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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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USNRC

ATOMIC SAFETY AND LICENSING APPEAL BOARD

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OFFICE OF SECRETARY
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Administrative Judges:

Alan S. Rosenthal, Chairman
Gary J. Edles
Howard A. Wilber

February 21, 1985
(ALAB-800)

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

Karla J. Letsche and Lawrence Coe Lanpher, Washington, D.C. (with whom Herbert H. Brown, Washington, D.C., was on the brief), for the intervenor Suffolk County.

Fabian G. Palomino, Albany, New York, for the intervenor State of New York.

Robert M. Rolfe and Anthony F. Earley, Jr., Richmond, Virginia (with whom W. Taylor Reveley, III, and Donald P. Irwin, Richmond, Virginia, were on the brief), for the applicant Long Island Lighting Company.

Robert G. Perlis for the Nuclear Regulatory Commission staff.

DECISION

Before us is the appeal of intervenors Suffolk County and the State of New York from the Licensing Board's October 29, 1984 initial decision in this operating license proceeding involving the Shoreham nuclear power facility.[1] In that decision, the Board granted the applicant's request

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[1] LBP-84-45, 20 NRC 1343.

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for an exemption from the requirements of General Design Criterion (GDC) 17[2] to enable it to conduct low power testing of the facility up to five percent of rated power. Insofar as here relevant, GDC 17 requires an onsite alternating current (AC) electric power system meeting certain standards concededly not met by the system now in place.[3]

The intervenors' attack upon the initial decision is broad-based and encompasses a large number of asserted errors on the part of the Licensing Board. On a close examination of the decision, the underlying record and the appellate positions of the parties as developed in their extensive briefs, we concluded that all of the substantial issues presented by the appeal fell into one of three areas:

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[2] 10 CFR Part 50, Appendix A.

[3] The applicant's original intention was to use Transamerica Delaval (TDI) diesel generators to comply with the onsite power requirements of GDC 17. As matters now stand, the suitability of those generators is in litigation before the Licensing Board. Further, diesel generators of a different manufacturer, which the applicant intends to utilize eventually in place of the TDIs, are in the process of installation and presumably will have to undergo staff review before being used in satisfaction of GDC 17 requirements.

The system that the applicant proposes to use during low power testing under the sought GDC 17 exemption (in lieu of a system meeting GDC 17 standards) consists of a

(Footnote Continued)

(1) the meaning and scope of both (a) the phrase "otherwise in the public interest" contained in 10 CFR § 50.12(a)[4] and (b) the standard for a grant of an exemption under Section 50.12(a) set forth in CLI-84-8, an earlier Commission decision in this proceeding;[5]

(2) the meaning and scope of the Commission's directive in CLI-84-8 that facility operation utilizing the substitute AC electric power system be "as safe as" that operation would have been with a "fully qualified" onsite AC power source; and

(3) the applicability to the substitute AC electric power system of the physical security provisions of 10 CFR Part 73.

(Footnote Continued)
20 megawatt (MW) gas turbine, four temporary 2.5 MW diesel generators, and the commercial AC power grid.

[4] The exemption here involved was sought under Section 50.12(a), which provides in relevant part:

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

[5] 19 NRC 1154 (1984).

Consequently, our focus at oral argument was upon those areas.[6]

We held oral argument in this case on February 11. The following day, the Commission issued a memorandum and order in which it announced that it was allowing the Licensing Board's initial decision to become immediately effective.[7] In the course of its explanation of the basis for that

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[6] Insofar as concerns those appellate claims of the intervenors that do not come within one of the above identified areas, none appears to require specific treatment in this opinion. More particularly, each such claim is either manifestly without merit or grounded upon Licensing Board error not having a crucial bearing upon whether the grant of the Section 50.12(a) exemption should be set aside. We thus eschew a commentary on those claims in the interest of expediting our disposition of the issues that bear much more heavily on the correctness of the result below.

