UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Commission

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

LILCO'S COMMENTS IN RESPONSE TO THE
COMMISSION'S ORDER OF APRIL 30TH

I. COURSE OF EVENTS

A.

More than a month and a half have now elapsed since LILCO served by hand on the Commission itself, the Brenner Licensing Board, Suffolk County and the State of New York a "Supplemental Motion for Low Power License." That motion of March 20, 1984, expressly sought immediate Commission consideration of pertinent issues. Thus, the motion stated:

> As a practical matter, LILCO believes that whether Shoreham is entitled to such a license is a question that only the Nuclear Regulatory Commission itself can decide. The intensely political environment that now envelops Shoreham makes virtually certain that the NRC's highest tribunal must act before the plant will be allowed to conduct any operations, even loading fuel. Recognition of this reality prompts LILCO to request:

1. That this Board promptly refer the present supplemental motion to the Commission for decision, pursuant to 10 CFR § 2.718;

2. That if the Board decides against immediate referral, it then consider and decide this supplemental motion in an expedited fashion and thereafter certify its decision to the Commission, pursuant to 10 CFR § 2.730.

Id. at 3-4.

Following the filing of LILCO's motion, there has ensued the following 48-day spectacle:

Day 1: March 20 — LILCO serves its supplemental low power motion by hand on the Commission, Brenner Board and Suffolk County (SC or County), asking that the Brenner Board promptly refer the motion to the Commission or rule expeditiously on it and certify the result to the Commission. Accompanying the motion are affidavits setting out the technical bases for LILCO's request (the substance of LILCO's subsequent prefiled testimony appears in these affidavits).

Day 7:	March 26	SC[1]/ vigorously opposes referral of the motion to the Commission and objects to LILCO's low power request on numerous grounds, including GDC 17. The County also outlines the factual areas it deems necessary to investigate, but it takes no steps to begin the investigation by engaging consultants or seeking discovery.
Day 9:	March 28	A federal Congressman opens political fire on Chairman Palladino, suggesting that he has "pre-judged the merits" of a low power license for Shoreham and demanding, if such is the case, that the Chairman "immediately recuse" himself from the Shoreham proceeding.
Day 10:	March 29	The NRC Staff meets with LILCO to question it about the technical aspects of the March 20 motion; the questions and answers are transcribed. SC attends the meeting and receives the fruits of what, in effect, are Staff depositions of LILCO's experts (by letters dated April 3, 6 and 11, LILCO

1/ The actions and views of New York's Governor are rarely noted in this chronology. They generally track those of Suffolk County.

		provides the Staff and SC additional information requested by the NRC reviewers).
Day 11:	March 30	A new Licensing Board headed by Judge Miller is named to hear the March 20 motion, following "advice" by the Brenner Board "that two of its members are heavily committed to work on another . . . proceeding . . . ." 49 Fed. Reg. 13612 (April 5, 1984). The Miller Board notifies all parties that oral argument on the March 20 motion and objections to it will be heard on April 4.
Day 14:	April 3	SC objects to any oral argument that reaches the merits, on the ground that the County has not had time to prepare.
Day 15:	April 4	Lengthy oral argument occurs before the Miller Board, focusing on GDC 17 and schedule matters.
Day 17:	April 6	The Miller Board rules that GDC 17 does not preclude reaching the facts of LILCO's motion, frames the issues for hearings, and provides that discovery will end on April 16, written testimony be filed on April 20, and hearings occur on April

		24-28 and 30, and May 1-5.
Day 22:	April 11	The Suffolk County Executive fires the second political salvo against Chairman Palladino. In a letter not served on the other parties until five days after its delivery to the Commission, the SC Executive repeats earlier political allegations of bias on the Chairman's part and insists, as paraphrased in a later SC pleading, "that the present Licensing Board with jurisdiction over LILCO's low power license request be promptly disestablished by the Commission and a further Commission order be issued to assure no further Licensing Board violations of due process of law." SC serves "boilerplate" discovery requests that could have been prepared immediately upon receipt of LILCO's affidavits three weeks earlier; SC makes further discovery efforts on April 12, 13 and 16, but eschews LILCO's invitation to review documents around the clock from April 13 through April 16.
Day 23:	April 12	The Congressman renews his March 28 assault on Chairman Palladino,

		once again suggesting that he recuse himself from the Shoreham proceeding.
Day 27:	April 16	SC files papers with the Commission and with the Miller Board asking that the Board's April 6 order be overturned, repeating its arguments of March 26, April 3 and April 4.
Day 30:	April 19	LILCO and the NRC Staff oppose SC's request in papers filed with the Commission and Miller Board.
Day 31:	April 20	The Miller Board declines to vacate its April 6 order and refuses to certify the matter to the Commission.
		LILCO and the NRC Staff file their direct testimony (the Staff having previously issued SER Supplement No. 5, evaluating the low power request). SC submits a letter saying, once again, that it has not been allowed sufficient time to produce testimony.
Day 34:	April 23	After a lengthy meeting, the Commission leaves in place the Miller Board's April 6 order.
		SC then seeks a temporary restraining order from U.S. District

		Judge Johnson. On less than two hours' notice, the judge hears argument from all parties, based on an incomplete record from the Miller Board as presented by SC; the judge refuses to accept the remainder of the record tendered by LILCO. The judge declines to rule that evening but promises a decision by 12:00 noon the next day.
Day 35:	April 24	Hearings begin on Long Island and continue throughout the day. LILCO has in attendance 7 witnesses (4 from Long Island, 2 from San Jose, California, and 1 from Boston) and numerous supporting consultants from the same locations. Counsel for Governor Cuomo appears in the morning but leaves after lunch and does not reappear.
Day 36:	April 25	Hearings resume on Long Island. At approximately 11:30 a.m., shortly before the end of LILCO's direct case, Judge Johnson finally rules, issuing a TRO. The hearings stop and the throng assembled to support them disperses. Counsel for LILCO, SC and the NRC appear before Judge Johnson in Washington, D.C., regarding the bond to be posted by SC.

Day 37: April 26

Counsel for LILCO, SC and the NRC appear before U.S. District Judge Gesell to schedule briefing and hearings on jurisdictional arguments and on other matters pertinent to whether a preliminary injunction should issue; LILCO agrees to file its brief within 1-1/2 days in order to obtain a May 3 hearing.

In response to Judge Gesell's questioning, SC advises that schedule alterations would not moot the lawsuit since the County has that morning amended its complaint by asking to enjoin further participation by Chairman Palladino, Chief Judge Cotter and Judges Miller, Bright and Johnson. Judge Gesell admonishes SC for having no factual allegations supporting its bias claims and for attempting to delay administrative hearings by resort to the courts.

Following the scheduling conference, counsel for LILCO asks counsel for SC whether any accommodation can be reached on scheduling. The County responds that it will not discuss scheduling until the NRC indicates its willingness to alter the schedule.

Late in the day, the Miller Board is informed that the Commission has ordered a conference of the Board and parties regarding a new schedule.

The Board then schedules such a conference for 2:00 p.m. the next day and advises the parties by phone. LILCO is reached at 9:00 p.m. SC does not then respond that it will be unable to attend.

Day 38: April 27

Having cancelled a number of prior business commitments, counsel for LILCO travels from Richmond to Bethesda for the conference. At 2:00 p.m. and again at 3:30 p.m. the Board and counsel for LILCO and the NRC Staff attempt to comply with the Commission's directive of the prior day. Counsel for SC do not appear because of a prior engagement with their client. The County does send a written statement insisting that the Miller Board have no further part in the proceeding and setting August 7 as the earliest date acceptable to County for renewal of hearings. Shortly after 4:00 p.m. counsel for SC appear; by then the Board has left. No one knows

whether the prior day's Commission order remains in effect. Counsel for SC, LILCO and the Staff discuss the time for resumption of hearings. As indicated, SC wants August 7; the Staff suggests a seven week delay; and LILCO the resumption of hearings the last week in May (that is, over two months after the filing of its March 20 motion).

A Deputy County Executive fires the fourth political salvo for SC, renewing the County Executive's attack of April 11. Thus, the Deputy seeks to "disestablish [the Miller] Licensing Board" and to prevent Chairman Palladino "from participating in any Shoreham-related matters."

