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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

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

In the Matter of	Docket No. 50-322-OL-4 (Low Power)
LONG ISLAND LIGHTING COMPANY	
(Shoreham Nuclear Power Station, Unit 1)	July 24, 1984

ORDER GRANTING IN PART AND DENYING IN PART LILCO'S MOTIONS FOR SUMMARY DISPOSITION ON PHASE I AND PHASE II LOW-POWER TESTING

LILCO filed its supplemental application for a low-power license on March 20, 1984. That application relies upon supplemental emergency power sources to compensate for the absence of an acceptable onsite emergency power source. However, the Commission issued an Order (CLI-84-8) on May 16, 1984 holding that GDC-17[1] applied to low power

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1 GDC-17 states, in pertinent part, that:

> "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

(Footnote Continued)

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operation and that if LILCO's application did not demonstrate compliance with GDC-17, LILCO would have to seek an exemption pursuant to 10 CFR §50.12. LILCO subsequently filed an exemption request with the Licensing Board.

On May 23, 1984, LILCO filed its "Motion for Summary Disposition on Phase I Low-Power Testing", and "Motion for Summary Disposition on Phase II Low-Power Testing", pursuant to 10 CFR §2.749. This Board denied LILCO's motion for expedited responses to its motions for summary disposition, instead directing the parties to file answers within the time limits prescribed by regulations. Suffolk County, the State of New York, and the NRC Staff filed answers to the summary disposition motions on June 13, 1984.

LILCO's motions are based upon its assertion that even if the Shoreham facility lacks a qualified source of onsite AC power, the

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(Footnote Continued)
to assure that (1) specified acceptable fuel 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.

The onsite electric power supplies, including the batteries, and the onsite electric distribution system, shall have sufficient independence, redundancy, and testability to perform their safety functions assuming a single failure" (10 CFR Part 50, Appendix A, Criterion A).

activities which would be performed during Phases I and II[2] of its Low-Power testing program require no such power to perform the safety functions specified by the General Design Criteria (GDC), specifically GDC-17.

LILCO argues that as to Phase I fuel loading and precriticality testing, there are no fission products in the core and no decay heat. Thus no core cooling is required, and hence no AC power (either onsite or offsite) is needed "to permit functioning of structures, systems, and components important to safety" (GDC-17). As to Phase II cold criticality testing, LILCO asserts that any self-sustaining nuclear reaction will be conducted at extremely low power levels and for very short periods of time, and that radioactive fission products produced will be negligible. A review of the accident and transient events contained in Chapter 15 of the Shoreham FSAR allegedly shows that there are no consequences even assuming no onsite AC power source, and in fact no AC power is required to protect the core.

In essence, LILCO seeks summary disposition as to Phases I and II, because (a) no onsite or offsite AC power is necessary to perform the safety functions needed to protect the public health and safety, and

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2 Phase I: Fuel load and precriticality testing.
Phase II: Cold criticality testing.

(b) since no AC power is needed, GDC-17 is said to be satisfied at Phases I and II without an approved (or indeed any) onsite power source.

The Staff in its June 13 response to LILCO's motions for summary disposition submitted that the motions should be granted in part and denied in part. It stated that the Commission's May 16 Order (CLI-84-8) stands for the proposition that GDC-17 means the same for low-power operation as for full-power operation and must be completely satisfied before any license (including low-power) may be issued. It therefore follows that, in the absence of a fully approved onsite power system, an exemption from GDC-17 is needed before any license can be issued pursuant to 10 CFR §50.57(c). LILCO did not seek summary disposition of its exemption request nor address factual issues involved therein, and accordingly the ultimate issues involved in Phases I and II could not be summarily disposed of. However, the Staff stated that partial summary disposition should be made as to some of the statements of material facts appended to the Phase I motion (Statements 5-9) and to the Phase II motion (Statements 5, 8, 9, 10, 11, 12 and 13, and reworded 6 and 7),[3] and that such statements should be deemed admitted unless properly controverted.

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[3] These Statements of Material Facts are described and discussed infra, at pages 9-14.

