433

8/31/84

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

Before the Atomic Safety and Licensing Board

'84 SEP -4 A10:49

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

BRIEF OF SUFFOLK COUNTY IN OPPOSITION
TO LILCO'S MOTION FOR LOW POWER
OPERATING LICENSE AND APPLICATION FOR EXEMPTION

By a separate filing dated August 31, 1984, Suffolk County and the State of New York have jointly submitted proposed non-argumentative findings of fact as required by this Board. See ASLB Order, August 9, 1984. As permitted by the Board's August 9 Order, Suffolk County submits this Brief to present certain arguments which are not included in the proposed findings.

This proceeding has focused on LILCO's Supplemental Motion for a Low Power Operating License (the "Motion"), dated March 20, 1983, and on LILCO's Application for Exemption (the "Application"), dated May 22, 1984. The Application, filed after issuance of the Commission's May 16, 1984 Order (CLI-84-8), has

add. J. York
OCA

D503

in many respects superceded the earlier Motion due to the Commission's directive that LILCO can be granted a low power operating license only if it demonstrates that it qualifies for an exemption from applicable regulations under 10 C.F.R. § 50.12(a).

The Commission has held repeatedly that a Section 50.12(a) exemption is an extraordinary remedy that should be granted sparingly. See, e.g., Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), CLI-84-8, ___ NRC ___, slip op. at 2, note 3 (May 16, 1984); Washington Public Power Supply System (WPPSS Nuclear Project Nos. 3 & 5), CLI-77-11, 5 NRC 719, 723 (1977). Suffolk County submits that LILCO has failed to meet its burden of proving that it satisfies the high standards which apply to the granting of a Section 50.12(a) exemption.

LILCO has failed to meet its burden of proof in four respects. We summarize LILCO's failures immediately below and will address them in greater detail in the body of this brief.1/

1/ Suffolk County does not address in this Brief every basis for denying LILCO the relief it seeks. Rather, this Brief is intended to highlight some of LILCO's most significant failures, and it must be read in conjunction with the Proposed Findings of Fact of Suffolk County and the State of

(Footnote cont'd next page)

1. Section 50.12(a) specifies that an exemption can be granted only if it is "otherwise in the public interest." The exemption sought by LILCO is not in the public interest because:

(a) The representatives of the public, the State of New York and Suffolk County, are strongly opposed to the exemption. This Board, when considering where the public interest lies, should place great weight on the views of such representatives of the public.

(b) The rush to license Shoreham via an exemption has already resulted in a decline of service to LILCO's customers, a result that also is not in the public interest. The grant of an exemption will likely exacerbate this already serious situation.

(c) The public interest favors full compliance with all safety-related regulations. When a requested exemption goes to safety regulations, as does the one sought by LILCO, the public interest in compliance

---

(Footnote cont'd from previous page)

New York which provide further data regarding why this Board should deny the relief LILCO seeks.

with safety regulations requires denial of the exemption. Indeed, a Section 50.12(a) exemption from a safety-related requirement has never been granted in any reported NRC case.

(d) The public interest does not favor the grant of an exemption to permit operation of Shoreham in advance of resolution of outstanding emergency planning uncertainties, since the grant of the exemption could result in contamination of the plant followed by abandonment. This would result in substantial costs which might ultimately have to be borne by the public but no attendant benefits to the public.

(e) No economic benefit would accrue to the public from the grant of the exemption. In fact, even assuming that the grant of the exemption were to result in the earlier commercial operation of Shoreham, this would result in a $165 million rate increase to be borne by the the public in 1985 alone. Such a rate increase, which comprises an immediate economic penalty to the public resulting from the grant of the exemption, is not in the public interest.

(f) The alleged public interest in reducing dependence on foreign oil is irrelevant to the exemption requested by LILCO. This exemption pertains solely to low power operation of Shoreham, and it is undisputed that no reduction in foreign oil consumption would result from Shoreham's low power operation.

(g) It is not in the public interest for a company like LILCO, which is close to bankruptcy, to be granted an exemption from safety regulations and be permitted to operate a nuclear plant. Operation of a nuclear plant is necessarily an activity that entails certain risks. When a company is close to bankruptcy, common sense indicates that the company will be under pressure to reduce costs in an effort to survive -- a situation which is not conducive to the high levels of safety expected under the NRC's regulations.

2. An exemption can be granted only if LILCO demonstrates that there are "exigent circumstances" which favor the grant of an exemption. The circumstances in this case do not support the extraordinary relief LILCO seeks:

(a) One circumstance to be considered in determining whether an exemption is justified is whether there is

a need for the power from the reactor. It is undisputed that the power proposed to be generated by Shoreham is not needed for at least 10 years and maybe longer. This circumstance militates strongly against the grant of the exemption.

(b) Another circumstance to be considered in a Section 50.12(a) proceeding is whether there may be alternate relief available in a short time period, thus making extraordinary relief by way of exemption unnecessary. If so, then the exemption should be denied. In this case, it is undisputed that alternate relief is available to LILCO -- namely, the TDI diesel proceeding before the Brenner Board. This circumstance also militates strongly against the grant of the exemption.

(c) LILCO has not demonstrated any extraordinary efforts to comply with GDC 17. While LILCO has attempted to comply with GDC 17, it has failed to show that its attempts are entitled to any specific consideration or weight, or that they differ from what is expected of every NRC license applicant. Moreover, the evidence indicates that LILCO itself has been

responsible for, and could have prevented, many of the difficulties it now faces. The balance of equities certainly does not favor rewarding LILCO with an exemption when the perceived need for an exemption is at least partially LILCO's fault.

(d) The fact that this has been a long proceeding has nothing to do with whether an extraordinary exemption should be granted to avoid compliance with a safety regulation.

(e) The training benefits which are alleged to result from the grant of an exemption are minimal, if any. The vast majority, if not all, of the training which would take place during the proposed low power testing program would be provided to operators during LILCO's low power and power ascension testing whether or not an exemption is granted. Further, if LILCO truly believes that the proposed "additional" training benefits are important to safe operation of Shoreham, it should ensure that such training is accomplished regardless whether the exemption is granted.

3. LILCO must demonstrate "that, at the power levels for which it seeks authorization to operate, operation would be as safe under the conditions proposed by it, as operation would have been with a fully qualified onsite AC power source." CLI-84-8, at 3. LILCO has failed to meet this standard. The evidence is clear that in the event of a loss of offsite power with the alternate AC power configuration proposed by LILCO, power could be supplied to safety loads by two sources. These two sources share common failure points with each other and with the offsite power sources, and are nonsafety-related, less redundant, more prone to single failures, operator error and natural hazards than a fully qualified onsite power system. A fully qualified source of onsite power provides three fully independent sources of power that are also independent of offsite power sources. Further, whereas a fully qualified power system would supply power to safety loads in 10 to 15 seconds, the alternate power sources proposed by LILCO, under ideal conditions, could not supply power for several minutes, and under some circumstances it could take as long as 30 minutes. Since power may need to be supplied to safety loads within 55 to 86 minutes after a LOOP/LOCA event, reliance on the alternate AC power system substantially reduces the margin of safety and constitutes a severe reduction in the defense-in-depth

protection which generally is central to the NRC's licensing concept.

4. LILCO has applied for an exemption from GDC 17. However, LILCO has also failed to comply with many other regulations, including GDC 1-4, 18, 33-35, 37, 38, 40, 41, 43, 44, and 46, and Part 50, Appendix B. Further, it is impossible for this Board to make the Section 50.57(a) findings necessary to the issuance of a low power operating license. LILCO has failed to seek an exemption from these requirements or to offer evidence in support of any implicit request for such an exemption. Therefore, no low power license can be authorized.

We address each of the foregoing matters in greater detail below. First, however, the County sets forth a brief analysis of the legal principles that must govern this Board's decision.

I. The Legal Standard Which This Board Must Follow

In CLI-84-8, the Commission set forth generally the requirements which LILCO must satisfy in order to be eligible for an exemption. First, LILCO must address the explicit determinations which are required by the plain words of Section 50.12(a). That Section provides in relevant part:

> The Commission may, upon application by any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this Part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

It is clear from Section 50.12(a) that LILCO has the burden of demonstrating that the grant of an exemption is in the "public interest." In addition, however, the Commission established two further legal requirements that must be satisfied before an exemption may be granted: first, the applicant must demonstrate that "exigent circumstances" favor the grant of an exemption under Section 50.12(a), assuming that LILCO has also demonstrated that in spite of its noncompliance with GDC 17, the health and safety of the public would be protected; and second, the applicant must demonstrate "that, at the power levels for which [LILCO] seeks authorization to operate, operation would be as safe under the conditions proposed by it, as operation would have been under a fully qualified onsite AC power source." CLI-84-8, at 2-3.

