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(Security/Safeguards Information)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges
Marshall E. Miller, Chairman
Glenn O. Bright
Elizabeth B. Johnson

In the Matter of LONG ISLAND LIGHTING COMPANY (Shoreham Nuclear Generating Plant, Unit 1)	Docket No. 50-322-OL-4 (Low Power) (ASLBP No. 77-347-OIC-OL) September 19, 1984

ORDER DENYING REVISED SECURITY CONTENTIONS

On August 13, 1984, Intervenors Suffolk County and the State of New York filed seven proposed security contentions for litigation in this low-power proceeding. LILCO replied on August 24, and the County and the State responded to the LILCO reply on August 28, submitting a superseding set of seven "Revised" security contentions. On August 30, at a conference of counsel held in Bethesda, Maryland, the Board heard the response of LILCO, additional arguments of the Intervenors, and the position of the NRC Staff regarding the "Revised" contentions.

Subsequent to that conference, but before this Board had ruled on the contentions, the NRC Staff (Division of Licensing, Office of Nuclear Reactor Regulation) issued a letter to LILCO dated September 11, 1984. This letter apparently constituted an abrupt change in the previous

position of the Staff on the issues of vital areas or equipment, which are matters significantly related to the subject matter of this segment of the proceeding. We therefore found it necessary to hold another conference with counsel on September 14, 1984 to discuss the "effect and implications" of the Staff's letter "upon substantive issues and scheduling" in the proceeding.

The Commission in its Memorandum and Order of July 18, 1984, set forth guidance on the admissibility of contentions in the special circumstances of this proceeding.[1] The Commission said that admissible contentions must be: (1) "responsive to new issues raised by LILCO's exemption request;" (2) " relevant to the exemption application and the decision criteria as set forth in the Commission's Order of May 16, 1984;" (3) " reasonably specific;" and (4) " otherwise capable of on-the-record litigation." The Commission further explained that security issues, if any, may be litigated:

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1 LILCO has requested an exemption pursuant to 10 C.F.R. § 50.12(a), to requirements of general design criteria (GDC), specifically GDC 17, to allow issuance of a low-power operating license for Shoreham prior to completion of litigation regarding certain emergency power systems. LILCO has added certain "enhancements" to the plant's offsite emergency power systems: four EMD diesels and one gas turbine. The security of the "enhancements" is also part of their exemption request. Tr. S-108, 232-3.

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"(1) to the extent they arise from changes in configuration of the emergency electrical power system, and

(2) to the extent they are applicable to low power operation."

In its Memorandum and Order dated August 20, 1984, the Commission stated that it did not believe that the security agreement, "by its terms, precluded the raising of any new security issues raised by LILCO's exemption request" (at page 2). We have followed this direction and permitted the Intervenors to file (and revise) their proposed contentions, which must be within the Commission's guidelines.

Each of the proffered contentions must be measured against the six criteria, supra, explicitly set forth by the Commission as governing the admissibility of physical security issues. Such contentions must also be viewed in the context of an approved security plan resulting from the parties' November 24, 1982 security settlement agreement, approved by an ASLB order entered December 3, 1982. That plan is a complex, sophisticated security plan which covers all aspects of the Shoreham facility. New contentions involving security issues must therefore plead with reasonable specificity their necessary causal connection with the "changes in configuration" of the enhancements to emergency power, and the "extent they are applicable to low-power operation" covered by the exemption application. The Intervenors have had access to this detailed security plan for almost two years, and their contentions must reflect this high level of prior information in specifying concerns

solely attributable to such "changes in configuration." The Intervenors have failed to meet the standards required by the Commission.

A pervasive issue throughout the proffered revised security contentions is whether the power enhancement equipment should be treated as "vital" under NRC regulations.[2] Suffolk County and the State of New York submit that because these "enhancements" are substituted for equipment that is designated "vital" -- fully qualified emergency diesel generators -- they must also receive that designation. The NRC Staff, in its Supplemental Safety Evaluation Report (SSER) No. 5 filed April, 1984 for Shoreham, stated at page 13-3 that "there is no technical reason to protect the temporary diesels and the gas turbine generator as vital equipment because they are not required for safe shutdown (in the absence of a LOCA)." At the August 30 conference with counsel, the Staff's position was that it "would not oppose" a contention which would deal with the need for protection of the diesels and the gas turbine as

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2 10 CFR §73.2 contains the following definitions:

> "(h) 'Vital area' means any area which contains vital equipment.
>
> (i) 'Vital equipment' means any equipment, system, device, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation. Equipment or systems which would be required to function to protect plublic health and safety following such failure, destruction, or release are also considered to be vital."