The Response of Suffolk County and the State of New York (with attached affidavits and statement of material issues as to which it is alleged that there are facts in dispute) submits that the LILCO motion may not be granted because, first, the NRC allegedly lacks authority to grant what is characterized as a "no power" license. Second, because the LILCO low-power license application which was considered by the Commission in its Order of May 16, 1984 (CLI-84-8, 19 NRC ___) included Phases I and II, that are the subjects of the pending summary disposition motions, they argue that the Commission's statement that LILCO must obtain an exemption from applicable General Design Criteria (expressly GDC-17) prior to the grant of its low-power proposal, includes the grant of any portion thereof. They further argue that LILCO's position that the requirements of GDC-17 would be met during Phases I and II ignores the plain language of that criterion. Lastly, the Intervenors set forth issues of material fact which they say remain in dispute.

I. LEGAL STANDARDS FOR SUMMARY DISPOSITION

The Commission's Rules of Practice provide for summary disposition of certain issues where "the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law" (10 CFR §2.749(d)). The Rules also provide for summary disposition as to any portions of a

matter involved in a proceeding as to which there is no genuine issue of material fact (10 CFR §2.749(a)).

The Commission and Appeal Board have encouraged the use of summary disposition to resolve contentions where an intervenor has failed to establish that a genuine issue exists.[4] The "summary disposition rule (10 CFR §2.749) provides an ample safeguard against an applicant or the...staff being required to expend time and effort at a hearing on any contention advanced by an intervenor which is manifestly unworthy of exploration."[5]

The Commission's policy is to encourage the use of summary disposition where no genuine issue of material fact exists "so that evidentiary hearing time is not unnecessarily devoted to such issues." Statement of Policy in Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 457 (1981). Thus, a hearing on the questions raised by an intervenor is not inevitable. See Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-654, 14 NRC 632 (1981). The purpose of summary disposition is to avoid hearings,

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4 Northern States Power Co. (Prarie Island Nuclear Generating Plant, Units 1 & 2), CLI-73-12, 6 AEC 241, 242 (1973), aff'd sub nom. BPI v. AEC, 502 F.2d 424 (D.C. Cir. 1974); Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 550-51 (1980); Mississippi Power & Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 424-25 (1973).

5 Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, 228 (1974).

unnecessary testimony and cross-examination in areas where there are not material issues to be tried.[6]

The Supreme Court has very clearly stated that there is no right to a trial except so far as there are issues of fact in dispute to be determined. Ex parte Peterson, 253 U.S. 300, 310 (1920). Under the Federal Rules the motion is designed to pierce the general allegations in the pleadings, separating the substantial from the insubstantial by utilizing depositions, interrogatories or other material of evidentiary value. 6 J. Moore, Moore's Federal Practice ¶56.04[1] (2d ed. 1976). Mere allegations in the pleadings will not create an issue as against a motion for summary disposition supported by affidavits (10 CFR §2.749(b); Fed. R. Civ. P. 56(c)).

The Commission's summary disposition procedures have been analogized to Rule 56 of the Federal Rules of Civil Procedure.[7] Decisions arising under the Federal Rules thus may serve as guidelines to licensing boards in applying 10 C.F.R §2.749.[8] Under both Federal and

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6 A material fact is one that may affect the outcome of the litigation. Mutual Fund Investors Inc. v. Putnam Management Co., 553 F.2d 620, 624 (9th Cir. 1977).

7 Cleveland Electric Illuminating Co., et al. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 753-54 (1977); Alabama Power Co. (Joseph M. Farley Nuclear Plant, Units 1 and 2), ALAB-182, 7 AEC 210, 217 (1974).

8 Perry, ALAB-443, supra at 754; Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-74-36, 7 AEC 877, 878-79 (1974).

NRC rules, the record is to be reviewed in the light most favorable to the party opposing the motion.[9]

To draw on federal practice, the Supreme Court has pointed out that Rule 56 of the Federal Rules of Civil Procedure does not permit plaintiffs to get to a trial on the basis of the allegations in the complaint coupled with the hope that something can be developed at trial in the way of evidence to support the allegations.[10] Similarly, a party may not defeat a motion for summary judgment on the hope that on cross-examination the defendants will contradict their respective affidavits. To permit trial on such a basis would nullify the purpose of Rule 56 which permits the elimination of unnecessary and costly litigation where no genuine issues of material fact exist.[11]

All material facts adequately set forth in a motion and not adequately controverted by the responses thereto are deemed to be