The three foregoing legal standards are mandatory and binding on this Board. This Board has no authority to deviate from those standards, but rather must apply this guidance from the Commission. During the closing arguments on August 16,

there was discussion, primarily between the Board and Staff counsel, regarding the "as safe as" standard set forth in the Commission's May 16 Order. The discussion centered on whether the standard articulated by the Commission means what it says or whether it means something else, such as "substantially as safe as," or "a comparable level of safety." For instance, the Staff urged that a so-called "rule of reason" should apply and that one should assess "whether the augmented system proposed for Shoreham would provide a comparable level of safety as a system in compliance with GDC 17." See Tr. 3027, et seq.

Notwithstanding the suggestions by Staff counsel, this Board does not have the authority to deviate from the standard set forth by the Commission. The Commission's Order is clear: LILCO has the burden of proving that operation of Shoreham at low power with its alternate AC power sources (and assuming the TDI diesels do not exist) would be as safe as low power operation of Shoreham would be with a fully operational and qualified onsite AC power source. An allegedly "comparable level" of safety is not the same as being "as safe." Thus, the Staff's suggested re-wording of the Commission's standard in fact changes that standard. The Commission's standard calls for a direct comparison of the two AC power configurations -- the alternate system vs. the fully qualified system. If the

safety provided by operation with the alternate system does not fully measure up to that provided by operation with a fully qualified system, then the exemption must be denied. This Board is absolutely precluded from deviating from this guidance.

If either this Board or the Commission were to alter the standard set forth by the Commission in its May 16 Order, it would be unlawful. To require the parties to litigate the case according to one standard and then decide it according to a different standard would contravene the federal constitutional guarantee of procedural due process. Due process requires that parties be given fair notice of any changes to regulatory requirements.2/

One other matter needs to be addressed with respect to this Board's application of the legal standards which govern this exemption proceeding. This is not the first Section 50.12(a) case. In fact, there have been a large number of reported decisions under this regulation, and many of them will be discussed elsewhere in this brief. However, the NRC case

---

2/ See Natural Resources Defense Council, Inc. v. United States Nuclear Regulatory Comm., 695 F.2d 623, 625 (D.C. Cir. 1982).

law makes absolutely clear that a Section 50.12(a) exemption constitutes an extraordinary remedy, and one that should not often be granted. For example, the Commission in a 1977 Section 50.12 decision stated:

> We regard this method as extraordinary and we reiterate that it should be used sparingly . . . . Parties should resort to this method of relief only in the presence of exigent circumstances, such as emergency situations in which time is of the essence and relief from the Licensing Board is impossible or highly unlikely.

Washington Public Power Supply System (WPPSS Nuclear Project Nos. 3 and 4), CLI-77-11, 5 NRC 719, 723 (1977).

Similarly, in 1974, the Commission acknowledged the receipt of comments pressuring it for more liberal issuance of Section 50.12(a) exemptions. The Commission responded as follows:

> The Commission has rejected this suggestion and will continue the present policy of granting such exemptions sparingly and only in cases of undue hardship.

39 Fed. Reg. 14507 (1974). See also 39 Fed. Reg. 5746 (1972) ("it is expected that specific exemptions will be used only sparingly . . . ."). Many other decisions of the NRC have confirmed that Section 50.12 exemptions are the unusual case.

See Louisiana Power and Light Company (Waterford Steam Electric Generating Station, Unit 3), CLI-73-25, 6 AEC 619, 622, n. 3 (1973); Carolina Power and Light Company (Shearson Harris Nuclear Power Plant, Units 1, 2, 3 & 4), CLI-74-9, 7 AEC 197, 198 (1974).

The foregoing regulatory guidance stresses that this Board's discretion in this exemption proceeding is limited. LILCO has the burden of proving that it is entitled to the exemption and the Commission precedents instruct this Board that it should recommend the grant of an exemption only if LILCO convincingly demonstrates that the extraordinary relief which it seeks is justified. As will be demonstrated in the sections which follow, no such demonstration has been made by LILCO and, accordingly, the exemption must be denied.

II. LILCO Has Failed to Demonstrate that the Grant of a Section 50.12(a) Exemption Would be in the Public Interest

LILCO has failed to demonstrate that the public interest favors the grant of the requested exemption. First, in considering where the public interest lies and reviewing the evidence in this proceeding, this Board must assess what person or persons are in the best position to advise the Board regarding the public interest. In this regard, Suffolk County submits that

the Governor of the State of New York, representing the millions of residents of the State, and the government of Suffolk County, which has 1.3 million residents, whose obligation and responsibility it is to serve and protect the public who have elected them, are in a far better position to advise the Board regarding where the public interest lies, than LILCO, a private utility company, or individual employees of LILCO.3/ Suffolk County and the State of New York have made crystal clear where the public interest lies: it is to assure full compliance with NRC safety requirements and to allow no shortcuts which permit or would give the appearance of permitting any lessening in the level of safety demanded for Shoreham.

In this regard, it is especially important for this Board to take account of the testimony of Mr. Richard Kessel, the Chairman of the State of New York Consumer Protection Board, whose job it is to represent the consumers of the State of New York. Mr. Kessel testified that it is not in the public interest to contaminate a nuclear power plant, such as Shoreham, in light of the substantial uncertainties concerning whether

---

3/ The NRC Staff might arguably have been in a position to advise the Board on the public interest issue; however, the Staff, both in its testimony and at the August 16 closing argument, failed to address the public interest issue.

full power operation will ever be permitted for that plant. See Proposed Findings ¶471. This important fact in the testimony of the primary representative of the public whose interest is to be determined, is not rebutted or controverted in this record. Mr. Kessel testified further that if Shoreham were operated at low power and ultimately were abandoned, the costs that ratepayers would ultimately bear would be increased. That is not in the public interest, as Mr. Kessel testified, and that testimony is also uncontroverted on the record. Id.4/

Further, Mr. Kessel also testified that the rush to operate Shoreham which has already taken place and which would be furthered by the grant of an exemption has already caused a decline in the quality of service to LILCO customers. Id. at ¶472. Those LILCO customers are the public whose interest is supposedly to be protected by this Board and the Commission under Section 50.12(a). Clearly, the public has been penalized already by the reduction in the quality of LILCO's service, and Mr. Kessel testified that the grant of an exemption would result in an increased and unacceptable deterioration of electric

---

4/ Suffolk County offered testimony that supported that of Mr. Kessel on this point, but the Board struck the County's testimony. See Tr. 2145-48 and pages 42-47 of the Maden/Dirmeier prefiled testimony. The Board should rectify its error by admitting the stricken testimony.

service to customers because LILCO's low power testing program would require LILCO to expend funds which LILCO could obtain only by reducing its non-nuclear related expenditures and thus impairing its already diminished quality of service. Id. at ¶473. Clearly, such results of the granting of the exemption are is not in the public interest. Mr. Kessel's testimony concerning the detrimental impact of the grant of the exemption upon the service LILCO could provide to the public was not rebutted or controverted in this record.5/

Finally, Mr. Kessel testified, and again it was not controverted on the record, that it is not in the public interest to have a company such as LILCO, which is close to bankruptcy, begin to operate a nuclear power plant. Id. at ¶474-75. LILCO's precarious current financial condition was documented in the record by LILCO's own filings with the Securities and Exchange Commission and by LILCO's witness Mr. Nozzolillo. Its financial situation, which includes projections by LILCO that it will run out of cash in the fall of 1984, cancellation of its common stock dividend, termination of payments due on loans

---

5/ Suffolk County offered testimony which supported that of Mr. Kessel on this matter. That testimony was stricken by the Board. See Tr. 2145-48 and pages 22 and 41-42 of the Madan/Dirmeier prefiled testimony. The Board should rectify this error by admitting the County's testimony.

for Nine Mile Point 2 (placing LILCO in potential default), and an inability to obtain outside financing, has caused LILCO to institute a severe "austerity" program, and has caused a strike of LILCO's unionized employees. Id. at ¶476-92. Mr. Kessel testified that these facts indicate that LILCO's precarious financial condition has already undermined the reliability of LILCO's personnel and operations. His testimony on this point was not rebutted or controverted in the record. Mr. Kessel further testified that it does not make sense, and is not in the public interest, to impose additional safety responsibilities, which are involved in the operation of a nuclear power plant, upon a company which is in such dire financial condition. Id. at ¶493. Clearly, LILCO has failed to meet its burden of proof set forth in Section 50.12 that the grant of the exemption would be in the public interest.

