privilege</u>
34	2/29/84	I.C.		Comments regarding experiences with earthquakes and their effects on transmission equipment	work product and preparation for litigation*
86	3/6/84	Brian McCaffrey/ William J. Museler	M.S. Pollock W.E. Steiger R.A. Kubinak E.M. Barrett W.T. Reveley NOSD/ASLB File M.C. Cordaro D.J. Binder J.P. Novarro W. Schiffmacher	Discussion of ways of improving offsite AC power and reflecting discussions with counsel concerning reliability of offsite power sources	attorney-client and work-product/trial preparation
86	3/2/84	Schiffmacher/ C.J. Davis	M.C. Cordaro A.M. Madsen B.R. McCaffrey	Outline and various attachments prepared at the request of counsel concerning AC power sources and potential additional AC power sources	work-product/trial preparation

*All documents described herein were prepared by LILCO personnel in specific response to counsel's request that certain information be gathered in preparation for drafting, revising and filing LILCO's Supplemental Motion for Low Power License or in preparation for hearings to commence April 24, 1984, July 30, 1984 or in preparation of motions or pleadings incident to the low power proceeding.