LILCO files with Judge Gesell motions to dismiss, a motion to strike a County lawyer's affidavit, and two supporting briefs, indicating that the federal district court has no subject matter jurisdiction over the scheduling or disqualification issues, that SC and Governor Cuomo fail to state a claim upon which relief can be granted, that they fail to meet the

		Virginia Petroleum Jobbers test, and that a lawyer for SC has inappropriately made himself a witness in the proceeding. LILCO expects the TRO to be dissolved and the case to be dismissed on May 3.
Day 41:	April 30	The Commission produces its first enduring order (the order of April 26 apparently having been recalled without ever taking public written form). Without hearing from the parties or awaiting action by the federal court, the Commission suddenly vacates the schedule adopted by the Miller Board 24 days earlier and sets argument on issues easily identifiable over five weeks earlier when LILCO's March 20 motion was first filed.
Day 42:	May 1	Having attained their goal of delay by the Commission's April 30 order, SC and Governor Cuomo voluntarily dismiss their federal lawsuit, thereby avoiding the merits of LILCO's and the NRC's position in that suit.
Day 45:	May 4	The parties file yet another round of briefs, this time with the Commission alone.

Day 48:	May 7	Forty-eight days after LILCO asked that its low power motion be immediately referred to the Commission, the parties again argue threshold issues concerning the law, facts and schedule, this time in front of the Commission.

B.

In LILCO's view, the sequence of events just described is profoundly disturbing. It is not disturbing because the Commission itself has taken an active interest in the matter. LILCO sought such an interest on March 20. To repeat:

> As a practical matter, LILCO believes that whether Shoreham is entitled to such a license is a question that only the Nuclear Regulatory Commission itself can decide. The intensely political environment that now envelops Shoreham makes virtually certain that the NRC's highest tribunal must act before the plant will be allowed to conduct any operations, even loading fuel.

LILCO's Supplemental Motion for Low Power Operating License at 3-4.

It is profoundly disturbing, first, because the issues that the Commission now wants to hear on May 7 have long been apparent; if the Commission wished to involve itself in them prior to completion of the Licensing Board's work, it would

have been far more productive to have done so in March. Second, the inconsistency with which the Commission has acted is disquieting. It inspires little confidence by LILCO, the nuclear industry, an increasingly apprehensive financial community2/ or a thoroughly confused public in the stability of the administrative process. The inconsistency burdens parties pulled first one way and then another by rapidly fluctuating demands. Especially unsettling is the Commission's sudden decision to abandon the Miller Board's procedural arrangements virtually on the eve of their defense before Judge Gesell; this action cannot be squared with the NRC's strenuous prior defense of the arrangements before Judges Johnson and Gesell, or with the distinct likelihood that they would have been successfully defended.3/ Finally, there is the unhappy possibility that political bullying has had its intended result.

2/ This community has become notably anxious that Suffolk County will succeed in its goal of prolonging the litigation of Shoreham until no life remains in LILCO.

3/ In LILCO's judgment, the federal suit would have been dismissed for the reasons set out in LILCO's April 27th Motions to Dismiss, Memorandum of Law in Support of Motion to Dismiss for Lack of Subject Matter Jurisdiction and Failure to State a Claim Upon Which Relief Can Be Granted and in Opposition to Motion for Preliminary Injunction, Motion to Strike Affidavit of Lawrence Coe Lanpher, and supporting Memorandum of Law.

C.

The factors just noted would be disturbing enough had they been isolated instances of confusion and drift, but they are not. It seems that Shoreham's operating license proceeding is to be eternal. The proceeding just entered its ninth year; it has been underway since April 1976. To date, four different Licensing Boards -- and enough judges to staff six boards[4]/ -- have sat on various aspects of the case; three boards are still sitting.

With few interruptions, the eight years since April 1976 have involved constant, complex licensing activity. Hundreds of issues have been raised by a large array of intervenors. Immense informal and formal discovery has taken place -- e.g., hundreds of thousands of pages of documents have been formally produced or made available for inspection; the depositions of over 115 people have been taken in places from New York to California; scores of issues have been settled after the informal exchange of great amounts of information and extended discussion and negotiation. Since the beginning of

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4/ Listed in alphabetical order, 17 NRC judges have dealt so far with the Shoreham OL proceeding: Bowers, Brenner, Bright, Carpenter, Carter, Cline, Ferguson, Frisiak, Harbour, Head, Johnson, Jordan, Laurenson (on two boards), Miller, Morris, Paris, and Shon (on two boards).

formal evidentiary sessions two years ago, over 14,500 pages of written direct testimony have been served; over 160 days of hearings have been held; and the transcript has passed 30,000 pages. Since 1976, simply the rulings by the various Licensing and Appeal Boards involved in the proceeding, as well as by the Commission itself, have exceeded 2,800 pages.

As suggested by the vast amount of time consumed and verbiage generated, the licensing process has often moved at a glacial pace. Along the way, due process in excess has been provided to those who wished to question and challenge the Shoreham application. With rare exception, and none pertinent to low power operation, all questions and challenges to date -- once tested during sworn adjudicatory hearings -- have been persuasively answered or refuted. As the massive Partial Initial Decision of September 21, 1983 makes unavoidably clear, due process in excess has not resulted in showings of inadequacy at Shoreham.5/

5/ See generally Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-83-57, 18 NRC 445 (1983). The quality assurance litigation is indicative. After near-interminable discovery and hearings, SC's claims were emphatically rejected. See 18 NRC at 578-622 (opinion alone; findings not published). The Brenner Licensing Board noted its frustration with the County's mistreatment of the vast QA record:

> Once again, the Board, in reaching its conclusions on these contentions, is faced with a

(footnote cont'd)

Confronted by this situation LILCO has been driven to ask for expedition on numerous occasions. The request accompanying the Company's March 20, 1984 motion is only the latest in a long series of attempts by the Company to obtain rudimentary fairness for the applicant, including an end ultimately to the licensing proceeding.

While LILCO does ask for expedition now, as often in the past, by no stretch of imagination has this operating license proceeding involved a rush to judgment. No case that has already involved four Licensing Boards, 17 NRC judges, and

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(footnote cont'd)

> massive record, based on 55 days of hearing, extensive written testimony and exhibits, and voluminous proposed findings of fact and opinions by the parties that are disparate, at least. The difficulty of our task, trying to be objective in consideration of each of the parties' submissions, is further compounded by the County's misrepresentation of the complete record -- by omission, selective citations and distortion of recorded testimony.34/

> 34/ Our view of the County's performance is strictly our own. Our conclusion, however, is not without independent, if biased, corroboration. LILCO, on its own initiative, took the trouble of analyzing all 732 proposed findings of the County. It found 365 (50%) of them inaccurate, for 439 reasons (157 out of context, 100 with no citation, 105 with unjustifed inference and 67 refuted on the record).

18 NRC at 579.

eight years can conceivably be viewed as a rush to judgment. Quite to the contrary, this proceeding's place in history is secure as one of the most protracted, intense adjudications in American administrative practice. Expedition now to bring one phase of the proceeding to a conclusion will not offend due process. The obverse would; it has long since ceased to be either fair as a matter of law or desirable as a matter of public policy to compel LILCO to devote tremendous human and financial resources to litigation that has already gone beyond the outer bounds of that which would be deemed tolerable in any other judicial or administrative setting.

Against this background, the psychodrama of the past 48 days is acutely unfortunate. The time is long overdue for the NRC to engage the Shoreham proceeding in a systematic, coherent and expedited fashion. We respectfully urge, and fervently hope, that such will be the case after May 7th.

II. RESPONSE TO COMMISSION INQUIRIES

Paragraph 2 of the Commission's April 30 Order asked the parties to address the three following questions:

> (1) The Board's Order states that if public protection at low power operation without the diesel generators required for full power operation is equivalent to (or greater than) the protection afforded to the public at full power operation with such approved generators, then LILCO's motion for

> low power authorization should be granted. In these circumstances, what justification is there for waiving the emergency preparedness requirements applicable to full power operation?
>
> (2) What is the legal basis for holding that General Design Criterion 17 is not applicable for low power operation? Would this argument apply to other criteria?
>
> (3) What would be the technical justification for authorizing low power operation without the onsite electric power system required by GDC 17? What would be the basis of any calculation or judgment that protection to the public at low power under these circumstances would be greater than or equal to public protection at full power?