"vital" (Tr. S-145). However, on September 11, 1984, a copy of a letter signed by Albert Swencer, Chief, Licensing Branch No. 2, NRC Division of Licensing, Office of Nuclear Reactor Regulation (NRR), addressed to a LILCO vice president, was served on the Board. That letter stated, in pertinent part:

> "The staff's previous approval of the Shoreham Physical Security Plan was based in part on the protection of the TDI emergency diesel generators as vital equipment. As a result of a re-evaluation of your proposed alternative emergency power supplies for operation at up to five percent power, the staff has determined that you should amend the Security Plan to describe the measures that will be used to protect alternative emergency power supply equipment located in the protected area as vital equipment.
>
> "Please submit your revised plan for our review and approval upon receipt of this letter. Our evaluation of the revised plan, which will update the evaluation presented in Supplemental Safety Evaluation Report (SSER) Number 5, will be published in a future SSER."

At our conference with counsel on September 14, counsel for the Staff told us that the letter was not intended to be an attempt to improperly interfere with an ongoing adjudication[3] (Tr. S-193, 227), but admitted that the timing of the letter reflected the Staff's desire not to be "overtaken by events." (Tr. S326). The only "event" contemplated was the impending release of the Board's order ruling on security contentions.

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3 See 10 CFR §2.717(b). See also Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-214, 7 AEC 1001 at 1002 (1974).

The Staff's complete change of position from that set forth in SSER No. 5 was made administratively, in an apparent attempt to influence the Board's imminent adjudicatory ruling on the identical issue involving "vital equipment." No motion or other pleading was filed with the Board, in order to keep the issue in its adjudicatory posture. Apparently no consideration was given by the Staff in their deliberations[4] to the propriety of taking direct action potentially conflicting with our pending decision, such as directing LILCO to "amend the Security Plan." We find that the Staff's asserted reasons for issuing this letter are as insubstantial and unconvincing as its purported bases for changing its long-standing position on vital equipment.[5] There were admittedly no changes in the facts or circumstances at Shoreham since the publication of SSER No. 5 in April, 1984.[6] We can only conclude that the Staff's precipitous issuance of its September 11 letter was an attempt to frustrate the Board's anticipated issuance of an order denying the vital equipment contention. As we have previously stated,[7] this Board's "adjudicatory independence"

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4 Tr. S-290-293, 321, 323-326.

5 Tr. S-295-96; 281-82.

6 Tr. S-295.

7 Order Expunging Rule to Show Cause, entered May 30, 1984, at page 5.

and "integrity" are not to be influenced by pressure or coercion from any source. We treat with equal disdain any efforts at intimidation by vituperation.

LILCO, in its oral arguments of August 16 and August 30, pointed out that the nature of this proceeding is an application for exemption from certain regulations, including the requirement of General Design Criterion (GDC) 17 that a fully qualified onsite emergency AC power source be in place as well as security requirements.[8] The equipment at issue here, although physically located at the plant site, is considered "offsite" -- i.e., not fully qualified. To require this equipment to be treated as "vital" is, in a sense, to negate the purpose of the exemption. Under this line of reasoning, the enhancements would be treated as vital for security purposes, but as offsite for functional purposes. This we refuse to do.

We exercise our power under 10 CFR §2.717(b) to overrule as a matter of law the Staff's position that LILCO's power enhancements must be treated as vital for purposes of qualification for a low-power operating license. It is important to keep in mind the nature of this proceeding: we are considering LILCO's request for an exemption from the requirement that a fully-qualified onsite source of emergency power be available, for the purposes of low-power testing up to 5% of rated

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8 Tr. S-108, 232-3.

power. If the requirements associated with a fully-qualified power source at full power are applied to LILCO's offsite power "enhancements," there is no point or purpose to the exemption. This is disregarding the fact that at low-power operation, the degree of potential danger to the health and safety of the public is significantly less than at full-power operation. On balance, and when viewed in the exemption context here before us, the need for security of the power enhancements is diminished.[9]

As to Phases I and II of LILCO's proposed low-power testing program,[10] it is uncontroverted that no AC power whatsoever is needed to protect public health and safety. Therefore, the security of these power sources is not relevant and security issues can have no impact upon any decision regarding these phases.[11] Likewise, in Phases III and

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9 The four EMDs and the gas turbine are not unprotected. The EMDs are located in the plant's "protected" area, and the turbine is in a fenced switchyard which contains other important equipment.