The evidence submitted by LILCO concerning its view of what is in the public interest is set forth in the Proposed Findings. The following points about that evidence are the most significant.

First, the only evidence on public interest presented by LILCO was that of Mr. Szabo and Mr. Nozzolillo, who are both LILCO employees without any expertise, knowledge, or responsibility for determining what the public interest is.6/

6/ LILCO may suggest that its witness Mr. McCaffrey also addressed the public interest requirement of Section

(Footnote cont'd next page)

Both of these gentlemen discussed certain so-called "benefits" which they asserted would accrue if the requested exemption were granted. Significantly, however, they did not address at all the basic and dispositive question which this Board must decide: whether the granting of an exemption from a safety-related regulation and the operation of a nuclear power plant by LILCO without its having complied with all safety regulations, is in the public interest. Thus, their testimony does not provide any evidence to make the necessary threshold determination required by Section 50.12(a).

Second, the "evidence" that was provided by these witnesses clearly does not support the grant of exemption. The benefits they discussed are wholly based upon the assumption that the Shoreham plant would eventually achieve full power commercial operation; that is, the proposed "benefits" discussed by LILCO's witnesses would not accrue as a result of the grant of the exemption, nor would they even materialize until after the Shoreham plant went into commercial operation. Indeed, both Messrs. Nozzolillo and Szabo frankly admitted that their

---

(Footnote cont'd from previous page)

50.12(a). The County addresses Mr. McCaffrey's testimony in the "exigent circumstances" section which is later in this Brief.

testimony dealt not with benefits resulting from the conduct of low power testing but rather only with possible benefits resulting from the assumed full power commercial operation of Shoreham. See Proposed Findings ¶414-16, 435-36, 440. However, the purpose of this proceeding is to determine whether the requested exemption from GDC 17 should be granted to permit low power operation, and part of that determination includes determining whether such an exemption resulting in such operation would be in the public interest. LILCO's witnesses do not address at all the matter at issue in this proceeding. Thus, there is no evidence in this record of any benefits resulting from the grant of a low power license exemption.

Third, even assuming that with respect to this exemption request it would be proper for this Board to consider benefits that could accrue as a result of the assumed achievement of commercial operation, whether or not Shoreham actually will achieve commercial operation is speculative. Although all LILCO's evidence on the so-called public interest benefits from low power operation was premised on the assumption that commercial operation will occur, there is in fact no evidence in this record that such an assumption is accurate, realistic, or one upon which the grant of the extraordinary relief of an exemption from a safety-related regulation should be based.

Moreover, although it is at least as likely that commercial operation of Shoreham will not be achieved (for reasons which include LILCO's lack of authority to implement an offsite emergency response plan), the County was precluded by this Board from submitting evidence concerning the substantial harm to the public that would result from the grant of an exemption if the assumption that is the converse of LILCO's -- i.e., that there would be no commercial operation -- were the premise for evaluating the public interest.7/ Thus, LILCO's so-called public interest testimony should be disregarded because (a) it is based on a speculative premise, unsupported in the record, that one of two possible scenarios will occur, and (b) the evidence which could have provided a balanced two-sided picture by discussing the public interest ramifications if the other possible scenario occurred was stricken by the Board. If the Board were to rely upon LILCO's public interest testimony after having precluded the introduction of evidence on the same subject by Suffolk County, it would be committing error.

7/ The County's testimony on this matter was sponsored by Messrs. Madan and Dirmeier (at pages 42-47 of their prefiled testimony) and was stricken by the Board. See Tr. 2145-48. The County submits that this was an error which could be rectified by admitting this testimony.

Fourth, there is no basis for finding that LILCO's evidence sustains LILCO's burden of proving that the public interest requirement of Section 50.12(a) is satisfied. Mr. Szabo's testimony consisted of a discussion of the alleged benefits of reducing dependence on foreign oil. His testimony is premised entirely on the ultimate commercial operation of Shoreham. There is no possible benefit in terms of foreign oil savings or any other kind of savings that results from low power testing. On this basis alone, this Board should disregard Mr. Szabo's testimony. Further, Mr. Szabo admitted that his concerns about dependence on foreign oil and the possible results of a disruption in foreign oil availability are not affected by whether the plant were to begin low power testing as a result of an exemption or as result of gaining a low power license in the normal course of an NRC adjudicatory proceeding. Proposed Findings ¶414-15. Accordingly, his testimony simply does not relate to the situation involved in this exemption request.

Mr. Szabo's testimony must also be disregarded because it in fact represents nothing more than speculation. He could not testify as to the probabilities of any disruption of foreign oil supply happening and he stated, in fact, that he thought such a cutoff would be equally as probable now or three months from now as it would be 10 years from now. Proposed

Findings ¶417-28. Thus, there is no basis upon which this Board could find that such a cutoff would be possible or that it would relate at all to this exemption request. In sum, Suffolk County submits that the only conclusion that can be drawn relating to Mr. Szabo's testimony is that it is of no probative value and that there would be no benefit resulting from the grant of this exemption relating to foreign oil.8/

For similar reasons, the testimony of Mr. Nozzolillo should also be disregarded. His testimony concerned a hypothetical benefit in the range of $8 to $45 million if the exemption were granted and the grant of the exemption were followed by full power commercial operation. See Proposed Findings ¶434-35. The postulated $45 million benefit should be disregarded entirely, because that depends upon Shoreham being in commercial service for tax purposes by December 31, 1984. The record is undisputed that that is so unlikely as to be impossible. Id. at ¶441-42, 450-55.

8/ Suffolk County moved to strike Mr. Szabo's testimony. See Tr. 1237, 1261-62. The County submits that the Board erred in failing to strike the testimony for the reasons already stated on the record. The Board can correct its error by now ignoring that testimony in its initial decision.

Therefore, the only alleged benefit that LILCO's own witness could talk about was the possibility of an $8 million benefit. However, that hypothetical benefit would not be experienced by ratepayers until almost the year 2000. In fact, the evidence showed that the immediate impact of the grant of an exemption would be an increase in utility rates for LILCO ratepayers by approximately $165 million during 1985. Such a rate increase clearly is not in the public interest. Rather, it constitutes an additional burden on LILCO ratepayers who are already paying some of the highest rates in the country. Proposed Findings ¶444-47, 455. Furthermore, the County's witnesses testified that not only would there not be an economic benefit of $8 million, but that there would be an economic detriment -- of as much as $49 million -- to the LILCO ratepayers if the Shoreham plant achieved commercial operation three months earlier. Id. at ¶456-67.

Finally, when considering the public interest, this Board cannot shut its eyes to reality. LILCO is pressing this Board to grant an exemption to permit LILCO to contaminate the Shoreham facility right now. LILCO wants to conduct low power testing even though there remain substantial uncertainties (particularly regarding emergency planning issues) regarding whether LILCO will ever be issued a full power operating

license. It appears that a decision on emergency planning issues will be issued in 1985.9/ Suffolk County submits that it is not in the public interest to gain two or three months advance on low power operation, with its attendent risks and inevitable contamination, when it is possible that by early 1985, there will be an NRC decision that the LILCO emergency plan will not protect the public and, accordingly, that no commercial operating license ever should be issued.10/ In these circumstances, Suffolk County submits that it is strongly in the public interest to deny the requested exemption and to hold off on low power operation until the uncertainties regarding Shoreham's ultimate fate are resolved.

It is essential that in ruling upon whether the public interest requirement of Section 50.12(a) has been satisfied, this Board also consider the kind of exemption which is being sought

---

9/ The briefing schedule for emergency planning issues calls for the briefing to be completed in mid-November, 1984. Thus, a Board decision can be expected in early 1985.

10/ The County recognizes that under the Commission's interpretation of 10 C.F.R. § 50.47(d), a low power license can be issued despite outstanding uncertainties regarding full power emergency planning issues. See Long Island Lighting Co. (Shoreham Nuclear Power Station), CLI-83-17, 17 NRC 1032 (1983). However, that NRC decision involved only interpretation of Section 50.47(d) and never addressed the public interest factors which must be satisfied in a Section 50.12(a) proceeding.

in this case. LILCO is not seeking an exemption for a limited work authorization relating to some discrete aspect of the plant that does not have direct safety implications. Rather, LILCO seeks an exemption from one of the basic safety requirements of the NRC's regulations, namely, General Design Criterion 17 which requires that there be both an onsite and an offsite AC power system. Our review of reported NRC exemption cases does not indicate a single instance where an exemption from a safety-related regulation has been granted under Section 50.12(a).