LILCO will address these inquiries as follows. First, we discuss question (2) concerning the legal justification for LILCO's Supplemental Motion for Low Power License and why as a matter of law it is not necessary to complete hearings on the TDI diesel generators before issuance of a low power license. Second, we address question (1) concerning the standard for judging LILCO's proposal and the concomitant inquiry about emergency planning. Third, we address question (3) dealing with the technical justification for authorizing low power operation without the TDI diesel generators. Finally, questions of recusal and schedule are considered.

A. Completion Of Hearings Concerning The TDI Diesels Is Not A Necessary Predicate For Issuance Of A Low Power License

A consistent reading of the Commission's regulations affords LILCO the right to seek a low power license without first completing hearings concerning the reliability of the TDI diesel generators. Individual regulations should not be construed in a vacuum. They must be harmonized. Thus, the requirements of GDC 17 must be read in concert with 10 CFR § 50.57(c) providing for interim low power licensing absent completion of hearings necessary for full power operation.6/ This harmonizing of regulations is not new and its implementation here does not deviate from past practice. Previous Licensing Boards and the Commission have recognized the lower risks attendant to low power testing. Consequently, they have acknowledged the lesser need for literal compliance with all regulations otherwise attendant to operation at full power.

Section 50.57(c) provides, in pertinent part, that:

> An applicant may, in a case where a hearing is held in connection with a pending proceeding under this section make a motion in writing, pursuant to this paragraph (c), for

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6/ Contrary to the implication of the Commission's question in paragraph 2(2) of its April 30 Order, the Licensing Board did not hold and LILCO does not contend "that General Design Criterion 17 is not applicable for low power operation." GDC 17 applies and its purpose will be fulfilled. It should not, however, be construed in isolation from other regulations such as § 50.57(c).

> an operating license authorizing low-power testing (operation at not more than 1 percent of full power for the purpose of testing the facility), and further operations short of full power operation. Action on such a motion by the presiding officer shall be taken with due regard to the rights of the parties to the proceedings, including the right of any party to be heard to the extent that his contentions are relevant to the activity to be authorized.

10 CFR § 50.57(c).[7/]

This regulation obviously contemplates an interim licensing proceeding to allow low power testing when full power licensing proceedings are incomplete. As the Diablo Canyon Licensing Board recognized:

> Historically § 50.57(c) motions have usually been made prior to the closing of the record in operating license proceedings, but after the completion of the record on any contentions which are relevant to the sought-for testing license. This timing permitted the presiding officers to make the necessary findings and conclusions with respect to the testing license prior to the completion of the record on all contentions.

7/ The County and Governor Cuomo have no pending contentions concerning LILCO's Supplemental Motion for Low Power License. Nor is the filing of a § 50.57(c) motion generally an appropriate opportunity for filing new contentions. E.g., Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-728, 17 NRC 777, 803 n.78 (1983); Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-81-5, 13 NRC 226, 233 (1981).

Throughout Shoreham's lengthy operating license proceeding, there have been no contentions raised concerning LILCO's offsite power system, though there has been ample opportunity to do so.

> For purposes of the § 50.57(c) motion, the contentions were those previously allowed in the proceeding. Contentions were considered "relevant" to the motion to the extent that they needed to be resolved prior to criticality.

Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP 81-5, 13 NRC 226, 232-33 (1981).

Absent such an interpretation, § 50.57(c) would be superfluous. If a plant met all regulations necessary for full power operation, there would be no need for interim low power licensing. No applicant would undertake the expense and commitment of resources to participate in an unnecessary licensing proceeding. As the Licensing Board's April 6 Memorandum and Order Scheduling Hearing on LILCO's Supplemental Motion for Low-Power Operating License stated, "[t]he very purpose of this regulation is to permit motions for low-power operations where, as here, the licensing proceedings are not completed because of pending hearings on the satisfaction of all of the requirements of GDC-17, among others." Board Order at 12.

This approach is neither unique nor of recent vintage. More than two years ago, before the amendment of § 50.47, the Licensing Board in the San Onofre proceeding employed a similar analysis. Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-3, 15 NRC 61, 188-90 (1982). There, the applicants had no offsite emergency preparedness plan as required by regulation, though the plant was

otherwise ready to engage in low power testing. The applicants' low power motion "was predicated upon . . . a showing to be presented concerning the relatively lower accident risks associated with low-power, compared to full power, operations." 15 NRC at 185. The Board's conclusion that no offsite emergency plan was necessary is instructive here:

> The Commission itself recently endorsed the general proposition that fuel loading and low-power testing--
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> > involved minimal risk to the public health and safety, in view of the limited power level and correspondingly limited amounts of fission products and decay heat, and greater time available to take any necessary corrective action in the event of an accident. . . .
>
> The Staff's technical presentation in this case reflected substantial research and amply demonstrated the applicability of the Commission's statements to San Onofre Unit 2. Specifically, we find that even in the case of the most serious (and extremely unlikely) postulated accident, there would be some 15 hours available for diagnostic and mitigative actions before core melt would occur. More time would be available for more credible events. In addition, the fission inventories produced by low-power operations of limited duration are a fraction of those produced at full power. Furthermore, the capacity required for heat removal is reduced at low power. On the basis of these factors, we conclude that low-power operations of Unit 2 at San Onofre, as proposed by the Applicants, will involve substantially less risk to the public health and safety than full power operations.

15 NRC at 190. Though San Onofre had an onsite emergency plan, the Board observed that "arguably, one might exempt an applicant from on-site requirements that are irrelevant to low power." 15 NRC at 193 n.114.[8/]

Another Licensing Board reached a similar conclusion, holding that there was no need for emergency planning matters to be resolved prior to low power licensing hearings. Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-81-21, 14 NRC 107, 121-23 (1981).

Nor is the reasoning evident in these two decisions limited to unresolved emergency planning matters. In Duquesne Light Co. (Beaver Valley Power Station, Unit No. 1), LBP-76-3, 3 NRC 44 (1976), an auxiliary river water system was required for full power operation to provide sufficient redundancy for safe shutdown in the event the main intake structure was

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8/ That the Board's analysis was premised in part on § 50.47(c)(1) is of no consequence here. Section 50.47(c)(1) affords an applicant an opportunity to demonstrate that it need not meet all applicable emergency planning standards because they are "not significant for the plant in question." As the San Onofre Board noted, however, § 50.47(c)(1) does not explicitly provide separate and less stringent standards for low power operation. It does not explicitly allow the complete absence of an offsite emergency plan for low power testing. The willingness of the San Onofre Board to apply a less stringent standard for low power testing can only have resulted from its recognition that the Commission's regulations applicable for full power licensing must be read in harmony with the regulatory provisions for interim low power licensing and, accordingly, interpreted in light of low power operating conditions.

damaged. After hearing evidence concerning the nature of activities proposed by the applicant and the resulting fission product inventory, the Licensing Board found that operation of the plant for low power testing did not constitute an undue risk:

> The Applicants have testified that the duration of operation at up to 5 percent of full power will be less than that required for the fission product inventory of the core to build up to 5 percent of its equilibrium full power value. This testimony regarding the accidents occurring at power levels not exceeding 5 percent has been reviewed by the Board. The consequences have been found to be acceptable, even in the absence of an auxiliary river water system. Based upon the foregoing, the Board finds that the proposed limited low power operation of the Beaver Valley Unit 1 facility does not constitute an undue risk to the health and safety of the public and is acceptable insofar as conducting such operations without an auxiliary water system is concerned.

3 NRC at 63.

As the Miller Board held in its April 6 Memorandum and Order, such flexibility in evaluating the readiness of a plant to engage in low power testing requires that LILCO be afforded the opportunity to present its evidence that Shoreham satisfies GDC 17 as applied to low power testing. The issue is whether LILCO can engage in the proposed activities without endangering the public health and safety.