[7] CLI-85-1, 21 NRC ___ (Feb. 12, 1985). The Commission had previously noted that any Licensing Board decision granting an exemption from the requirements of GDC 17 would not become effective until the Commission had conducted an immediate effectiveness review. CLI-84-8, supra, 19 NRC at 1156. An express announcement of that purpose was necessary because the Commission ordinarily does not undertake an immediate effectiveness review in an operating license proceeding unless the initial decision authorizes facility operation at greater than five percent of rated power. See 10 CFR § 2.764(f)(1).

In actuality, the immediate effectiveness determination in CLI-85-1 applied only to Phases III and IV of the applicant's low power testing program, involving such testing at elevated temperature and pressure levels up to five percent of rated power. Last November, the Commission made immediately effective, subject to certain conditions, the Licensing Board's authorization of Phases I and II of the program (fuel loading, precriticality testing, and cold criticality testing). CLI-84-21, 20 NRC 1437. See also LBP-84-53, 20 NRC 1531, 1542 (1984).

determination, the Commission addressed and resolved in the applicant's favor the pivotal questions in the first two of the three areas that we had previously identified as likely determinative of the outcome of the intervenors' appeal. The order nonetheless ended with the statement that "[t]he foregoing is entire / without prejudice to pending appeals before the Atomic Safety and Licensing Appeal Board."[8] Further, 10 CFR § 2.764(g) states that, "[u]nless the Commission otherwise explicitly so directs in its immediate effectiveness determination," we are not to give "any weight" to any statement reflecting that determination.

I.

We fully recognize, of course, our obligation to respect and obey Commission directives. Nonetheless, in the highly unusual circumstances of this case, we find ourselves unable to comply fully with either the "without prejudice" notation in CLI-85-1 or the even stronger admonition in 10 CFR § 2.764(g) to the same general effect.

On occasion, the Commission may reach and announce a conclusion on an essentially factual issue in the course of its immediate effectiveness review. When this occurs, and assuming no explicit Commission instruction to the contrary, we see no impediment to an appeal board passing independent

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[8] CLI-85-1, supra, 21 NRC at ___ (slip opinion at 6).

judgment on the same factual issue and, possibly, reaching a different conclusion in its appellate decision. (Among other things, the rule detailing the procedure for the conduct of immediate effectiveness reviews does not appear to contemplate the same in-depth examination of the underlying evidentiary record as would customarily be undertaken by an appeal board in response to a formal appellate attack upon crucial findings of fact in the initial decision.[9]) Moreover, with regard to a legal issue turning upon the interpretation and application of Constitutional or statutory provisions, there might well be similar warrant for a fresh look by an appeal board even if the immediate effectiveness determination had addressed the issue.[10] But what confronts us here is a quite different situation.

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[9] 10 CFR § 2.764. Additionally, in conducting an immediate effectiveness review, the Commission does not normally have the benefit of the same full briefing enjoyed by the appeal boards. See Section 2.764(f)(2)(ii), allowing the parties to submit to the Commission within ten days of the initial decision "brief comments . . . pointing out matters which, in their view, pertain to the immediate effectiveness issue."

[10] Once again, the Commission likely would not have the benefit of full briefing on the issue. Of course, were the appeal board to reach a different conclusion than that contained in the immediate effectiveness determination, the Commission would have a further opportunity to examine the matter on review of the appeal board's decision.

As previously noted, in large measure the substantial issues presented by the intervenors' appeal turn upon a determination as to the meaning and scope of the terms of either a Commission regulation (10 CFR § 50.12(a)) or a Commission opinion in this very proceeding (CLI-84-8, supra) or both. Further, these same issues were not merely considered by the Commission in its immediate effectiveness review, but resolved.[11] The short of the matter is that, in CLI-85-1, the Commission interpreted one of its own regulations and one of its own opinions in a manner at odds with the interpretation that necessarily undergirds the intervenors' challenge before us to the Licensing Board's disposition of their public interest and "as safe as" claims.