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9 Poller v. Columbia Broadcasting System, Inc., 368 U.S. 464, 473 (1962); Crest Auto Supplies, Inc. v. Ero Manufacturing Co., 360 F.2d 896, 899 (7th Cir. 1966); United Mine Workers of America, Dist. 22 v. Roncco, 314 F.2d 186, 188 (10th Cir. 1963); Pennsylvania Power & Light Co. and Allegheny Electric Cooperative, Inc. (Susquehanna Steam Electric Station, Units 1 and 2), LBP-81-8, 13 NRC 335, 337 (1981), directed certification denied, ALAB-641, 13 NRC 550 (1981); Seabrook, LBP-74-36, supra, 7 AEC at 879.

10 First National Bank of Arizona v. Cities Service Co., 391, U.S. 253, 289-90 (1968), rehearing den., 393 U.S. 901 (1968).

11 See Orvis v. Brickman, 95 F. Supp 605, 607 (1951), aff'd 196 F.2d 762 (D.C. Cir. 1952), cited with approval in Gulf States Utilities Co. (River Bend Station, Units 1 and 2), 1 NRC 246, 248 (1975).

admitted (10 CFR §2.749(a)). A party opposing the motion may not rely upon a simple denial of the material facts stated by the movant, but must set forth specific facts showing that there is a genuine issue of fact remaining.[12] However, the proponent of a motion must meet the burden of proof in establishing that there is no genuine issue of material fact, even if the opponent fails to controvert the conclusions reached in the motions' supporting papers.

II. DENIAL AS TO ULTIMATE ISSUES

The Commission's May 16 Order (CLI-84-8) stated that it "has determined that 10 CFR 50.57(c) should not be read to make General Design Criterion 17 inapplicable to low-power operation" (slip opinion, page 1). That order therefore stands for the proposition that GDC-17 means the same for low-power operations as for full-power operation, and it must be completely satisfied before any license (including low-power) may be issued. Accordingly, the only recourse available to LILCO in this proceeding is to seek an exemption under the provisions of 10 CFR §50.12(a), which is the subject of the instant evidentiary hearing.

The Board does not have the power or jurisdiction to grant LILCO's motion for summary disposition of Phases I and II of its low-power testing program, even though such activities do not require a qualified

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12 10 CFR §2.749(b), Virginia Electric and Power Co. (North Anna Nuclear Power STation, Units 1 and 2), ALAB-584, 11 NRC 451, 453 (1980).

source of onsite AC power in order to perform the safety functions specified by GDC-17. The Commission's order requires that the GDC-17 requirements be completely satisfied even for fuel loading and precriticality testing. In its motion LILCO did not seek summary disposition of its exemption request, nor did it even address the factual issues involved therein. Accordingly, the ultimate issues involved in Phase I and II activities cannot be disposed of summarily, and that portion of the summary disposition motion is denied.

III. GRANTED AS TO CERTAIN STATEMENTS OF MATERIAL FACTS

Some of the statements of material facts appended to LILCO's Phase I motion (Statements 5-9) and to the Phase II motion (Statements 5, 8-13, and reworded 6 and 7) were not controverted and should be deemed to be admitted. Accordingly, the following statements of material fact are held to be admitted in this proceeding.

Phase I Statements 5-9:

(5) During all of the activities in Phase I, the reactor will remain at essentially ambient temperature and atmospheric pressure. The reactor will not be taken critical. Any increase in temperature beyond ambient conditions will be due only to external heat sources such as recirculation pump heat. There will be no heat generation by the core. Rao, et al., Tr. 279; Sherwood Affidavit at ¶7; Hodges Affidavit at ¶3.

(6) Of the 38 accident or transient events addressed in FSAR Chapter 15, 18 of the events could not occur during Phase I because of the operating conditions of the plant. An additional six events could

physically occur, but given the plant conditions, would not cause the phenomena of interest in the Chapter 15 safety analysis. The remaining 14 events could possibly occur, although occurrences are highly unlikely given the plant conditions. The potential consequences of these 14 events would be trivial. Rao, et al., Tr. 279-84; Sherwood Affidavit at ¶¶8-11; Hodges Affidavit at ¶4.