In pertinent part, GDC 17 reads as follows:

> An onsite electric power system and an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The safety function for each system (assuming the other system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

10 CFR Part 50, Appendix A, GDC 17. For full power operation, LILCO will have a qualified "onsite" power source. For low power testing, however, such an "onsite" qualified power source is not necessary to satisfy GDC 17.[9/] Instead, LILCO has proved that it has sufficient redundancy in its offsite electric power system and the added 20 MW gas turbine and four GM EMD diesel generators at the site to assure that fuel design limits and design conditions of the reactor pressure boundary will not be exceeded as a result of anticipated operational occurrences and that the core will be cooled and containment integrity and other vital functions maintained in the event of postulated accidents.

9/ LILCO's "offsite" AC power supply for Shoreham includes two emergency power sources physically at the site. Both the 20 MW gas turbine and four GM EMD 2.5 MW diesel generators are at Shoreham and will start automatically upon the loss of other offsite power supplies.

The Commission has recently employed an indistinguishable analysis. Though numerous issues remained unresolved with respect to quality assurance at the Diablo Canyon facility, the Commission recognized that there was no need for hearings concerning Pacific Gas & Electric's request to load fuel and conduct precriticality testing because these activities presented no significant safety issues:

> Since there are no significant safety issues material to fuel loading and pre-criticality testing, and there will be no prejudice to future Commission decisions, a consideration of the equities favors denial of the Joint Intervenors' request to defer the decision on the licensee's request for reinstatement and extension of the license to load fuel and conduct pre-criticality testing pending the holding of a hearing on the licensee's request.

Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-83-27, 18 NRC 1146, 1149 (1983).

Similarly, for proposed Phases I (fuel load and pre-criticality testing) and II (cold criticality testing) at Shoreham,[10/] the evidence before the Commission demonstrates that no AC power is needed to achieve compliance with GDC 17.[11/] That criterion requires only that an onsite electric

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10/ The activities in Phases I and II are discussed in more detail at pages 33 through 36 below.

11/ Neither the County nor Governor have challenged LILCO's assertion that no AC power is needed to cool the core during Phases I and II; nor have the intervenors challenged LILCO's Chapter 15 analysis for any of the four phases.

power system and an offsite system "provide sufficient capacity and capability" to achieve the specified goals. With respect to Phases I and II, the "sufficient capacity" is zero. Hence, no onsite AC power source is necessary to meet the criterion's requirements.

With respect to the activities sought to be licensed for Phases III (heat-up and low power testing up to 1% of rated power) and IV (low power testing from 1% to 5% of rated power),[12/] LILCO has followed the reasoning of previous Licensing Boards to demonstrate that the proposed low power testing will pose no undue risk to public health and safety. As discussed below, LILCO has used the existing FSAR Chapter 15 safety analysis as a benchmark to ascertain whether operation of Shoreham as proposed presents any undue risk to the public. LILCO's evidence proves that even in the event of a loss of coolant accident during Phase IV, a minimum of 86 minutes, and a more realistic estimate of more than three hours, would be available to restore necessary cooling to the core. In the event of an accident or transient without a loss of coolant accident, more than 30 days would be available before AC power was needed. LILCO has further proved that, through its extensive offsite power sources, it would be able to restore AC

12/ Phases III and IV are more particularly described at pages 36-37 below.

power within far less than the time required. As described in the affidavits and testimony of LILCO's witnesses during the hearings on April 24 and 25, AC power to Shoreham can be restored through many sources in a matter of minutes.

The Licensing Boards for San Onofre, Diablo Canyon and Beaver Valley engaged in similar analyses. Indeed, this Commission engaged in a similar analysis when it determined that emergency planning was not necessary for issuance of a low power license and in granting Diablo Canyon a license for fuel loading and precriticality testing. In short, the analytical approach taken in LILCO's March 20 motion is not unique. Thus, there

impose full power licensing requirements on low power testing at Shoreham.[13/]

B. Standard For Judging LILCO's Motion

The Commission has already concluded that operation of a nuclear plant without an offsite emergency plan does not present an undue risk to the public health and safety for

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13/ The Commission has inquired whether other criteria

operation at power levels up to 5% of rated power. 46 Fed. Reg. 61132-33 (1981); Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-83-17, 17 NRC 1032 (1983); Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-3, 15 NRC 61, 188-90 (1982). Given this determination, LILCO's Supplemental Motion requires only an assessment of whether the absence of TDI diesels during low power testing poses undue risk to public health and safety.

Accordingly, the Board's April 6 Order announced a broad standard for judging LILCO's low power motion:

> The Board will be required to determine whether there is reasonable assurance that the activities associated with LILCO's request for a low-power license can be conducted without endangering the health and safety of the public, in the absence of resolution by another licensing board of the emergency diesel generator contentions related to full-power operation.

Board Order at 6. The Board based its reasoning in part on Shoreham's September 21, 1983 Partial Initial Decision:

> Even though we resolve all contentions which are the subject of this Partial Initial Decision favorably to LILCO, at least insofar as operation at levels up to five percent of rated power is concerned, we do not authorize the issuance of the license for fuel loading and low power operation which LILCO has requested at this time. No such license may be authorized until such time as that portion of Suffolk County's recently admitted

> emergency diesel generator contention may be resolved in LILCO's favor, at least insofar as necessary to support a finding of reasonable assurance that Shoreham can be operated at levels up to five percent of rated power without endangering the health and safety of the public.

18 NRC at 445. Moreover, the Commission has specifically ruled that offsite emergency planning matters need not be resolved prior to low power testing by LILCO. Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-83-17, 17 NRC 1032 (1983). Accordingly, inherent in the standard set by the Miller Board is the assumption that LILCO has requested permission to operate Shoreham at low power levels without relying on the TDI emergency diesel generators and without having a fully litigated offsite emergency plan.14/

14/ The Miller Board provided guidance for determining whether the broad standard has been met:

> If the evidence shows that the protection afforded to the public at low power levels without the diesel generators required for full power operations, is equivalent to (or greater than) the protection afforded to the public at full power operations with approved generators, then LILCO's motion should be granted.

Board Order at 7. As with the broad standard, this specific factual inquiry must inherently include the assumption that Shoreham will not have fully litigated diesels or an offsite emergency plan during low power operation.

The Board, therefore, has essentially mandated a comparison between the protection provided by Shoreham in its current configuration and that provided by a plant operating at 5% power without an emergency plan but with approved diesel generators. It follows that if LILCO can demonstrate that the analysis of a particular accident or transient is independent of the onsite diesel generators, no further inquiry is necessary; the consequences of this event will be the same as those for a plant operating at power levels up to 5% with approved diesel generators. Where an accident or transient does rely on the use of onsite diesel generators, LILCO must demonstrate that, under the circumstances present at Shoreham, the event will not result in consequences more severe than those resulting from the same accident at a plant that has approved diesel generators.15/ As demonstrated below, LILCO has done this by proving that for accident and transient events that rely on diesel generators, there is ample time to restore power to provide the necessary core cooling prior to the onset of any fuel damage. Since fuel damage will not occur, there is reasonable assurance that the consequences of the accident or transient event will not exceed those of a plant with approved diesel generators operating at 5% of rated power.

15/ In any such an analysis, Shoreham must be compared to a plant that meets regulatory requirements. To the extent Shoreham exceeds regulatory requirements in pertinent areas (e.g., offsite power sources), the comparison must favor LILCO.

In short, LILCO's analysis has been performed in a way that obviates the need for any consideration of offsite emergency planning.

C. Technical Justification For Authorizing Low Power Operation Assuming The Unavailability Of Onsite Diesel Generators

The technical justification for operation of Shoreham during the activities proposed for low power testing was originally presented in the affidavits accompanying LILCO's March 20 motion.[16/] The information presented in those affidavits was refiled as written direct testimony on April 20, for use during hearings conducted by the Licensing Board on April 24-25. While the format of this testimony differs from the affidavits, its substance does not.[17/]

16/ The affidavits served March 20 included the following:

Affidavit of Jack A. Notaro and William E. Gunther, Jr. (Notaro Affidavit);

Affidavit of William G. Schiffmacher (Schiffmacher Affidavit);

Affidavit of Dr. Glenn G. Sherwood, Dr. Atambir S. Rao and Mr. Eugene C. Eckert (Sherwood Affidavit); and

Affidavit of William J. Museler (Museler Affidavit).