The only NRC decision to directly address the question of a Section 50.12(a) exemption from a safety regulation was the NRC's 1982 decision concerning the Clinch River Breeder Reactor. See United States Department of Energy (Clinch River Breeder Reactor Plant), CLI-82-23, 16 NRC 412 (1982). In Clinch River, the Department of Energy sought exemptions for a variety of activities, all but one of which did not involve any safety-related construction activities. However, the Department also requested permission to construct emergency plant service water piping that is part of the safety-related emergency service water system for the plant. While the Commission approved all the other exemption requests, the Commission denied the request for an exemption to perform the safety-related work. The Commission stated:

> The Commission believes, as a matter of policy for the CRBR program, that safety-related activities should not be permitted prior to the completion of an adjudicatory hearing for CRBR. For this reason, the Commission denies this portion of DOE's exemption request.

Id. at 419.

Commissioner Asselstine, in additional views, expanded upon his view concerning whether safety-related activities should be permitted to be covered by an exemption request. Commissioner Asselstine stated:

> I strongly support the Commission's decision, reached by a vote of 4-0 to deny Applicants' request for permission to construct emergency plant service water piping that is part of the safety-related emergency service water system for the Clinch River Breeder Reactor Plant. This decision was based upon the judgment of the Commission, as a matter of policy, that no safety-related activities for the CRBRP should be permitted prior to the completion of a formal, adjudicatory hearing for this project. I agree entirely with this policy judgment by the Commission that all safety-related activities for the CRBRP must await the completion of the formal hearing.
>
> I would also conclude that the Commission must reject on procedural grounds as well, Applicant's request to perform safety-related activities prior to completion of a formal hearing. Specifically, I believe that section 189a of the Atomic Energy Act of 1954, as amended, requires the conduct of a hearing prior to Commission

> authorization to conduct safety-related activiti s. Moreover, the Commission's long standing interpretation of Section 189a is that this hearing must be a formal, adjudicatory hearing. For these reasons, I would have rejected Aapplicants' request to conduct safety-related activities both as a matter of policy and as a matter of law.

Id. at 435 (emphasis in original).

Commissioner Asselstine's separate views, expanding upon the Commission's decision in Clinch River, make clear that when an applicant seeks an exemption for safety-related activities, a very high standard will be applied by the Commission. Accordingly, Suffolk County submits that the fact that LILCO seeks an exemption from GDC 17, one of the most important safety regulations in Part 50, is reason to require a very high showing of need for the exemption before a finding can be made that a grant of the exemption is consistent with the public interest.

III. There Are No Exigent Circumstances Which Justify the Grant of an Exemption

The Commission's guidance and precedents require LILCO to demonstrate that there are exigent circumstances which support the grant of the exemption it seeks. Suffolk County submits that the evidence refutes any argument that exigent

circumstances support the grant of the requested exemption. In fact, the circumstances strongly support the denial of any exemption.

First, one factor that is important in NRC decisions regarding the grant or denial of an exemption is whether there is a need for the power from the reactor in question. A need for the power will militate in favor of granting an exemption; on the other hand, if there is no pressing need for the power from the reactor in question, then Commission precedents indicate that this fact will militate against the grant of an exemption. See United States Department of Energy (Clinch River Breeder Reactor Plant), CLI-83-1, 17 NRC 1, 4 (1983); Washington Public Power Supply System (WPPSS Nuclear Projects Nos. 3 and 5), CLI-77-11, 5 NRC 719 (1977).11/

In this case, the record is clear that there is no present need for Shoreham's power. In fact, the evidence indicates that in all likelihood, there is no need for Shoreham's power for at least 10 years, and perhaps longer. See Proposed

---

11/ Because Commission precedents make clear that need for power is relevant to decisions on exemption requests, Suffolk County submits that the Board erred in striking the testimony submitted by New York State (Kessel Tr. 2914-15) concerning that subject. See Tr. 2903.

Findings ¶401, 404. Accordingly, this factor militates against a finding that LILCO has established exigent circumstances in support an its exemption requst.

A second factor which the Commission has consistently considered in deciding whether exigent circumstances are established in exemption cases is whether there is a real need for the exemption at all. If there is alternate relief which may be granted by a licensing board within a short period of time, the Commission has consistently denied exemption requests.

The best example of this Commission interpretation of Section 50.12 is the WPPSS case, cited above. In that case, WPPSS sought an exemption under Section 50.12 to begin site clearing, excavation, and road and bridge repair prior to the completion of construction permit proceedings. See 5 NRC at 721. At some time prior to the filing of the exemption request, WPPSS initiated a proceeding to obtain a limited work authorization which would also allow it to begin the construction activities without a permit. Id.12/ The NRC refused to grant the requested

---

12/ WPPSS based its exemption request on several factors: commencing site preparation immediately would enable WPPSS to take advantage of the dry season, saving an unspecified amount of time and money, the relief affored by the LWA proceeding would be a long time coming, the environmental

(Footnote cont'd next page)

exemption, finding that the licensing board would issue a decision in the LWA proceeding "in a short period of time," was already familiar with the record, and that the time pressures and the attendent expenses plead by WPPSS were not extreme enough to justify an exemption. Id. at 722-23. The NRC endorsed the basic holding of the WPPSS case in its later decision in Clinch River. See United States Department of Energy (Clinch River Breeder Reactor Plant), CLI-83-1, 17 NRC 1, 5-6 (1983).

In this case, clearly there exists an alternate form of relief which should be available to LILCO in a short period of time. LILCO seeks an exemption from GDC 17 because it does not now have a qualified source of onsite AC power. At the same time LILCO is seeking this exemption, however, it is engaged in a proceeding before the Licensing Board chaired by Lawrence Brenner in which LILCO is seeking a determination that the Transamerica Delaval diesel generators constitute an adequate source of onsite AC power that meets all NRC requirements, including GDC 17. If the Brenner Board agrees with LILCO, then the need for an exemption will be entirely obviated.13/

(Footnote cont'd from previous page)

impact of the construction activities was redressable, and the public need for the power was allegedly substantial. Id. at 721-22.

13/ In addition, LILCO has purchased a set of diesel generators manufactured by Colt Industries which could be avail-

(Footnote cont'd next page)

In light of the Commission's precedent, the relevant inquiry for this Board is whether the Brenner Board is likely to reach a decision in a relatively short period of time. The answer clearly is yes. The Brenner Board has scheduled trial to begin on September 10. All indications are that the trial will take several weeks and thus a decision can be expected toward the end of this year. Given the need to prepare an initial decision and also the need to address outstanding security issues which the NRC has directed this Board to consider, this Board likely cannot reach a decision on LILCO's exemption request before November. Then, according to the Commission's May 16 Order and Section 50.12(a), the Board's initial decision must be reviewed by the full Commission, a process that will take at least several weeks. Accordingly, this Board is being asked to issue an exemption from a safety regulation -- extraordinary relief in the best of circumstances -- in order to save LILCO at most one or two months. We submit that under the binding Commission precedent cited above, there is an alternate means of relief available to LILCO which strongly militates <u>against</u> the grant of an exemption.

(Footnote cont'd from previous page)

able for use by May 1985, which would also obviate the need for an exemption, even if the TDI litigation were not resolved in LILCO's favor.

Third, this Board must look closely at the evidence that LILCO has submitted in an attempt to demonstrate the existence of exigent circumstances. Suffolk County submits that when the Board takes that close look, it must conclude that that evidence is largely irrelevant and, taken as a whole, clearly does not establish the existence of the kind of circumstances which the Commission has held to be pertinent to a decision whether to grant an exemption.

LILCO's testimony on exigent circumstances consists of three elements: (1) complaints by Mr. McCaffrey about the length of the NRC licensing proceeding, allegedly unjustified actions by the NRC Staff, and the resources LILCO has had to expend in the NRC licensing process; (2) testimony by Mr. Gunther concerning alleged training benefits of low power testing; and (3) testimony by Mr. McCaffrey concerning LILCO's attempts to comply with GDC 17. We discuss this testimony in detail in the Proposed Findings, and explain here why none of this LILCO testimony evidences the existence of the extraordinary conditions which the Commission has held are necessary to justify the grant of an exemption from a safety regulation.