In our view, it would defy all reason for us to do anything other than to accept and apply the Commission's determinations in this regard. Simply stated, the Commission must be deemed the ultimate arbiter of what was meant by the provisions of its own regulations and the language contained in its own opinions. To be sure, absent the availability of a definitive Commission pronouncement,

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[11] In addition, CLI-85-1 discussed other Commission regulations and opinions at least on the periphery of the issues brought to us by the intervenors (e.g., 10 CFR § 50.47(d); CLI-83-17, 17 NRC 1032 (1983); CLI-84-9, 19 NRC 1323 (1984)).

it often falls to us to undertake to resolve disputes between parties as to the proper interpretation and application of a particular Commission regulation or formal opinion.[12] But, once the Commission has spoken on the subject itself, the pursuit of such an undertaking perforce is no longer either required or tenable. For it cannot seriously be suggested that it is open to us to conclude that the Commission has misinterpreted one of its own regulations, directives, or pronouncements.[13]

We accordingly affirm without further discussion the Licensing Board's ultimate resolution of the intervenors' public interest and "as safe as" claims. Although not necessarily in agreement with everything that the Board said

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[12] As reflected by the transcript of the oral argument on the intervenors' appeal (which took place before the issuance of CLI-85-1), we were fully prepared to fulfill that responsibility here.

[13] We recognize the possibility that an immediate effectiveness determination might contain a seemingly tentative (and therefore not necessarily definitive) interpretation of a regulation that the Commission had not previously fully considered in an adjudicatory framework. In such circumstances, an appeal board conceivably might be justified in offering its own contrary interpretation of the regulation (which, on review of the board's decision, the Commission could accept or reject). We need not pursue the point further here, however, because, in the context of this very exemption request, the import of Section 50.12(a) received full consideration in CLI-84-8. Consequently, there is no reason to assume that what the Commission had to say about the section's meaning in CLI-85-1 represented anything less than a fully informed judgment on the Commission's part.

or did in connection with the claims, we are persuaded that the Commission's treatment in CLI-85-1 of Section 50.12(a) and CLI-84-8 has rendered harmless any Licensing Board error along that line. To repeat, on these two aspects of their appeal, the intervenors' success hinged entirely upon a determination -- now totally foreclosed by CLI-85-1 -- that the Licensing Board had crucially misapprehended the mandate imposed upon it by regulation and Commission order.

A like disposition, however, cannot be made of the issues in the third category of importance to the outcome of the appeal: those pertaining to the applicability to the substitute AC electric power system of the physical security provisions of 10 CFR Part 73. In terms, CLI-85-1 left open the question whether the intervenors' contentions in that area were improperly disallowed.[14] Accordingly, in Part II we turn to a consideration of the intervenors' insistence that this question requires an affirmative answer.

II.

Each application for a license to operate a nuclear power plant must include a physical security plan.[15] That plan must address how the applicant intends to comply with Part 73 of the Commission's regulations pertaining to the

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[14] 21 NRC at ___ (slip opinion at 5-6).

[15] 10 CFR §50.34(c).

physical protection of the plant.[16] Among other things, Part 73 prescribes various requirements for the protection of "vital equipment."[17] Vital equipment is defined as

> any equipment, system, device, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation. Equipment or systems which would be required to function to protect public health and safety following such failure, destruction, or release are also considered to be vital.[18]

Suffolk County's original contentions relating to physical security issues were resolved in a Final Security Settlement Agreement that was approved by the Licensing Board in 1982.[19] That was, of course, well before the applicant sought an exemption from GDC 17 in early 1984. Relying on that settlement agreement, the Licensing Board initially precluded the County and the State from raising any new physical security matters in connection with the exemption request.[20] In response to a request for directed certification filed by those intervenors, the Commission

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[16] See 10 CFR § 73.1(b)(1)(i).