17/ The testimony included:

(footnote cont'd)

The evidence just identified describes the activities to be conducted during four phases of low power testing at Shoreham, the applicable safety analysis, and LILCO's ability to provide AC power in response to anticipated accidents. The four phases include:

> Phase I: fuel load and precriticality testing,
>
> Phase II: cold criticality testing,
>
> Phase III: heat up and low power testing to rated pressure/temperature conditions (approximately 1% rated power); and
>
> Phase IV: low power testing (1-5% rated power)

To assure that the activities proposed during these phases of low power testing will not pose any undue risk to the public health and safety, LILCO reviewed the spectrum of accidents and transients considered in Chapter 15 of the Shoreham Final Safety Analysis Report (FSAR), using the assumption that

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(footnote cont'd)

> Testimony of William E. Gunther, Jr. (Gunther, ff. Tr. 198);
>
> Testimony of Atambir S. Rao, Eugene C. Eckert, George F. Dawe and Robert A. Kascsak (Rao, et al., ff. Tr. 26);
>
> Testimony of William G. Schiffmacher (Schiffmacher, ff. Tr. 480); and
>
> Testimony of William J. Museler (Museler, ff. Tr. 554).

the existing onsite AC power source was not available. Chapter 15 of the Shoreham FSAR provides the results of analyses for the spectrum of accident and transient events that must be accommodated by the plant to demonstrate compliance with the NRC's regulations. Sherwood Affidavit at ¶ 4; Rao, et al., Tr. 275. The proper scope of Chapter 15 of Shoreham's FSAR was the subject of previous review and litigation in this proceeding. The NRC Staff reviewed the Shoreham FSAR, including the Chapter 15 analysis, and approved that analysis in its Safety Evaluation Report for Shoreham. Sherwood Affidavit at ¶ 4; Rao, et al., Tr. 276. The Brenner Licensing Board, in its Partial Initial Decision of September 21, 1983, found that the spectrum of events analyzed in Chapter 15 was appropriate and adequate. 18 NRC 565-67. Consequently, it is appropriate to rely on Shoreham's Chapter 15 analysis as a basis for judging the protection provided to the public.[18/]

Described below is a summary of LILCO's evaluation of the Shoreham plant for the activities proposed during Phases I through IV. It demonstrates that those activities will pose no undue risk to the public health and safety.

18/ The County has hired no consultants and proffered no evidence concerning this analysis. The Staff agrees with LILCO's analysis. Thus, any further proceedings should focus only upon LILCO's ability to restore power within the parameters established by the Chapter 15 review.

1. Phase I: Fuel Load and Precriticality Testing

The technical justification for operation of Shoreham during this phase is set out in more detail in LILCO's motion for summary disposition concerning Phase I activities, filed with these comments. In summary, during Phase I there are no fission products in the core. Therefore no decay heat would be generated following an accident and there would be no radioactive materials to be released from the reactor. As a result, no AC power, either onsite or offsite, is required to protect the public health and safety during this phase. Accordingly, even if one of the accident or transient events analyzed in Chapter 15 were to occur (and most are impossible or highly unlikely), there would be no risk to the public health and safety.

2. Phase II: Cold Criticality Testing

Again, detailed justification for permitting operation of Shoreham during Phase II is contained in LILCO's motion for summary disposition concerning Phase II. As in Phase I, during Phase II, the accident and transient events analyzed in Chapter 15 would pose no threat to the public health and safety, even assuming the unavailability of an onsite power source. The fission products generated at the extremely low power levels (.0001% to .001%) achieved during Phase II testing, and the

short periods of time at these power levels, produce an extremely low level of fission products in the core. Thus, there is essentially no radioactivity to be released to the public in the event of an accident and there is essentially unlimited time available to restore cooling to the core.

3. Phases III and IV: Heat Up and Low Power Testing (up to 1% and 1%-5% of Rated Power)

During Phase III of low power testing, reactor heatup and pressurization are achieved, and the power level is taken to approximately 1% of rated power. In Phase IV, testing is performed at power levels up to 5%. Operation of the plant during Phases III and IV poses far less risk to the public health and safety than does operation of the plant at 100% rated power. This reduced risk is generally attributable to three factors. First, operation at low power results in a small inventory of fission products in the core compared to full power operation. This low fission product inventory substantially reduces the amount of decay heat present in the core following shutdown and substantially reduces the radioactivity in the core that could be released upon fuel failure. Sherwood Affidavit at ¶ 26; Rao, et al., Tr. 307. Second, operation of the plant at low power gives the operator increased response time to take appropriate manual actions. This minimizes the severity of transients and in some cases prevents the need for

automatic operation of the plant's safety systems. Sherwood Affidavit at ¶ 27; Rao, et al., Tr. 300-01. And third, capacity requirements for mitigating systems (such as cooling and ventilation systems) are substantially reduced because of the low power levels. This reduces the amount of plant equipment needed to mitigate events (i.e., fewer pumps) and, as a result, reduces AC power requirements. Sherwood Affidavit at ¶ 28; Rao, et al., Tr. 301.

Again, Chapter 15 of Shoreham's FSAR provides the framework for assessing protection of the public health and safety during Phases III and IV, assuming the TDI diesels are unavailable. Of the 38 events included in Chapter 15, three cannot occur during these phases. Sherwood Affidavit at ¶ 24; Rao, et al., Tr. 298. Of the remaining 35 events, 31 do not require an assumption of the loss of offsite AC power concurrent with the event. Thus, the assessment of these Chapter 15 events during Phases III and IV is unaffected by the status of the diesel generators, since they are not required to mitigate these events. Sherwood Affidavit at ¶ 25; Rao, et al., Tr. 302.

For the four Chapter 15 events that do assume a loss of offsite AC power, the existing analyses rely in some measure on the availability of an onsite power supply. Therefore, the issue is whether there is reasonable assurance that emergency

AC power will be available to accomplish the required safety functions normally powered from the onsite power supply. The four pertinent events are loss of AC power, pipe breaks inside the primary containment (loss of coolant accident), pipe breaks outside primary containment (steam line break accident) and feedwater system piping break. Sherwood Affidavit at ¶ 29. Of these four events, the loss of coolant accident event is potentially the most significant because it has the potential for the most severe loss of coolant inventory in the reactor vessel. Sherwood Affidavit at ¶ 29; Rao, et al., Tr. 302. In the unlikely event of a LOCA during Phase III, a realistic assessment of the accident sequence indicates that more than 24 hours would be available to restore AC power without exceeding fuel limits specified in 10 CFR § 50.46 and Appendix K. Rao, et al., Tr. 302. Even using very conservative assumptions, more than six hours would be available to restore cooling to prevent the core from exceeding 10 CFR § 50.46 limits. Rao, et al., Tr. 303. And during Phase IV, more than three hours would be available under a realistic assessment; 86 minutes would be available even under the extremely conservative Appendix K assumptions. Rao, et al., Tr. 307. Moreover, even if the Appendix K limits were reached, there would be no release of fission products during Phases III and IV because no fuel perforation would occur; at low power there is a significant margin between

the Appendix K temperature limit and the temperature at which cladding perforations would occur. Rao, et al., Tr. 307, 309.

The public health and safety will be protected because AC power will be available in sufficient time to mitigate these events. LILCO's affidavits and testimony have shown that it strains credulity to assume that all AC power to Shoreham will be lost. And further, even if that assumption is made, AC power can be restored to Shoreham from a multitude of power sources in a matter of minutes -- far less than the time available to restore power in the event of a worst case accident. These conclusions are apparent from the following analysis.

a.