First, Suffolk County believes that the Board committed serious error in admitting into evidence the portion of Mr. McCaffrey's prefiled testimony (pages 17 to 33 which appear at Tr. 1715-31) in which he complains about the length of the contested Shoreham licensing proceedings, alleges that the NRC Staff has imposed extra and technically unjustified burdens on LILCO, and complains that because Shoreham's licensing has been contested, LILCO has had to expend a great deal of resources.14/ Suffolk County urges the Board to correct that error and to disregard entirely that testimony in making its decision.

There is no indication in any Commission precedent that this type of evidence (even if believed) demonstrates the existence of the kind of exigent circumstances which could justify an exemption. This portion of Mr. McCaffrey's testimony amounts to nothing but an assertion of LILCO's apparent belief that it has a right to receive a license from the NRC. In fact, however, it is clear that nobody has a right to an NRC license; all persons applying for NRC licenses do so at their

---

14/ The County moved to strike this portion of Mr. McCaffrey's prefiled testimony. See Tr. 1680-92. The Staff agreed that the testimony was not relevant and supported the motion to strike. Tr. 1693 (Perlis).

own risk, and subject themselves to the NRC's rules and regulations, to the rulings of licensing boards and the Commission, and to the technical judgments and requirements of the NRC Staff. There is simply no basis for LILCO at this late date to complain about the NRC licensing process, actions of the NRC Staff, or the length of this proceeding. There is certainly no basis for LILCO's audacious non sequitur that because it has been involved in a contested NRC licensing proceeding convened to test LILCO's compliance with NRC safety requirements, "fairness requires" it should now be granted an exemption from complying with those very NRC safety requirements. In short, this Board should disregard LILCO's improper and irrelevant allegations about the NRC's licensing process; they merit no more than cursory dismissal by this Board.

Second, Mr. McCaffrey's testimony concerning the allegedly "undue" burdens suffered by LILCO as a result of the NRC licensing proceeding is totally without any factual basis. In the Proposed Findings of Fact we detail the lack of basis for the specific assertions made by Mr. McCaffrey. We highlight the most significant ones here.

Although Mr. McCaffrey asserted that LILCO has been consistently and without technical justification held by the NRC

Staff to a higher burden of proof than other utilities, and that in his opinion the Staff did so as a result of the contested nature of the licensing proceeding, the only stated basis for Mr. McCaffrey's opinion was the fact that the NRC Staff rejected some alternative technical approaches proposed by LILCO and refused to accept certain answers provided by LILCO to Staff questions. Mr. McCaffrey was able to think of only one issue (steam bypass testing) as to which he believed the Staff held LILCO to a higher standard without any technical justification; however, Mr. McCaffrey was forced to admit that he did not know what steam bypass testing requirements were imposed by the Staff on other plants. In addition, Mr. McCaffrey acknowledged that LILCO had made several presentations to the NRC Staff in an attempt to change its mind, but that the Staff refused to agree with LILCO's belief that the requirements it imposed on LILCO were without technical justification. See Proposed Findings ¶368-77.

In addition, Mr. McCaffrey testified that in his view, the Staff's Safety Evaluation Report, which was issued in April 1981, could have been issued in late 1978 or early 1979 had it not been for the contested nature of the Shoreham proceeding. Mr. McCaffrey, however, had no factual basis for that assertion. In fact, the Systematic Assessment of Licensee

Performance (SALP) evaluation of LILCO for the time period July 1, 1980 to June 30, 1981, rated LILCO's responses and submittals to the NRC Staff as "below average." The NRC also found that the Shoreham FSAR and amendments provided insufficient information concerning the plant design, that LILCO's answers to requests for information from the Staff were usually not responsive to Staff concerns, that LILCO's responses were frequently inadequate and therefore open items required several meetings, phone conversations and letters to achieve resolution, and that LILCO was "frequently recalcitrant" in dealing with the NRC Staff. See Proposed Findings ¶378-89.

Mr. McCaffrey also complained at length about the resources LILCO expended in conducting and responding to discovery and other litigation-related activities during the licensing process. He admitted, however, that all such activities were conducted pursuant to Licensing Board orders and the NRC rules. See Proposed Findings ¶390-95. Although Mr. McCaffrey complained that the operating license hearing process has placed a drain on LILCO and its consultants because individuals who were responsible for designing and completing the plant were diverted to litigation, clearly, LILCO had the ability to request a stay in the licensing proceeding at any time if it believed such a stay were necessary to permit it to complete the plant.

It failed to do so. Id. at ¶396-97. The fact that LILCO persisted in attempting to obtain an operating license when the plant was not complete and when the hearing process was allegedly interfering with its attempts to complete the plant was LILCO's own choice to make.

Finally, Mr. McCaffrey's testimony that the licensing proceeding hearings have delayed the Shoreham plant's fuel load date is simply untrue. Mr. McCaffrey admitted that the plant was not capable of loading fuel until April or May 1984, and that fuel load is dependent upon the issuance of a license by the NRC. Of course, he was also forced to admit that fuel load was not possible in April or May of 1984 because at that time -- and continuing to the present time -- LILCO has no source of onsite AC power and the Commission has required LILCO to obtain an exemption before any fuel load would be permitted. See Proposed Findings ¶406-08.

In essence, Mr. McCaffrey's testimony is a challenge to the NRC and to the NRC's regulations. The NRC Staff and the Commission's Licensing Boards are required by NRC regulations to make particular and specific findings concerning the safety of a nuclear power plant. The NRC Staff and Licensing Boards undertake whatever reviews and other actions are necessary to

enable them to make the requisite findings. The fact that in the case of Shoreham extensive Staff review and hearings on health and safety and emergency planning contentions admitted by Licensing Boards have been necessary to enable the Staff and Licensing Boards to make the findings required under the regulations (some of which have not to date been made because LILCO has still failed to comply with all regulatory requirements) does not constitute the kind of "exigent circumstance" which justifies the grant of an exemption or the issuance of a license. LILCO may not like the process established by the NRC regulations but that does not make that process improper nor does it entitle LILCO to opt out of that process by taking shortcuts around safety regulations.

Furthermore, although Mr. McCaffrey asserted that his testimony concerning the licensing process was pertinent to the balancing of equities which a Board can consider in evaluating a request for an exemption, his testimony does not make such a balancing process possible, and therefore it is not probative or material evidence. Mr. McCaffrey's testimony provides only his personal opinions concerning what should go on one side of the scale. He fails to address in his testimony any of the equities relating to burdens imposed upon other parties, such as the public and the NRC Staff, by LILCO's actions during the

licensing process. See Proposed Findings ¶405. Thus, the LILCO testimony does not in fact provide any basis for this Board to balance equities; it merely provides a one-sided diatribe which is irrelevant and immaterial.

LILCO also submitted testimony concerning an alleged "training benefit" which would result from the grant of its exemption request. However, LILCO's evidence showed that these benefits, if they are deemed to exist at all, would be extremely small.

Mr. Gunther testified that some additional criticalities would be performed during Phase II of the low power testing program if an exemption were granted; however, this amounts to only a total of 72 hours of time added to the normal low power testing schedule, and the manhours of training which would be involved is de minimis in light of the total amount of training that would be involved in any case and the number of individuals who would receive this training. See Proposed Findings ¶314-22. In addition, once any operating license is issued to LILCO, all operators are required to perform 10 criticality manipulations per year; therefore, the training involved in performing criticalities during Phase II would of necessity be provided to all operators whether a license is issued with or

without an exemption. Id. at ¶320. The only other "additional" training which LILCO asserted would be provided if the exemption were granted involves the performance of additional reactor heatups at the end of the test program. Mr. Gunther testified, however, that this training would only be conducted if there were extra time available at the end of the low power test program before further power ascension were authorized. Thus, that asserted "training benefit" is speculative, and not entitled to any weight. Id. at ¶324-28.

Finally, all the tests that will be performed during the low power test program are required, are necessary, and would be performed in any event whenever low power operation was conducted at the plant. See Proposed Findings ¶315, 324, 327. Thus, with the possible exception of 72 hours of criticalities, the testing and training that would result from the performance of those tests is not related to the grant of an exemption and cannot be described as comprising an "exigent circumstance" that justifies the grant of an exemption. Because the testing and training would take place in any event, no benefit would be gained as a result of the requested exemption.