[17] See 10 CFR § 73.55.

[18] 10 CFR § 73.2(i).

[19] Licensing Board Memorandum and Order Canceling Hearing, Approving Final Security Settlement Agreement, and Terminating Proceeding (Dec. 3, 1982) (unpublished).

[20] Licensing Board Order Granting LILCO's Motion In Limine (June 20, 1984) (unpublished).

reversed the Board, however, and authorized the filing of new contentions "so long as they were responsive to new issues raised by LILCO's exemption request, relevant to the exemption application and decision criteria cited and explained in . . . [CLI-84-8], and reasonably specific and otherwise capable of on-the-record litigation."[21] The Commission also indicated that "security issues, if any, may be litigated (1) to the extent that they arise from changes in configuration of the emergency electric power system and (2) to the extent they are applicable to low power operation."[22]

The County and the State thereafter submitted seven contentions concerning security problems allegedly implicated by the exemption proposal. Those contentions raised two basic issues: whether the temporary diesel generators and the gas turbine[23] should be treated as "vital equipment" and whether the addition of the new equipment required changes in the existing physical security plan. The Licensing Board issued a restricted order on September 19, 1984, denying admission of the proposed security

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[21] Commission Memorandum and Order (July 18, 1984) (slip opinion at 2-3) (unpublished).

[22] Id. at 3.

[23] See note 3, supra.

contentions, and later publicly summarized its reasons for denying admission.[24] At the heart of the Board's decision was its conclusion that

> as a matter of law . . . under a request for exemption from certain regulations for the purpose of low-power testing, the power enhancements need not be treated as "vital." To require this equipment to be treated as vital would, in effect, negate the exemption provisions.[25]

The Board additionally concluded that the intervenors had failed to demonstrate with reasonable specificity that certain of the new contentions were not encompassed within the previously approved Security Plan, and observed that some of the new contentions also failed to meet the criteria described in the Commission's July 18, 1984 order. Finally, the Board noted that, in any event, pursuant to informal arrangements with the NRC staff, the applicant had voluntarily agreed to modify its physical security arrangements for the temporary diesel generators.[26]

The intervenors assert that the Board's ruling was erroneous.[27] The applicant contends that the security

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[24] LBP-84-45, *supra*, 20 NRC at 1356-58.

[25] *Id.* at 1357 (emphasis in original).

[26] *Id.* at 1358.

[27] Suffolk County and State of New York Brief in Support of Appeal of October 29, 1984 ASLB Decision on LILCO's Exemption Request (Dec. 11, 1984) (hereafter
(Footnote Continued)

issues were resolved correctly.[28] The NRC staff argues that the intervenors have failed on appeal to address sufficiently the reasoning advanced in the Board's restricted order of September 19 or to identify any error in the Board's ruling.[29] We find that the intervenors have adequately pointed to prejudicial error in the Board's ruling. Thus, we reverse the Board's decision and remand the security issues for further consideration in light of our determinations here.

As noted earlier, vital equipment is

> any equipment [or] system . . . the failure [or] destruction . . . of which could directly or indirectly endanger the public health and safety by exposure to radiation. Equipment or systems which would be required to function to protect public health and safety following such failure [or] destruction . . . are also considered to be vital.[30]

It is clear that this is a functional description and does not specifically address the type or location of the equipment required to fulfill the function. The gas turbine

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(Footnote Continued)
Intervenors' Brief) at 18-25.

[28] Long Island Lighting Company's Reply Brief (Jan. 14, 1985) (hereafter LILCO Brief) at 24-31.

[29] NRC Staff Response to Suffolk County and State of New York Brief in Support of Appeal of October 29, 1984 ASLB Decision on LILCO's Exemption Request (Jan. 22, 1985) (hereafter Staff Brief) at 36-39.

[30] 10 CFR § 73.2(i).

and the temporary diesels, therefore, are to be considered vital equipment if they are necessary to protect the public health and safety.