10 I. Fuel load and precriticality testing.
II. Cold criticality testing.

11 At the September 14 conference (called to discuss the implications of the Staff's September 11 letter, supra), the Staff said that "...because you don't need to rely on this equipment for any safety functions...this equipment would not be vital equipmenmt at Phase I and II and need not be protected as vital equipment at Phases I and II, since in fact it serves no vital equipment purpose." (Tr. S-207).

IV,[12] absent a LOCA, no AC power is needed to protect public health and safety. Even in the unlikely event of a LOCA during low-power operation, it is uncontroverted that at least 55 minutes would be available in which to restore emergency power. We find that that time factor, plus the availability of first-line emergency power from the Long Island power grids provides sufficient protection to public health and safety.[13]

Suffolk County and State of New York also argue that the "change in configuration" wrought by the addition of the EMDs and the gas turbine creates a completely new set of vulnerabilities from those which were covered by the approved comprehensive site security plan. (Tr. S-50). The County and State further argues that LILCO has overlooked security issues in setting up its new configuration (Tr. S-136; County/State "Reply" August 28, 1984 at p. 2) and has failed to establish that the "high assurance of protection" standard of 10 CFR §73.551a) has been upheld with the new configuration. The NRC Staff at the August 30 conference with counsel indicated its opposition to the admission of any contention on this issue.

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12 III. Low-power testing up to 1% power.
IV. Low-power testing 1-5% rated power.

13 Regulations do not currently require that any emergency power source be treated as vital, even for full-power operations. A proposed rule which would institute such a requirement is presently
(Footnote Continued)

The site security plan is a sophisticated, substantial and lengthy document. It has been reviewed extensively. It was the subject of a settlement agreement among LILCO, Suffolk County, and the NRC Staff, and it was approved by order of a special Board in December, 1982.[14] We cannot let it be challenged lightly or on the basis of generalized conclusions.

LILCO characterizes the site security plan as a "functional" one, which sets forth security principles and procedures, rather than "nuts and bolts". Thus, it readily adapts to fit changed circumstances such as the addition of five new pieces of equipment (four EMDs, one gas turbine) that we address here.

We note that LILCO's representations that lighting, observability,[15] etc., remain adequate with the new configuration are essentially uncontradicted other than for conclusionary arguments

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(Footnote Continued)
before the Commission, and comments thereon are due in December, 1984.

14 "Memorandum and Order Cancelling Hearing, Approving Final Security Settlement Agreement and Terminating Proceeding" (unpublished) December 3, 1982.

15 Other structures already a part of Shoreham's design, such as the condensate storage tank, fire protection tank, main transformers, normal station service transformers, reserve station service transformer, demineralized water storage tank and fuel oil fill station are -- like the four EMD's -- situated within the protected area but outside the plant buildings, and are accounted for by the existing security plan.

lacking bases set forth with specificity. We further note that LILCO, in its written Response of August 24, 1984, presented an item-by-item discussion to show that its new configuration is in compliance with the requirements of 10 CFR §73.55. Suffolk County has had the security plan and procedures for two years, but has not shown us any discernible impact on the plan's efficacy resulting from the new configuration. Our own consideration of the filings of the parties, their arguments and the record before us convince us that there is no such impact. The Commission's guidance limits us to issues that arise from changes in the configuration of the emergency power system. No issue regarding the general security plan is seen to flow from that source.

The fact that an approved security plan is in place raises a presumption that the plant's vital areas will be protected in accordance with NRC regulations. The power enhancement equipment is outside the plant's vital areas, and has no impact upon anything which occurs inside them.[16] Thus, contrary to the assertions of the County, the possibility of a LOCA, sabotage-induced or otherwise, is not affected by the changed configuration.

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16 Suffolk County's argument that the subject equipment may be attacked as a "diversion" to facilitate attack upon a vital area is not impressive. The diversionary effect of an attack on any piece of equipment already situated outside the vital area and accounted for in the approved plan would be identical.