At the outset, a LILCO system-wide blackout is not likely. LILCO's bulk power transmission system has a generating capacity of 3,721 megawatts, achieved through a combination of various types of generating units. Since the Northeast Blackout of 1965, there has been no loss of the entire LILCO grid. Only once since then has LILCO lost any appreciable portion of its transmission system. Despite the lack of any procedures then in effect for restoring power to Shoreham, power was completely restored in slightly over one hour. If such an event were to occur today, power could be restored within minutes using any one of a number of facilities

and procedures now available. Schiffmacher Affidavit at ¶ 10; Schiffmacher, Tr. 520.[19/]

Moreover, LILCO's 138 KV and 69 KV high voltage transmission network is tied to the New York Power Pool and the New England Power Exchange. Thus, in the event LILCO suffered an internal power deficiency, ample power would be available to LILCO through three interconnections with the New York Power Pool and one interconnection with the New England Power Exchange to supply power to Shoreham. Schiffmacher Affidavit at ¶¶ 7, 9; Schiffmacher, Tr. 522-24.

b.

The configuration of LILCO's transmission circuits feeding Shoreham further assures the availability of power to the site. Shoreham is served by multiple circuits over different rights-of-way, as well an underground line. Four 138 KV transmission circuits run to Shoreham along two separate and independent rights-of-way. Additionally, three 69 KV circuits enter the Wildwood Substation, approximately one mile south of Shoreham, and, from there, a separate 69 KV line enters the site. Schiffmacher Affidavit at ¶¶ 12, 13; Schiffmacher, Tr.

19/ The Schiffmacher testimony was improperly collated when bound into the transcript. LILCO will cite the transcript pages as marked even though they are not in the proper sequence.

517-19. Significantly, LILCO's transmission facilities for Shoreham exceed the regulatory requirements contained in GDC 17, which states in pertinent part that:

> Electric power from the transmission network to the onsite electric distribution system shall be supplied by two physically independent circuits (not necessarily on separate rights of way) designed and located so as to minimize to the extent practical the likelihood of their simultaneous failure under operating and postulated accident and evironmental conditions. A switchyard common to both circuits is acceptable.

10 CFR Part 50, Appendix A, GDC 17.

c.

The ability to provide power to Shoreham is further assured by a number of independent gas turbines located at various places on LILCO's system and designed to start during system blackout conditions. There are 10 gas turbines at Holtsville (approximately 20 miles from Shoreham), five of which will have black start capability.[20/] Schiffmacher Affidavit at ¶ 18; Schiffmacher, Tr. 508. Actual tests have shown that power can be restored to Shoreham using these gas turbines in six minutes. Schiffmacher Affidavit at ¶ 18; Schiffmacher, Tr. 508. Restoration of power using Holtsville gas turbines

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20/ "Black start" means the ability to start independently of another power source.

will be tested bi-weekly during Phases III and IV using a procedure designed for restoring power to Shoreham. Schiffmacher Affidavit at ¶ 18; Schiffmacher, Tr. 507.

d.

Providing still more black start power capability in the event of a system blackout are two gas turbines east of Shoreham at Southold and East Hampton, either of which is capable of supplying adequate power to the plant. These units operate independently of the 10 Holtsville gas turbines. Schiffmacher Affidavit at ¶ 19; Schiffmacher, Tr. 502-06. Each of these sources will be tested periodically. Museler, Tr. 577. Moreover, LILCO has black start gas turbines at each of its major generating stations, including Port Jefferson, which is 11 miles west of Shoreham and connected to it through a 69 KV line. Schiffmacher, Tr. 500-01.

e.

If one assumes the failure of all of the sources of power discussed so far, despite their diversity, redundancy and reliability, AC power can still be supplied to Shoreham using a dedicated 20 MW gas turbine on the Shoreham site. This turbine is equipped with a fully automatic black start capability. It will start automatically upon the loss of voltage to the 69 KV

bus and can restore power to the plant's emergency buses in less than three minutes. Schiffmacher Affidavit at ¶¶ 20-24; Schiffmacher, Tr. 495-500. This source of power will also be tested periodically. Museler, Tr. 577.

f.

Finally, despite the remote possibility that all of the power sources described above will fail, LILCO has installed a block of four 2.5 MW black start diesel generators at Shoreham. These four General Motors EMD units will be connected directly into the plant's 4 KV bus network and can supply power to the plant's emergency buses. Schiffmacher Affidavit at ¶ 25.; Schiffmacher, Tr. 493-94. These diesels will bypass the station's normal service transformer and reserve service transformer in the event emergency power is needed. Id. Only one of the four General Motors EMD units will be necessary to provide the power required for safe shutdown under normal or accident conditions. Schiffmacher, Tr. 492.

In sum, there is a backup for every credible failure of AC power and more. If an unlikely system-wide failure occurs, power is available through the two power pools to which LILCO is connected and from black start gas turbines at each of LILCO's major generating stations. If these sources fail, independent black start gas turbines at three locations away from

Shoreham will provide power to the plant in minutes using the available transmission system. If the entire transmission system fails, the 20 megawatt gas turbine located at the site is available to start automatically and provide power to Shoreham. And if that gas turbine fails simultaneously with the collapse of everything else, there still remain the four GM EMD diesel generators also located onsite, only one of which is needed to serve required plant loads.

Given all of these power sources, it is highly unlikely that Shoreham will ever lose offsite power during Phases III and IV operation. But if even if such a loss were to be assumed, the protection afforded public health and safety is essentially the same as that afforded any other plant operating at 5% power.[21/] As noted above, even in the most limiting Chapter 15 event, the loss of coolant accident, more than six

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21/ Although differing in context, the reasoning of the Appeal Board in Florida Power and Light Co. (St. Lucie Nuclear Power Plant, Unit No. 2), ALAB-603, 12 NRC 30 (1980), indicates the interrelationship of power sources in determining compliance with GDC 17. The Licensing and Appeal Boards there observed that onsite diesel generators were inherently unreliable, even though technically in compliance with with GDC 17. In considering whether GDC 17 was nonetheless met, the Appeal Board noted that "the ability to restore some source of AC power after a station blackout provides reasonable assurance that such an event will not result in core damage or undue hazard to the public health and safety". 12 NRC at 60-61; see also Consumers Power Co. (Big Rock Point Nuclear Power Station), CLI-76-8, 3 NRC 598 (1976) (one onsite diesel acceptable in light of high availability of offsite power).

hours in Phase III and 86 minutes in Phase IV would be available to restore power using very conservative analytical assumptions. In reality, more than 24 hours and 3 hours respectively, would be available to restore AC power before there would be any risk that fuel limits specified in 10 CFR § 50.46 would be exceeded during Phases III and IV.

To further assure safety of the plant during Phases III and IV, LILCO will initiate reactor cold shutdown in the event of certain conditions that threaten the normal offsite power supply. These conditions include:

(A) A "hurricane warning" for the Shoreham area issued by the National Weather Service;

(B) A "tornado watch" or a "severe thunderstorm watch" for the Shoreham area issued by the National Weather Service;

(C) A "winter storm watch" for the Shoreham area issued by the National Weather Service, including ice storms;

(D) A coastal flood warning for the Shoreham area issued by the National Weather Service, predicting that a high tide greater than five feet above normal high water will occur within 24 hours;

(E) An indication of seismic activity of .01g on the Shoreham seismic monitors;

(F) The outage of two of the four LILCO interconnections to the New York Power Pool and the New England Power Exchange;

(G) A low electric frequency condition on the LILCO transmission system which reaches the alarm setpoint.

Museler, Tr. 561-62. These commitments substantially diminish the already remote possibility of a complete loss of offsite power during low power testing. Finally, LILCO has made a number of other testing commitments to reduce even further the possibility that offsite power will be lost at Shoreham. Museler, Tr. 576-78.

III. RECUSAL

Since April 11, representatives of the County have advanced improper and unfounded demands for the disqualification of Chairman Palladino, Judge Cotter, and Judges Miller, Bright and Johnson. At least three times the County has made these demands; each time it has failed to assert any proper basis for disqualification. It has yet to file a motion for disqualification pursuant to 10 CFR § 2.704.[22/] Apparently the County has no valid basis for disqualification and is using demands for it as yet another ploy to delay hearings.[23/] The disqualification issue ought to be addressed now and summarily.

First, it is incumbent upon a party to seek disqualification expeditiously when a perceived basis arises. Public

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22/ Section 2.704 requires that such a motion be made first before the judge to be disqualified.

23/ Judge Gesell aptly characterized the County's effort at disqualification as a delaying tactic.

Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-751, slip op. at 4-6 (Dec. 6, 1983). SC's perceived basis must date back to April 11 at the latest, given County Executive Cohalan's letter of that date to Chairman Palladino. Such an improper communication by the County with the Commission, however, is no substitute for a properly framed, filed and served motion for disqualification. Perhaps the County plans to wait until the latest possible moment for filing such a motion in order to achieve maximum delay under the mandatory referral procedure in § 2.704. The Commission should preclude any such tactic by ruling either that a disqualification motion is now barred by laches or by requiring the motion to be filed with the appropriate decisionmaker within five days, decided on an expedited basis and similarly expedited on referral, if that is required. The Commission should explicitly preclude a stay of further hearings incident to LILCO's low power motion pending resolution of any disqualification motion.

Second, disagreement with the pace of proceedings or comments of judges borne of frustration with the County's dilatory tactics are not grounds for disqualification. As the Commission clearly set forth in Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), CLI-82-9, 15 NRC 1363, 1365 (1982):

> "alleged bias and prejudice to be disqualifying must stem from an extrajudicial source and result in an opinion on the merits on some basis other than what the judge has learned from his participation in the case." United States v. Grinnell Corp., 384 U.S. 563, 583 (1966). . . . Indeed, the Commission has expressly adopted this rule, holding that "Preliminary assessments, made on the record, during the course of an adjudicatory proceeding -- based solely upon an application of the decision-maker's judgment to material properly before him in the proceeding -- do not compel disqualification as a matter of law" . . . .

15 NRC at 1365. Again, the County has yet to reference any source of extrajudicial prejudice concerning the merits. Nor has the County attempted to describe any judicial conduct "demonstrating such pervasive bias and prejudice as would constitute bias against a party." 15 NRC at 1366; see also Public Service Co. of New Hampshire, ALAB-751, slip op. at 3 (Dec. 6, 1983).

IV. SCHEDULING

Whether the Commission agrees with the Licensing Board's construction of GDC 17 or whether it finds that GDC 17's literal terms must be met even in the context of a § 50.57(c) motion, the scheduling issue will have to be engaged. In the former case, presumably some additional evidentiary hearings may be permitted on the issues formulated by the Licensing Board. In the latter case, evidentiary hearings would be necessary to develop the factual issues posed by a

§ 50.12(a) exemption request.[24/] Thus, a full understanding of the schedule controversy is essential to an equitable conclusion.

The County has alleged that the time contemplated by the Board's April 6 Order is inadequate to permit it to prepare for litigation of low power issues. SC's complaint is groundless.[25/] It understates the time available to Suffolk County to gain knowledge concerning matters relative to this litigation, overstates the scope of the litigation and hence the breadth of matters to be inquired into, and ignores the County's own dilatoriness in using its available time.

Suffolk County attempts to depict the Board's Order of April 6 as providing the first indication that low power proceedings involving emergency power sources other than the TDI diesels would be conducted. But the County was on explicit notice of LILCO's exact proposal as of March 20, when it was served on the County. That proposal was supported by four

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24/ LILCO's March 20 motion should be considered by the Commission as a request for exemption if that is deemed necessary to allow factual resolution of LILCO's proposal for low power testing.

25/ The April 25 temporary restraining order, though premised on assumed inadequacies in the low power license schedule, was issued without consideration of all pleadings below. And the County voluntarily withdrew the case prior to consideration of LILCO's and the NRC's motions to dismiss and thus prior to consideration of the merits of the case.

detailed affidavits, with attachments, sponsored by LILCO's experts. Moreover, the County knew nearly a month earlier, as of the February 22 conference of the parties, that LILCO would likely be filing proposals for low power operation using backup power sources in addition to the TDI diesels. See, e.g. Tr. 21481-86, 21631-33.[26/] Thus, the County had over two months' notice of the types of power sources upon which LILCO intended to rely. And it had over a month to analyze LILCO's specific proposal for low power operation.[27/]

Further, the County has been on notice for years of the existence of virtually all of the factual issues it now portrays as being newly created. GDC 17 also applied to Shoreham in 1977-81, when the County was formulating its safety contentions. GDC 17 applies to the capacity of offsite as well as onsite electric power systems to support the performance of specified safety functions in the event of postulated accidents. That criterion specifically requires that:

26/ Indeed, in a submittal filed on the Board and parties on February 7, 1984, LILCO urged the Licensing Board to consider the enhanced reliability of LILCO's offsite power system because of the special features included in its design. LILCO's submittal discussed many of the features that were later described in greater detail in its March 20 filing.

27/ LILCO's prefiled testimony differed only in form from its March 20 proposal. The substance was essentially identical. It follows, then, that the County's complaint about the limited time between the filing of testimony and the start of hearings is misleading.

> Provisions shall be included to minimize the probability of losing electric power from any of the remaining supplies as a result of . . . the loss of power from the onsite electrical power supplies.

GDC 17, last paragraph. Moreover, Shoreham's FSAR was required to show that each of the two required offsite power supply circuits was

> designed to be available in sufficient time following a loss of all onsite alternating current power supplies and the other offsite electric power circuit, to assure that specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded.

GDC 17, third paragraph (emphasis added). Clearly, the reliability of offsite power was a subject that should have been raised earlier in this proceeding if the County had any doubts about it.28/

In short, the same offsite power sources that Suffolk County now wants to examine exhaustively were instrumental in the safety analyses contained in Shoreham's FSAR and were available for litigation, if appropriately subject to concern,

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28/ If there is any doubt that the wording of GDC 17 should have prompted an earlier inquiry into the matters the County now wants to probe, the past prominence of the station blackout issue confirms that power reliability issues should have been raised earlier. Station blackout was considered for Shoreham by the Advisory Committee on Reactor Safeguards. See Advisory Committee on Reactor Safeguards Subcommittee Meeting, Sept. 30, 1981, Tr. 134-48. Suffolk County representatives attended the Shoreham ACRS proceedings.

when Suffolk County was framing its safety contentions years ago. The only recent development concerning the reliability of offsite power sources is their enhancement by the addition of two new power sources, a 20 MW gas turbine and four mobile diesel generators physically located on the Shoreham site (though not deemed "onsite" for regulatory purposes).

Further, the scope of issues properly before the Licensing Board is narrowly limited. LILCO's motion for a low power license was filed pursuant to 10 CFR § 50.57(c). Motions pursuant to this regulation do not provide an occasion for the litigation of new, unrelated contentions, or for the consideration of issues that either have, or should have, been previously litigated. See note 7 above. A review of the County's pleadings suggests that it wants time to conduct a much broader inquiry than is appropriate.29/

29/ The County's papers raise at least four issues that have no place in this litigation: need for power, LILCO's financial qualifications, its technical qualifications, and security. Need for power is definitionally not an issue in operating license proceedings; it cannot be raised in the guise of a complaint about the pace of an OL proceeding. Financial qualifications, though potentially a subject on which the Staff must make a finding, have not been raised in any fashion that requires expansion of this proceeding. LILCO's technical qualifications are also a matter about which the County has never filed contentions, despite its public discussion of these qualifications for years. Security issues are governed generally by an extensive settlement agreement dated November 22, 1982 among LILCO, Suffolk County and the NRC Staff, which resolved all outstanding County security contentions and which governs

(footnote cont'd)

Moreover, as the Board observed,

> a low power license could probably be ruled upon without further evidentiary hearings 11/ upon affidavits and counteraffidavits . . . .

11/ Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-81-5, 13 NRC 361 at 362 (1981).

Board Order of April 6, at 13. Nevertheless, the Board ordered evidentiary hearings.

The County has deliberately chosen not to take advantage of its opportunity to participate fully in these hearings. As outlined above, SC was aware of potential factual issues well before the Board's April 6 Order. At the very latest, the County could have begun inquiring actively into LILCO's case on March 20, the day LILCO's motion and affidavits were served. The County has often seized the opportunity for formal or informal discovery with alacrity in other aspects of this proceeding; its refusal to do so here is telling.30/

(footnote cont'd)

the relations of the parties on security prospectively.

The County's later affidavits submitted to the United States District Court and to the Licensing Board, however, make no mention of these issues and it is assumed that they will be given no consideration in scheduling.