Suffolk County urges this Board to disregard entirely the training benefit alleged by LILCO for an additional reason. If

LILCO believes that a significant benefit in terms of public health and safety will result from the performance of additional criticalities by its personnel, it is incongruous for LILCO to suggest that if the exemption is not granted it would not perform such criticalities. In asserting that it should be given credit for its proposed "additional training," LILCO argues that such training would be beneficial and would enhance safety. However, LILCO seems to be proposing a sort of tradeoff: give us the exemption and we will do more training; if you do not give us the exemption, we may not do as much training (even though the extra training would be beneficial and presumably safety will therefore suffer). This does not constitute responsible argument by an NRC applicant seeking the privilege of operating a nuclear power plant. Thus, this Board should dismiss that argument in its entirety.

Mr. McCaffrey also testified regarding LILCO's alleged good faith efforts to comply with GDC 17. LILCO's testimony in this regard was largely conclusory and was offered by a witness without any detailed knowledge of those efforts. His testimony is entitled to no weight. The details as to why Mr. McCaffrey's testimony regarding LILCO's efforts relating to its attempt to comply with GDC 17 must be ignored are set forth in the Proposed Findings of Fact. We summarize the most significant reasons here.

First, Mr. McCaffrey lacked personal knowledge and thus his testimony was largely unsupported conclusions. Although a major portion of the LILCO "efforts" Mr. McCaffrey believes should be considered to constitute exigent circumstances involves LILCO's procurement from TDI of diesels which supposedly were designed and manufactured to meet performance standards identified by LILCO, Mr. McCaffrey did not know what LILCO had or had not done to ensure that the TDI diesels were in fact manufactured to the performance standards in the LILCO specification. See Proposed Findings ¶329-37.

Although familiar with the existence of quality assurance programs, Mr. McCaffrey could not testify as to how TDI tested the diesel generators manufactured for LILCO to determine their capability to meet performance requirements. The crankshaft in one of the TDI diesels at Shoreham broke in two in August 1983. The cause of the failure was improper design of the crankshaft. Mr. McCaffrey did not know what LILCO did prior to the actual failure of the crankshaft in August 1983 to determine whether the crankshaft was adequately designed. Similarly, Mr. McCaffrey did not know whether prior to the August 1983 failure LILCO had ever even reviewed the design of the crankshaft. LILCO made no effort to determine whether a crankshaft of that design had been installed in any other TDI generators, and Mr.

McCaffrey did not know whether LILCO had ever had discussions with other owners of TDI diesels concerning the design of that crankshaft prior to the August 1983 failure. Furthermore, although Mr. McCaffrey asserted that LILCO had several means by which it could obtain information concerning engine failures and operating experience, he did not know whether LILCO had obtained or attempted to obtain any information about operating experience or problems with TDI diesels prior to the August 1983 crankshaft failure. See Proposed Findings ¶338-41, 356-65.

Mr. McCaffrey also asserted that LILCO's pre-operational testing program relating to the TDI diesel generators is an additional part of LILCO's efforts to comply with GDC-17 which should be considered to constitute an exigent circumstance that justifies the exemption. That testing program, however, resulted in a Notice of Violation of severity level III and a fine of $40,000 imposed upon LILCO by the NRC Staff as a result of LILCO's having improperly conducted and certified a test designed to verify the TDI generator's capability of running at its rated loads. Thus, in May 1982, LILCO performed a diesel test which did not meet LILCO's own test acceptance criteria or the verification requirements in LILCO's test procedure; in the face of these facts, the LILCO Test Engineer and LILCO's

Operational Quality Assurance inspectors nonetheless signed and accepted the test results. The results that were considered "acceptable" by LILCO did not in fact indicate the engine's capability of running at 3900 KW for two hours as required, but rather indicated capability of running for 15 minutes at a range of values from 3500 to 3850 KW. Despite Mr. McCaffrey's assertions that LILCO's pre-operational test program should be given special credit by this Board, the NRC Staff stated that the diesel generator testing by LILCO "demonstrates a lack of aggressiveness on the part of LILCO to pursue, identify and resolve associated problems that can affect the reliability of the diesel generators, including attention to detail during performance data review and approval of the test results of [its] pre-operational test program." The NRC Staff itself stated that such actions "are necessary to demonstrate that the components will perform satisfactorily in service." See Proposed Findings ¶342-47.

Furthermore, despite LILCO's lack of aggressiveness and failure to obtain information concerning operational experience with other TDI diesels, in March 1983, based on a review of LILCO's own documents and reports, the NRC Staff determined that the TDI diesels' reliability for continuous operation and for standby electric power was questionable. Based on LILCO's

own documents, as of March 1983 the Staff was able to identify 47 separate incidents and/or failures that had occurred in just the 12-month period prior to March 1983. Although these failures led the NRC Staff to conclude that there was "an immediate concern" with respect to the reliability of the TDIs, LILCO did not even disassemble those machines to examine them until more than five months later -- that is, after one of the crankshafts broke in two in August 1983. See Proposed Findings ¶348-54.

Finally, despite Mr. McCaffrey's belief that LILCO's efforts relating to the TDI diesels are entitled to weigh in favor of granting an exemption, the evidence showed that information concerning serious problems with TDI diesels installed at the San Onofre and Grand Gulf nuclear plants, as well as in marine service for non-nuclear organizations, was available long before the August 1983 crankshaft failure. Mr. McCaffrey was unable to say whether LILCO knew of such problems or in fact did anything in an attempt to learn of such problems. See Proposed Findings 357-65.

Thus, Mr. McCaffrey's conclusory assertions that LILCO's efforts to comply with GDC 17 were made in good faith and entitle LILCO to an exemption because they constitute exigent circumstances, are contradicted by the evidence. Suffolk County

submits that Mr. McCaffrey's testimony should be disregarded in its entirety.

The need to disregard Mr. McCaffrey's testimony is all the more important because the Board committed serious error when it barred admission of the testimony of Suffolk County's witnesses Messrs. Hubbard and Bridenbaugh on precisely the same subject. See Tr. 2373-90. The prefiled testimony of Messrs. Hubbard and Bridenbaugh established that LILCO had failed to take reasonable actions with respect to the TDIs to ensure compliance with GDC 17, that LILCO's failures began in 1974 and continued through the early 1980's, and that the failures involved, among other things, LILCO's quality assurance efforts and preoperational testing efforts which were discussed by Mr. McCaffrey. For reasons which are not clear in the record, this Board denied admission of the Hubbard/Bridenbaugh testimony even though it had admitted Mr. McCaffrey's testimony on the same basic subject. And, even after the Board's ruling, it denied the County's motion to strike Mr. McCaffrey's testimony. See Tr. 2866-72. There is a denial of due process when the Board admits one party's testimony on a subject and denies testimony by another party on the same basic subject matter.

We bring this to the Board's attention at this time so that it has an opportunity, before an initial decision is issued, to remedy its error. To remedy its error, the Board should reconvene the hearing for the limited purpose of hearing the Hubbard and Bridenbaugh testimony. Their testimony will establish that contrary to the allegations of LILCO's witness Mr. McCaffrey, the evidence is clear that LILCO did not take reasonable steps to ensure compliance with GDC 17; rather, LILCO repeatedly and consistently closed its eyes to repeated indications of serious deficiencies with the TDI diesels for many years. Thus, the fact that LILCO now needs to seek an exemption is largely due to its own failure to take reasonable actions in the past. Suffolk County submits that if its evidence had been admitted, there would be no conclusion for the Board to reach other than that it would be irresponsible for the NRC to reward LILCO's past failures by the grant of an exemption at this time.

IV. LILCO Has Failed to Establish that Low Power Operation of Shoreham with the Alternate AC Power System Would Be As Safe As Low Power Operation Would Have Been With a Fully Qualified Onsite AC Power Source

The Commission's guidance in CLI-84-8 makes clear that LILCO must demonstrate that operation of Shoreham with the alternate AC power system would be as safe as operation of Shoreham with a fully qualified onsite AC power system. As set forth in the earlier discussion of the legal standard, this Commission guidance is binding: the question is not whether operation of Shoreham with the alternate power system would, in the judgment of this Board, be safe enough, but rather whether operation of Shoreham with the alternate power system would be as safe as operation would have been with fully qualified TDI diesels.

Suffolk County submits that the evidence makes clear that the required "as safe as" finding cannot be made. The Proposed Findings document the reasons that the as safe as standard has not been met. We will briefly highlight here some of the comparisons which lead to this conclusion.