(7) During Phase I fuel loading and precriticality testing, there are no fission products in the core and no decay heat exists. Therefore, core cooling is not required. In addition, with no fission product inventory, there are no fission product releases possible. Rao, et al., Tr. 283-84; Sherwood Affidavit at ¶11; Hodges Affidavit at ¶4.

(8) Even a loss of coolant accident would have no consequences during Phase I since no core cooling is required. No fission products exist and therefore no decay heat is available to heat up the core. The fuel simply would not be challenged even by a complete drain down of the reactor vessel for an unlimited period of time. Rao, et al., Tr. 284; Sherwood Affidavit at ¶9; Hodges Affidavit at ¶4.

(9) No core cooling is required during Phase I and, therefore, no AC power is necessary during Phase I to cool the core. Rao, et al., Tr. 285; Sherwood Affidavit at ¶13; Hodges Affidavit at ¶3.

Phase II Statements 5, 8-13:

(5) Under the plant conditions present in Phase II, many events analyzed in FSAR Chapter 15 could not occur or would be very unliikely. Even the possible Chapter 15 events would have no impact on public

health and safety regardless of the availability of the TDI diesels. Rao, et al., Tr. 286-89, 295; Sherwood Affidavit at ¶¶15-17, 22; Hodges Affidavit at ¶6.

(8) Because of the extremely low-power levels reached during Phase II testing, fission product inventory in the core will be only a small fraction of that assumed for the Chapter 15 analysis. The FSAR assumes operation at 100% power for 1,000 days in calculating fission product inventory; inventory during Phase II low-power testing will be less than 1/100,000 (0.00001) of the fission product inventory assumed in the FSAR. Rao, et al., Tr. 295; Sherwood Affidavit at ¶17.

(9) If a LOCA did occur during the cold criticality testing phase (Phase II), there would be time on the order of months available to restore make-up water for core cooling. At the power levels achieved during Phase II, fission product inventory is very low. At most, the average power output will be a fraction of a watt-per-rod, with no single rod exceeding approximately two watts. With these low decay heat levels, the fuel cladding temperature would not exceed the limits of 10 CFR §50.46 even after months without restoring coolant and without a source of AC power. Thus, there is no need to rely on the TDI diesel generators, or any source of AC power. Rao, et al., Tr. 292-94; Sherwood Affidavit at ¶13; Hodges Affidavit at ¶8.

(10) During Phase II cold criticality testing conditions, there is no reliance on the diesel generators for mitigation of the loss of AC power event or the feedwater system piping break event. For these

events, no loss of coolant occurs and the decay heat is minimal. Core cooling can be achieved for unlimited periods of time without AC power using the existing core water inventory and heat losses to ambient. Rao, et al., Tr. 293-94; Sherwood Affidavit at ¶20; Hodges Affidavit at ¶6.

(11) The LOCA and the feedwater system piping break postulate the double-ended ruptures of a piping system. Because the reactor will be at essentially ambient temperature and atmospheric pressure during Phase II, it is extremely unlikely that such a pipe break would ever occur. The NRC Staff does not require double-ended ruptures to be postulated for low temperature and low pressure systems in safety analyses. Rao, et al., Tr. 294; Sherwood Affidavit at ¶21; Hodges Affidavit at ¶7.

(12) None of the events analyzed in Chapter 15 could result in a release of radioactivity during cold criticality testing that would endanger the public health and safety. Rao, et al., Tr. 296; Sherwood Affidavit at ¶17.

¶(13) Even if AC power were not available for extended periods of time, fuel design limits and design conditions of the reactor coolant pressure boundary would not be approached or exceeded as a result of anticipated operational occurrences, and the core would be adequately cooled in the unlikely event of a postulated accident. Rao, et al., Tr. 295-96; Sherwood Affidavit at ¶22.

Phase II Statements 6 and 7:

(6) Of the 23 possible Chapter 15 events reviewed, 20 would not be adversely affected by the loss or unavailability of offsite AC power. Therefore, the consequences of these events are unaffected by the unavailability of the TDI diesels. Hodges Affidavit at ¶10.

(7) The three events that are adversely affected by the loss or unavailability of offsite AC power are: pipe breaks inside the primary containment, feedwater system pipe break, and the loss of AC power event. Hodges Affidavit at ¶10.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Marshall E. Miller

Marshall E. Miller, Chairman
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland
this 24th day of July, 1984.