30/ The County did capitalize on one opportunity for early discovery during this period: its representatives attended an open meeting, convened by the NRC Staff, on March 29 to discuss

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Notwithstanding the County's contrary desires, the Board's intention to move quickly was signaled by its telephone notice of March 30 setting an April 4 oral argument, by its remarks at the ensuing conference, and by its April 6 Order. Still LILCO did not receive any discovery requests from the County until April 12.[31/] Even at that, Suffolk County's discovery requests, though extraordinarily burdensome, were of the boilerplate type that could have been formulated on a first reading of LILCO's March 20 motion and affidavits. In fact, the requests were very similar to the types of discovery that the County alleged it needed in its March 26 filing and reiterated at the April 4 argument.

The County's pursuit of document discovery actually requested has been equally superficial. Following receipt of the County's first discovery request, LILCO had documents assembled for examination and copying on Long Island the next day, April 13, and offered to make them available around the clock. The

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(footnote cont'd)

LILCO's low power motion. In addition, LILCO provided the County with responses to NRC Staff inquiries concerning the Company's low power proposal. Letters from LILCO to the NRC Staff dated April 3 (SNRC-1033), April 6 (SNRC-1035), and April 11 (SNRC-1036)

31/ One discovery request was dated April 11 but was not received until April 12 because it was sent by Federal Express rather than telecopier; the request dated April 12 was telecopied and received that evening.

County responded to the invitation by sending one lawyer recently assigned to the case and two paralegals; they spent between three and four hours going through some of the available documents, requested extensive copying (which was performed overnight) and departed.[32/] Further, despite having known since March 20 the identities of LILCO's potential witnesses and the gist of their proposed testimony, the County neither took nor requested depositions.[33/]

The County's pursuit of expert witnesses has been similarly lackadaisical. Despite the clear indication as early as February 1984 that LILCO intended to propose alternatives relying in whole or in part on the enhanced reliability of LILCO's offsite power sources, the County took no steps to secure additional consultants.[34/] Indeed, even when LILCO made a

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32/ Documents responsive to the second request were also assembled and made available for review on Long Island by April 14; the County forewent this opportunity, choosing instead to have the documents copied and sent to its attorneys' offices in Washington, D.C., which was accomplished by April 16. In addition, two SC paralegals reviewed documents on Long Island on April 16. Governor Cuomo made no discovery requests and sent no one to review documents produced by LILCO.

33/ The County's diffidence about taking depositions here is in marked contrast to its conduct in other phases of the case, where the County, according to LILCO records, has taken depositions of at least 51 experts and noticed (but not taken, for one reason or another) many more.

34/ As reflected in the Affidavits of Gregory C. Minor, the County has retained the services of MHB Technical Associates

(footnote cont'd)

specific proposal, supported by four affidavits including exhibits, the County made no effort to hire new consultants to engage the proposal. It was not until after April 4 that the County began to move. Minor Affidavit at 6. The County claims it "did not retain experts prior to the Licensing Board's April 6 Order because the County's position was that for legal reasons, the LILCO Motion needed to be dismissed." Id. at 7; Lanpher Affidavit at ¶ 10q. In short, the County made a tactical decision to rely on its legal arguments at the expense of developing a factual case. If the gamble fails, as it should, the County should not be permitted to benefit from its own misjudgment.

Finally, it is also important to be aware that the Board allotted 11 hearing days for cross-examination by the parties, more hearing time than is spent on the entire litigation of many NRC cases. Again, the County failed to use its opportunities. Hearings began at 9:00 a.m. on Tuesday, April 24, and by the time they were suspended at approximately 11:30 a.m. on Wednesday, April 25, all cross-examination of LILCO's witnesses had been completed. If the County had valid safety

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(footnote cont'd)

for a number of years. Thus, the County had immediate access to consultants it has used on a wide range of subjects in the Shoreham proceeding. The County also had previously retained the services of Dennis Eley.

concerns or thought the record needed further development, it could and should have put the available hearing time to far better use than it did.35/

The inescapable conclusion is that the County's professed unpreparedness to proceed at this point is substantially, if not entirely, of its own making. The County has deliberately chosen not to bestir itself.36/ It was not deprived of an opportunty to be heard.

What, then, about further scheduling? LILCO's motions for summary disposition, on Phases I and II, filed with these comments, are ripe for decision now. Today's motions merely renew LILCO's March 20 filing and reiterate that no AC power is required to protect the public health and safety during these phases. Indeed, the activities contemplated present no undue risk to the public. None of the County's filings raise any controverted issue of fact before the Licensing Board with respect to these phases. At the argument before the Licensing Board on April 4, LILCO repeatedly stated without contradiction

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35/ The County did engage in limited cross-examination of LILCO's witnesses, using in some instances documents that had been obtained during discovery.

36/ One test for determining whether a curtailment of discovery is reversible error requires a showing that more diligent discovery was not possible. Northern Indiana Public Service Co., ALAB-303, 2 NRC 858 (1975), citing Eli Lilly & Co. v. Generix Drug Sales, Inc., 460 F.2d 1096, 1105 (5th Cir. 1972). The County cannot meet this standard.

that the facts and conclusions in its March 20 motion with respect to Phases I and II were uncontroverted. See, e.g., Tr. 47, 67; see also Tr. 76, 94 (Staff agrees with LILCO's views on Phases I and II).37/

The license LILCO seeks with respect to Phase I is identical to the low power approval authorized by this Comission for Diablo Canyon in 1983. As noted then:

> The risk to public health and safety from fuel loading and pre-criticality testing is extremely low since no self-sustaining nuclear chain reaction will take place under the terms of the license and therefore no radioactive fission products will be produced.

Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-83-27, 18 NRC 1146, 1149 (1983). Similarly, no fission products or decay heat will be generated during precriticality operations at Shoreham. Moreover, in such circumstances, the Commission has recognized there is no need for hearings because "there are no significant safety issues material to fuel loading and pre-criticality testing and there will be no prejudice to future Commission decisions . . . ." Diablo Canyon, 18 NRC at 1149. The Commission's analysis for precriticality operations is also applicable to the activities

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37/ Ultimately, the County stated its opposition to Phase I and II licensing, but offered no substantive explanation. Tr. 85-86.

conducted during Phase II cold criticality testing because of the extremely low power levels achieved then and the short time criticality will be maintained. Thus, consistent with the precedent of Diablo Canyon, the Commission should promptly grant LILCO's March 20 motion for Phases I and II, renewed in the attached summary disposition papers, without further proceedings.38/

Although LILCO believes that the Board's previous schedule was justified for consideration of Phases III and IV, it is clear that the schedule is now lost. Thus, the Company proposes the following adjustments to it:

May 8	Begin supplementary discovery
May 18	End discovery
May 25	File supplementary testimony
May 30	Resume hearings

The Commission should make clear, however, that these adjustments are purely supplementary and do not signal a process begun all over. Thus, document discovery should consist of narrowly focused requests for specific documents, not sweeping requests such as the type the County has already filed.

38/ If the Commission permits written responses to LILCO's Phase I and Phase II summary disposition motions, such responses should be filed in short order, given that County has had LILCO's March 20 motion for almost seven weeks. Nothing in the County's papers suggests that any of its consultants will perform work pertinent to Phases I and II.

Depositions should only be permitted if the County identifies precisely what information it seeks and can demonstrate that it would have been impossible to seek that information during prior discovery or during the hearings already conducted. Discovery should be limited to the precise issues in controversy and to genuinely new matters. Finally, additional hearings should focus on matters that could not have been covered in prior evidentiary sessions. Thus, since cross-examination of LILCO's witnesses has been completed, a strong showing should be required as to why new cross-examination could not have been pursued earlier.

V. CONCLUSION

In sum, LILCO requests that the Commission:

(a) resolve the County's murky attempts to raise disqualification issues by finding them too late or, in the alternative, ordering that they be properly presented, if at all, within one week and handled expeditiously by the pertinent adjudicators;

(b) promptly grant LILCO's motions for summary disposition of Phase I and Phase II low power operation;

(c) set further proceedings for Phases III and IV as proposed above; and

(d) generally engage what remains of the Shoreham case in a systematic and expedited fashion.

Respectfully submitted,

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DATED: May 4, 1984