If Shoreham operated with the set of fully qualified onsite diesels originally proposed, its sources of onsite emergency power would have been fully seismically qualified, fully

protected against fires in accordance with Appendix R, and fully redundant. Each of the three TDI diesels is a completely independent power source capable of supplying safety loads during low power operation in the event of a loss of offsite power. The TDIs do not share fuel systems, starting mechanisms, output or input lines, or control mechanisms, and each one is physically isolated from the others in its own Category I building. The TDIs are also fully independent of the offsite sources of AC power.

In contrast, the elements of the proposed alternate AC power configuration, consisting of a set of four EMD diesels and the 20 MW gas turbine, are not seismically qualified, are not protected against fires in accordance with Appendix R, and do not have the same level of redundancy. Indeed, in contrast to the three independent power trains which could supply the safety loads in the qualified configuration, there are only two in the alternate configuration. Thus, from mere physical configuration -- three fully safety-related AC power sources vs. two nonsafety-related power sources -- it is clear that the "as safe as" standard cannot be met. In addition, portions of LILCO's alternate configuration share common elements with the offsite power system, and also share common features with each other; thus, unlike the fully qualified configuration, the

alternate configuration is neither independent of the offsite power system nor are the elements of that configuration independent of each other. See Proposed Findings ¶12-13, 265-67, 280-304. Furthermore, the set of four EMD diesel generators is subject to single failures that would disable the entire set of diesels because those units share a common fuel system, a common starting system, common output cables a d common controls. Id. at ¶104-30.

As noted above, LILCO's originally proposed fully qualified diesel generator system included both fixed fire detection and fixed fire extinguishing systems for each individual generator, and each was located in its own separate compartment. By contrast, the EMDs do not contain any fire detection equipment nor any fixed or remotely operated fire extinguishing or mitigating system. Furthermore, the EMDs are substantially more vulnerable to fire and explosion as a result of their fuel system and battery starting system, than a fully qualified source of onsite power. The vulnerability of the EMDs to fire is particularly significant because the EMDs are not separated by fire walls, and a fire in one EMD would likely result in the unavailability of all the EMDs. See Proposed Findings 131-52.

The originally proposed fully qualified source of onsite power included a detailed and comprehensive alarm system which was annunciated in the control room. That system permitted early detection of abnormal conditions and provided an opportunity for corrective action to be taken prior to an actual shutdown of one of the TDIs. By contrast, the abnormal condition alarms associated with the EMDs and the gas turbine are not annunciated in the control room, but rather in the individual switchgear cubicles located next to that equipment outside the plant building. The only alarm signals annunciated in the control room are those which indicate an actual shutdown of the equipment. Therefore, with the alternate configuration, there is no opportunity for corrective action prior to an actual shutdown of the equipment. See Proposed Findings 153-63, 260-62.

A fully qualified source of onsite power is fully automatic, requiring no manual operator actions. The TDI diesels started, synchronized, accepted load, and distributed load to systems requiring power without any operator intervention, and within 10-15 seconds. By contrast, the alternate power configuration requires many manual operations -- for example, in order to connect the EMDs to the necessary electrical loads, at least 18 separate manual operations are required. Not only

does the operation of the alternate power configuration require substantially more time -- at an absolute minimum three to five minutes but perhaps as much as 30 minutes -- the need for so much manual action makes the alternate configuration substantially more vulnerable to human error than a fully qualified system, which is fully automatic. In addition, the increased complexity involved in the electrical circuitry of the alternate configuration decreases the reliability of that configuration compared to the much less complex circuitry related to fully qualified TDI diesel generators. See Proposed Findings ¶164-89, 253, 263-64, 275-79.

Each of these comparisons demonstrates that the alternate configuration is less reliable and more vulnerable to failures than a fully qualified source of onsite AC power would be.

Although LILCO's witnesses relied upon the maintenance and operating history of the EMD diesels to assert that they are a reliable source of power, their testimony was based on incomplete and inconsistent records, they were not personally familiar with the maintenance records, and their assertions were largely contradicted by the records themselves or shown to be without factual basis or relationship to the particular diesels at issue. The LILCO witnesses did not controvert or rebut the

County's testimony concerning the 20 MW gas turbine. See Proposed Findings ¶203-74.

LILCO urged in its closing argument that the Board should make the necessary "as safe as" finding because LILCO asserts that its evidence indicates that under the alternate AC power supply which it has proposed, it will be able to supply power to the safety loads before the 2200 degree temperature limit is reached in the event of a loss of offsite power and loss of coolant accident sequence. However, this proposed comparison ignores the mandatory directive of the Commission. The question is not whether assuming a certain time frame is available (55 or 86 minutes or whatever it may be), the alternate AC power configuration may be able to supply power to the safety loads. Rather, the question is whether operation with the alternate AC power system is as safe as operation would be if there were fully qualified onsite diesels.

Clearly, it is not. If the TDI diesels were fully operational and qualified, then in the event of a LOOP/LOCA, power would be supplied to the safety loads, fully automatically, from three redundant sources in approximately 15 seconds. If everything works perfectly with the alternate AC power system, power will not be supplied for 3-5 minutes if the 20 megawatt

gas turbine is used, and for 10-15 minutes if the EMDs are used. In addition, because with the alternate AC power system, many manual operations are necessary to power the safety loads while, in contrast, the supply of power from a fully qualified onsite AC power system is fully automatic, there will be a reduced margin of safety under the alternate AC power configuration: for a period of time after a LOOP/LOCA, temperatures will rise in the reactor core from the decay heat from low power testing while the Shoreham operators are waiting and wondering whether the alternate AC power supply will in fact come on. See Proposed Findings ¶306-09. If the alternate AC power supply does not come on, there will less time thereafter for emergency corrective actions to be taken than would be the case with the TDI diesels wherein the operators would know within 15 seconds whether the onsite AC power supply was working. This constitutes a direct and clear reduction in the level of defense-in-depth safety which is a hallmark under the NRC's regulatory process.

Low power operation with the alternate configuration is also not as safe as operation with a fully qualified source of emergency onsite power because of the increased vulnerability of the alternate configuration to seismic events and the safe shutdown earthquake (SSE). The evidence presented by Suffolk

County, which was substantially uncontroverted by LILCO and the NRC Staff, was that there is a significant potential that as the result of the SSE, the 138 KV and the 69 KV systems (even as enhanced with the 20 MW gas turbine) will fail. These two sources of offsite power would fail in an SSE whether there were qualified onsite diesel generators or not. The significant fact, however, is that if there were three fully qualified diesel generators available, by definition they would be predicted to survive an SSE. Accordingly, after an SSE which disabled the 138 KV and 69 KV systems, under LILCO's originally proposed qualified configuration, there still would be three independent AC power sources, any one of which could meet low power safety load requirements. In contrast, under LILCO's proposed alternate AC power configuration, after the SSE (assuming failure of the 138 and 69 KV systems), only the EMD diesels would remain. See Proposed Findings ¶15-71, 78-80.

The EMDs however, also have a substantial potential for failure during an SSE because of the seismic vulnerability of their common fuel line and output cables, the potential for soil liquefaction in the area where they are located, and the potential for failure of the masonry walls in the non-emergency switchgear room. Id. The details concerning these seismic vulnerabilities of the alternate AC power configuration, and

the results of failures due to a seismic event upon the ability of that configuration to supply power to emergency loads, are set forth in the Proposed Findings of Fact.

Although there was some testimony by LILCO and Staff witnesses concerning the existence of testing and operating procedures relating to the alternate AC power configuration, the only evidence concerning the adequacy of the surveillance procedures for the EMDs and for the gas turbine was provided by the County's witnesses. As detailed in the Proposed Findings of Fact, the County's witnesses testified that the surveillance testing procedures do not adequately or effectively assure reliable operation of either the EMD diesels or the 20 MW gas turbine. Moreover, there is no evidence that the NRC Staff has even reviewed, much less approved, the surveillance procedures being proposed by LILCO. See Proposed Findings ¶190-200, 254-59.

Finally, the NRC Staff has stated that at least 16 additional technical specification requirements, and at least nine license conditions must be imposed upon and implemented by LILCO before the proposed low power operation would be acceptable to the Staff. See Proposed Findings ¶187-88, 257, 295-98. The need for so many additional technical specification

requirements and license conditions before the proposal would even be acceptable to the Staff provides a further indication that operation with the proposed AC power configuration would not be as safe as operation with a fully qualified source of AC power.