We believe they are. The Licensing Board found that if, under certain postulated accident conditions during five percent power operations, AC power was restored to the plant within fifty-five minutes, there would be no release of fission products and the low power testing would thus not endanger life or property.[31] It further found that the necessary power could be restored within fifty-five minutes from either the gas turbine or the temporary diesels located at the site.[32] Because these findings establish that this equipment is essential to the protection of the public from exposure to radiation in the event of a loss-of-coolant accident (LOCA) together with a loss of offsite power, we conclude that it must be considered vital equipment as defined in 10 CFR § 73.2(i).

The applicant contends that the substitute AC power equipment is not "vital" because the Commission's regulations do not currently require that onsite power be considered "vital equipment" even for full power operations. To support this argument, it points to a recent Commission

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[31] LBP-84-45, _supra_, 20 NRC at 1400.

[32] _Ibid._

notice of proposed rulemaking that it claims would, for the first time, treat back-up AC power sources as vital equipment.[33] That proposal simply does not support the applicant's argument.

At present, the regulations provide no express list of equipment that must be designated as vital. Rather, site-specific security plans set out what equipment the applicant intends to include as vital or what the NRC staff considers vital.[34] In the cited notice of proposed rulemaking, the Commission sets out "to clarify and refine" the requirements for the designation and protection of equipment in vital locations.[35] As we read the proposal, there is no intention to impose new or additional requirements with regard to the AC power supply. True enough, under the proposed regulation onsite AC power would for the first time be expressly labeled as "vital." But the same is true for such other items as the reactor containment

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[33] LILCO Brief at 25-26.

[34] Counsel for the staff indicated at oral argument that alternate power sources are now treated by the staff as vital equipment. App. Tr. 102. The staff's position on the need to treat the temporary diesel generators as vital equipment was revised during the proceeding. This action resulted in considerable confusion among the parties and the Licensing Board.

[35] 49 Fed. Reg. 30,735 (1984).

and the reactor control room.[36] Surely, it cannot be seriously suggested that, until now, the Commission deemed the containment and the control room as other than vital equipment. Thus, the fact that the onsite power sources were likewise not previously explicitly listed as vital equipment is not dispositive.

We disagree with the Licensing Board's view that treating the substitute AC power equipment as vital would "negate the exemption provisions."[37] The exemption request filed by the applicant concerns the design criteria for emergency power supplies contained in 10 CFR Part 50, not the security of those supplies as required by Part 73. The applicant is currently attempting to ensure adequate protection of the temporary diesels. It seems clear that a requirement that it protect the substitute power supply would not vitiate the benefits it might obtain from the Part 50 exemption itself.

We likewise reject the applicant's suggestion that approval of the exemption request should implicitly include exemption from Part 73. Its application sought "an exemption under § 50.12(a) from that portion of General Design Criterion 17, and from any other applicable

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[36] Id. at 30,735, 30,737.

[37] LBP-84-45, supra, 20 NRC at 1357.

regulations, if any, requiring that the TDI diesel generators be fully adjudicated prior to conducting the low power testing . . . ."[38] The Commission treated the request as submitted under 10 CFR § 50.12 of its regulations.[39] An exemption from the requirements of Part 73 would have been submitted pursuant to 10 CFR § 73.5, not Section 50.12. Moreover, because a loss of all AC power during a LOCA could result in core damage and, thus, harm to the public if AC power is not restored within a certain time period, we do not believe that grant of an exemption from the Part 50 design requirements should automatically relieve the applicant of the security requirements contained in Part 73. Given the critical nature of the gas turbine and the temporary diesels to the safety of the public, security must be assured. We do not suggest that such assurance cannct be forthcoming consistent with the use of the exemption authority. But, even if we assume that an exemption from Part 73 should now be embraced in this application, the intervenors are entitled to litigate contentions directed toward Part 73 issues.