The Intervenors in several of their proposed contentions, attempt to hypothesize the combination of two or more unlikely events such as a loss of offsite power (LOOP) occurring simultaneously with a loss of coolant accident (LOCA), and to attempt to treat security requirements as addressing that type of eventuality. There are an infinite number of remotely possible combinations of events. However, the chance of one unlikely event occurring at the same time that another unlikely event occurred (LOOP could not cause LOCA, or vice versa), is extremely unlikely. The NRC does not require consideration of such multiple unlikely events in evaluation of plant emergency safety. They are not litigable issues under our practice.

Contention 1

This contention alleges that the Shoreham security plan must be modified to take into account changes in the configuration of LILCO's emergency electrical power system. Specifically, it says that the plan must be modified with regard to the staffing and training of the plant security organization, the physical layout of the plant (barriers, isolation zones, access points, protected areas, perimeters), the locations and capabilities of security equipment (such as lighting, surveillance, detection and alarm devices), and that security procedures must be revised. The contention also alleges that the alternate AC power system is vital equipment and must be protected as such.

LILCO argues that this contention in its original form asserted no affirmative deficiency in the security program as applied to the temporary low power configuration at Shoreham, and thus failed to comply with the Commission's Standards (LILCO's August 24 Response, p. 29). At the August 30 conference of counsel, counsel for LILCO indicated his belief that the revised contention did not cure the defects. LILCO cited the contention's "failure to deal with the logic of the security plan and procedures." (Tr. S-115). The security plan and procedures "are geared to methodology and function" not "to individual items of equipment or other individual features of the plant." (Id.). LILCO counsel further stated that the plan as written "adequately would account for the addition of these two pieces of equipment with respect to both number of armed responders and with respect to training." (Id.). LILCO concluded that "the contention fails to show why the actual methodology in the original plan, which is conceded to have been adequate by all parties for full-power operation is suddenly inadequate for this low-power purpose." (Tr. S-116). The NRC Staff stated that the County and State had demonstrated no specificity or basis as to why the protection of the currently denominated vital areas needs to be changed because of the presence of a new configuration onsite and another new configuration outside of the protected area. (Tr. S-143). Thus, the Staff opposed the admission of any contention raising such an issue.

This contention also asserts that the power enhancements must be treated as vital equipment. The contention makes the bald statement that "in the event of a LOOP/LOCA at Shoreham, the alternate AC power system would be required to function to protect public health and safety following such failure. Accordingly, the alternate AC power system constitutes vital equipment, contrary to the assertion by the NRC Staff in SSER Supp. No. 5 at 13-3." It then enumerates changes which are deemed to be necessary in order to properly protect the EMDs and gas turbine as vital equipment. At the August 30 conference, LILCO stated its disagreement with the assumption that these pieces of equipment must be treated as vital areas. (Tr. S-112).

Counsel for Suffolk County objected to LILCO's characterization of its "assumption." The County said it was not assuming anything; it was contending that the emergency power equipment ought to be in vital areas. "That's what a contention is." (Tr. S-137).

We have not been shown any basis to admit either of the issues raised by this contention. The County and the State have shown us no reason why a previously approved the site security plan should be reexamined. Furthermore, the allegation that the subject equipment should be considered vital has been found by this Board to be incorrect as a matter of law. This contention is DENIED.

Contention 2

This contention assumes the essentially simultaneous occurrence, while operating at low power, of a LOCA (sabotage-induced or otherwise),

and a loss of offsite power. Should a LOOP/LOCA occur, the contention states, the emergency power enhancements would be required to function to protect public health and safety; thus, they should be designated as vital equipment.

LILCO in its August 24 Response argues that there is no basis for the assumption that a LOOP/LOCA would occur; that the approved site wide security plan is capable, within acceptable limits of assurance, of preventing a sabotage-induced LOCA; and that NRC regulations do not require emergency diesels be classified as vital areas. LILCO also complains that this contention is redundant with parts of Contention 1. The NRC Staff believes that this contention is admissible, as it addresses the issue that the Staff would like to see litigated -- whether, during low-power operation the augmented power sources must be considered as vital areas.

As we have discussed above, there is a very low probability of a LOCA. The existence of an an approved security plan allows a presumption that the likelihood of a sabotage-induced LOCA is acceptably small. The only other significant external cause of a LOCA is a seismic event; the plant itself meets all seismic criteria. In view of the

unlikelihood of such a combination of events occurring, the NRC has no regulations requiring that such combinations be considered.[17]

The assertion that the augmented emergency equipment should be treated as vital, remains unsupported as to basis. We have in this order considered and rejected that allegation as a matter of law. This contention is DENIED.