In short, Suffolk County submits that the evidence establishes that with the alternate AC power configuration, there would be a reduced margin of safety which, in turn, means that the level of defense in depth protection provided for a Shoreham emergency is reduced. Given the largely uncontroverted facts relating to the increased vulnerability and decreased reliability of emergency AC power given the alternate configuration as compared to a qualified configuration, it is impossible to find that operation of Shoreham with the alternate AC power system would be as safe as operation with a fully qualified onsite diesel system.

In this regard, Suffolk County is compelled to bring to the Board's attention another serious error which was committed on the record. Suffolk County offered into evidence the testimony of Messrs. Minor and Weatherwax for the purpose of demonstrating that operation of Shoreham with the alternate AC power configuration would not be as safe as operation of

Shoreham with a fully qualified onsite power system. Messrs. Minor and Weatherwax had performed both qualitative and quantitative (PRA) analyses in support of their opinions, and their prefiled testimony documented the fact that low power operation of Shoreham with the alternate AC power system is quantifiably less safe than low power operation with a fully qualified AC power system. The prefiled testimony of Messrs. Minor and Weatherwax established that a loss of offsite power transient during low power operation is seven times more likely to lead to a core vulnerable condition with the alternate configuration than with a fully qualified source of onsite AC power, and that the likelihood that the plant would experience an event leading to core vulnerability during low power operation is 2-1/2 times greater under the alternate configuration than it would be under the qualified configuration. Such testimony was directly responsive to the comparsion mandated by the Commission in CLI-84-8.

The Board clearly erred in striking this testimony. Although there is no regulatory requirement for PRA-type analyses, that is quite beside the point, and does not support the Board's assertion that a probabalistic risk assessment is not "a proper method to be used in this proceeding." See Tr. 2858. These witnesses chose to utilize probabalistic analyses as part

of their comparison of the relative safety of the alternate AC power configuration and a fully qualified AC power system. While there may be no regulatory requirement to perform PRA analyses, there clearly is also no regulatory bar to the use of probabalistic data, if available, to evaluate the relative safety of operation in different configurations. This Board cited no precedent for barring this testimony, and the NRC Staff admitted that not only is there no prohibition upon the performance or use of PRA data in NRC proceedings, but in fact the Staff has actually required PRAs in some proceedings. See Tr. 2856-57.

We bring this to the Board's attention at this time so that it may remedy the error prior to its issuance of a partial initial decision. The Board may remedy this error by promptly reconvening the proceeding and admitting this testimony for cross-examination. If this testimony is admitted, we submit that the testimony will establish even more clearly than is now established on the record that low power operation with the alternate AC power configuration proposed by LILCO is less safe than operation with fully qualified onsite source of power.

V. LILCO Has Failed to Establish that It Complies with All NRC Regulations or That it Has Sought an Exemption From NRC Regulations

In its Application for Exemption, LILCO states that it:

> [S]eeks an exemption under Section 50.12(a) from that portion of General Design Criterion 17, and from other applicable regulations, if any, requiring that the TDI diesel generators be fully adjudicated prior to conducting the low power testing described in LILCO's March 20 motion.

Application at 4 (emphasis supplied). Despite its seeking of an exemption from "other applicable regulations, if any," the evidence LILCO presented at trial fails even to address, much less establish any basis for, granting LILCO an exemption from any regulations in addition to GDC 17.

In fact, however, it is clear from a review of NRC regulations that LILCO does need exemptions from regulations other than GDC 17 because it has failed to comply with those other regulations. Suffolk County submits, as set forth in the Affidavit of Messrs. Minor and Bridenbaugh, filed on June 13, 1984 in response to LILCO's Motion for Summary Disposition on Phases I and II,[15] that LILCO fails to comply with the following

---

15/ See Suffolk County and State of New York Memorandum in Opposition to LILCO's May 22 Motions for Summary Disposition on Phase I and II of LILCO's Proposed Low Power Testing, June 13, 1984.

General Design Criteria: GDC 1-4, 18, 33-35, 37, 38, 40, 41, 43, 44, 46. In addition, LILCO has failed to comply with 10 C.F.R. Part 50, Appendix B, relating to quality assurance. LILCO is not in compliance with GDC 1-4 because its proposed new plant configuration does not include any safety-related or seismically or environmentally qualified onsite AC power systems. LILCO does not comply with GDC 18, 33-35, 37, 38, 40, 41, 43, 44, and 46 because there is no onsite emergency AC power source in the proposed Shoreham plant configuration and since there is no such source, the transfer from offsite to onsite power cannot be tested as required by those criteria. Finally, the proposed alternate plant configuration has not been designed, installed, tested, nor will it be operated in accordance with the criteria set forth in Part 50, Appendix B.16/

There is no evidence that would either support a finding that LILCO complies with the foregoing regulations or establish bases for exemptions from these regulations. Thus, this Board must rule that LILCO has failed to support its Application for an Exemption and thus that the exemption is denied.17/

16/ These bases are described in the County/New York submission of June 13 and will not be repeated in greater detail at this time.

17/ In addition, LILCO has also failed to document that it meets the requirements of 10 C.F.R. § 50.57(a). We will

(Footnote cont'd next page)

VI. LILCO's Request for an Exemption for Phase I and II Prior to the Issuance of Security Findings Must Be Denied

During its closing argument on August 16, LILCO urged that even though the Board had established a security proceeding, this Board could issue a decision granting the exemption for Phases I and II prior to rendering any decision on the security matters. This issue was not properly before the Board at closing argument since it was not part of the issues that were litigated during the August hearing. However, Suffolk County will briefly respond to LILCO's argument.

First, the Board has no authority to issue a license for Phase I or Phase II because under the Atomic Energy Act, the Board and the NRC have authority only to issue construction permits and operating licenses. The Board has no authority to issue a no power license or a license to load fuel. Rather than burden this brief with further argument on this subject, Suffolk County refers the Board's attention to pages 5-11 of

---

(Footnote cont'd from previous page)

not repeat in this brief the arguments that have previously been made by Suffolk County in its Memorandum filed June 13, 1984 in response to the LILCO summary disposition motions. Please refer to pages 27-43 of Suffolk County's June 13 filing for the reasons that the Section 50.57(a) findings cannot be made.

Suffolk County's Opposition to LILCO's Motion for Summary Disposition on Phase I and II (June 13, 1984) in which Suffolk County establishes that any such Phase I and II licenses would be illegal.

Second, LILCO asserted during its August 16 argument that there are no possible security implications during Phases I and II. LILCO's assertions are merely lawyers' arguments. Suffice it to say in this pleading that Suffolk County believes that at any time that fuel loading and cold criticality testing is being undertaken, there are security concerns which are relevant and must be considered. In this regard, Suffolk County reminds the Board that in the North Anna proceeding, the licensing board required full security implementation for the loading of fuel. See Virginia Electric and Power Company (North Anna Power Station, Units 1 and 2), LPB-77-64, 6 NRC 808, 813 (1977). LILCO's security plan is deficient at this time for the reasons set forth in the County/New York security contentions. Thus, there is no basis on which a Phase I or II license could now be issued.

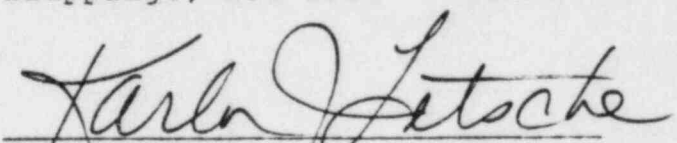
VII. Conclusion

The foregoing brief must be read in conjunction with the Proposed Findings which have submitted jointly by the State of

New York and Suffolk County. We submit that the evidence demonstrates that LILCO has failed to establish that it is entitled to an exemption from GDC 17 or from the other regulations with which it does not comply. Further, the evidence indicates that LILCO has failed to establish that it can satisfy the requirements of Section 50.57(a). For all the foregoing reasons, Suffolk County submits that this Board should rule that LILCO has failed to meet its burden of proof and, accordingly, the exemption and low power license request are denied.

Respectfully submitted,

Martin Bradley Ashare
Suffolk County Department of Law
Veterans Memorial Highway
Hauppauge, New York 11788



Herbert H. Brown
Lawrence Coe Lanpher
Karla J. Letsche
Cherif Sedky
KIRKPATRICK, LOCKHART, HILL,
CHRISTOPHER & PHILLIPS
1900 M Street, N.W., Suite 800
Washington, D.C. 20036

Attorneys for Suffolk County

August 31, 1984