The Board's error in excluding certain contentions because the emergency power supplies were not deemed "vital

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[38] Application for Exemption (May 22, 1984) at 4.

[39] See CLI-84-8, _supra_, 19 NRC at 1155-56.

equipment" requires a reexamination of these contentions. The Board also rejected certain of the contentions because they were insufficiently specific or not adequately tied to changes arising in the Security Plan as a result of the use of temporary power sources. Rejection of these latter contentions appears to have stemmed, at least in part, from the Board's determination that the substitute power supplies need not be considered as vital equipment. Its conclusions regarding the lack of adequate specificity and nexus to changes in the security plan flowing from the use of the substitute power sources should be reevaluated in light of our determination that such sources are vital equipment.

The staff's statement that the applicant has voluntarily agreed to provide protection to the temporary diesel generators so that any disagreement the staff had with the Licensing Board is now moot[40] does not affect our decision. The short answer is that the actions taken by the applicant have not been subjected to adversarial exploration; i.e., the intervenors have not been accorded an opportunity to address the applicant's recent changes.

One additional matter will need to be clarified by the Board on remand. In its initial decision the Board relied on both the gas turbine and the temporary diesels as the

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[40] Staff Brief at 39 n.22.

source of emergency power. It is not clear, however, whether, because of its location, the gas turbine can be protected to the level required for vital equipment. The Licensing Board nevertheless found that the historical reliability of the temporary diesels has been "excellent."[41] It also noted that the ultimate mission of the temporary diesels is to act as a backup to the gas turbine.[42] This being so, the Board might need to determine whether, when considering the limited operating conditions of the exemption request, the reliability of the temporary diesels is sufficient to provide adequate protection for the public. If found sufficiently reliable and adequately protected, the treatment of the temporary diesels as vital equipment without similar treatment of the gas turbine could satisfy the need for a secure source of AC power. As an alternative, the Board might need to consider whether a level of protection of the temporary diesels and the gas turbine is adequate to satisfy the concerns for physical security of this equipment for low power testing, even

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[41] LBP-84-45, supra, 20 NRC at 1372.

[42] Ibid.

though that level may be somewhat less than normally provided to vital equipment.[43]

We affirm, in substantial part, the conclusions reached in the Licensing Board's initial decision. The Board's disposition of the intervenors' security contentions is reversed, and the case is remanded to the Licensing Board for further proceedings consistent with this opinion. The authorization of the exemption is vacated insofar as it permits Phases III and IV of low power operation.[44]

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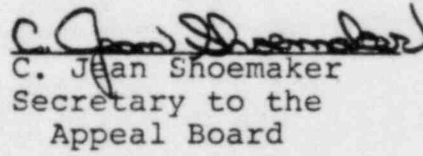
[43] In its restricted decision, the Board also suggested that it placed some reliance as well on the availability of power from the Long Island power grid. Order Denying Revised Security Contentions (Sept. 19, 1984) at 9 (restricted). We do not read the Board's decision as holding that, in the event of a loss of offsite power, such power could always be restored within fifty-five minutes. We assume the Board placed ultimate reliance on emergency power supplied by the temporary diesels or the gas turbine. The Board may wish to clarify this matter on remand.

[44] We terminate, because it is obviously no longer needed, the requirement imposed by our unpublished February 13, 1985 order that the applicant provide us with two business days notice of its intention to embark upon Phase III of its low power testing program. We decline to upset the Licensing Board's grant of an exemption for the conduct of Phase I and II activities. See note 7, supra. As found by the Board below, core cooling and, thus, AC power is not needed in the event of a loss-of-coolant accident during Phase I and only after at least a month if an accident were to occur during Phase II. LBP-84-45, supra, 20 NRC at 1362-63, 1384-85, 1793. As a result, there are no security concerns regarding the substitute AC power supply during Phases I and II.

It is so ORDERED.

FOR THE APPEAL BOARD



C. Jean Shoemaker
Secretary to the
Appeal Board