Contention 3

This contention alleges that, although the design basis threat (10 CFR §73.1) is generic and does not vary with different power levels, vulnerabilities to the design basis threat vary depending on the layout and configuration of each facility. It alleges that LILCO has not identified, characterized, analyzed or prepared for the design basis threat as applied to the new configuration, and has not therefore made appropriate modifications to the site security plan. The contention provides as reasons why the new AC power system will be subject to attack: alleged frequency of attacks on electrical equipment, visibility of the enhancements, publicity concerning the enhancements, and asserted animosity engendered by the recent labor strike.

LILCO argues that the logic of the security plan rules out this contention; the functional nature of the plan allow it to adapt to such

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17 Southern California Edison Company, et al (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-81-33, 14 NRC 1091 (1981).

configuration changes as these while still providing adequate protection from the design basis threat. (Tr. S-124). The Staff would not have us litigate the issue of changes, if any, in the design basis threat, because that threat is generic, unchanged at low-power, and therefore would have been settled as part of the comprehensive security agreement. (Tr. S-36).

We are not writing on a clean slate, as we have the security plan before us. We find that the approved security plan adequately addresses the design basis threat. Although the plant configuration has been slightly changed, we find that because the augmented equipment is not vital and does not impact upon the vital equipment or area, and thus the plants vulnerability to successful radiological sabotage remains acceptably low. The enumerated reasons for attacks upon the plant are irrelevant because they are not in any way attributable to the low-power configuration of the plant. This contention is DENIED.

Contention 4

This contention again assumes a combination of events. The design basis threat is here hypothetically initiated by "external attackers" who would disable the enhanced AC power. Concurrently a "dedicated knowledgeable insider," would produce a LOCA (by unspecified means) while the plant is isolated from offsite power. The contention further states that the present configuration does not provide the "multiple levels of protection" offered by the original emergency power

configuration.[18] The contention also asserts that the "probability of a sabotage-induced LOCA is much greater now than it was with the original plant configuration."

This contention fails on several counts: it again assumes the designation of the enhanced power sources as vital equipment; it postulates a successful sabotage-induced LOCA simultaneously with loss of offsite power and with a disabling attack on the alternate AC power sources. Although we do not consider the existence of an approved security plan as a bar to the litigation of security contentions, we have to assume that the plan takes into account the possibility of an insider-produced LOCA and is adequate for that purpose. Even though the plan was written with the assumption that multiple levels of protection were to be in place, the provisions in the plan for prevention of an insider-produced LOCA would not depend on whether the emergency power supplies were in fact protected. Furthermore, we see no rational reason, nor are we offered one, behind the statement that the possibility of a sabotage-induced LOCA "is much greater" with the new configuration. This contention is DENIED.

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18 The normal emergency AC power source (TDI diesels) will be protected as vital equipment.

Contention 5

This contention once again addresses the "vulnerability" of the proposed alternate AC power system during low-power operation, this time to "such weapons as mortars and other accurate, highly destructive weapons which would be available to the design basis threat," which would not even have to enter a protected area. If emergency AC power is to be needed during low-power operations, one would have to assume a LOCA concurrent with what would be in essence a military attack. We are not required to make any such assumption.[19] Furthermore, 10 CFR §73.1(a)(1) sets forth the types of weapons against which a plant must be protected from radiological sabotage from a variety of sources, including violent external assault. Weapons of the size and severity of "mortars and other accurate, highly destructive weapons" are not included. This contention is DENIED.

Contentions 6 and 7

Here, it is alleged that LILCO has not proven that operation at low power with the alternate AC power configuration "would not endanger life and property" and "would be in the public interest." These issues (public health and safety and public interest) are an integral part of the main low-power exemption proceeding. They are not relevant to security. These contentions are DENIED.

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19 Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 16 NRC 55, 75 (1981); cf. Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968).

For the foregoing reasons, it is ordered that the "Revised Security Contentions of Suffolk County and the State of New York" are denied in their entirety.

Although this Order denying security contentions may not be technically within the Commission's reserved jurisdiction in CLI-84-8, we believe that it is within its spirit. Accordingly, this Order Denying Revised Security Contentions is hereby transmitted directly to the Commission for appropriate action.

It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD

Glenn O. Bright, Member
ADMINISTRATIVE JUDGE

Elizabeth B. Johnson, Member
ADMINISTRATIVE JUDGE

Marshall E. Miller, Chairman
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland
this 19th day of September, 1984.