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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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Before the Atomic Safety and Licensing Board

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

_____ )	
In the Matter of )	
LONG ISLAND LIGHTING COMPANY )	Docket No. 50-322-OL-3
(Shoreham Nuclear Power )	(Emergency Planning)
Station, Unit 1) )	
_____ )	

OPPOSITION OF SUFFOLK COUNTY, THE STATE OF NEW YORK AND  
THE TOWN OF SOUTHAMPTON TO LILCO'S MOTION FOR SUMMARY  
DISPOSITION OF CONTENTIONS 1, 2 AND 9 -- IMMATERIALITY

I. INTRODUCTION

On December 18, 1987, LILCO filed a "Motion for Summary Disposition of Contentions 1, 2 and 9 -- Immateriality" (the "Motion"). Suffolk County, the State of New York, and the Town of Southampton (the "Governments") hereby respond in opposition to LILCO's Motion.

LILCO's Motion seeks summary disposition on three of the outstanding legal authority contentions -- Contentions 1, 2 and 9. Contentions 1 and 2 assert, in essence, that LILCO lacks legal authority to implement the traffic control scheme reflected

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in its Plan. Essential elements of the scheme include placing "traffic guides" at various EPZ intersections to direct traffic and to alter or block the normal flow of traffic. Contention 9 states that LILCO has no legal authority to dispense fuel to evacuees from fuel trucks, as is called for in the Plan.

The basis for LILCO's Motion is the latest version of its "immateriality" theory. That argument has already been rejected by this Board and the Appeal Board as contravening the NRC's emergency planning regulations. Nevertheless, despite the plain rulings against its immateriality arguments and despite the plain materiality of the issues presented, LILCO attempts to reargue the matter yet again. The Motion must fail, however, for a number of reasons.

First, it relies on data that have not yet been subjected to scrutiny by this Board or the Governments. Without discovery of pertinent underlying documents and information, the Governments do not have sufficient knowledge to respond to many of the factual allegations contained in the Motion. Pursuant to 10 CFR § 2.749(c), and consistent with the Board's recent rulings under similar circumstances, the Motion must be rejected.

Second, on the basis of its revised data, LILCO argues that it makes little or no difference to the public health and safety, in terms of dose reduction, whether traffic control or fuel

distribution can be implemented. Thus, it is LILCO's position for the purpose of this Motion that even assuming no capability to implement any type of traffic control and no capability to assist cars which have run out of fuel, summary disposition on the three contentions at issue is appropriate. This position, however, is contrary to the NRC's regulations, NRC case precedent (including decisions in this case which constitute a res judicata bar to LILCO's Motion), and good emergency planning principles. LILCO's argument that it can eliminate an essential element of emergency planning from its Plan is thus unlawful and constitutes a challenge to the regulations.

Third, LILCO's Motion is deceptive in that it fails to bring to the Board's attention certain data which refute the factual basis of its Motion. When those data are considered, LILCO's immateriality argument collapses completely. LILCO's apparent decision to highlight only the data favorable to its position also undercuts the credibility of the Motion itself.

Finally, summary disposition at this time is inappropriate because there are genuine issues of material fact in dispute which must be explored at a hearing. These issues must be resolved before there can be any consideration of LILCO's argument that its Plan defects are "immaterial."

For these reasons, which are more fully explained below and which are supported by appropriate affidavits and a statement of disputed facts (all attached hereto), LILCO's Motion must be denied.

## II. BACKGROUND

### A. History of Immateriality Argument

Before examining the details of LILCO's Motion, it is useful to examine the history of the immateriality argument, including the Licensing and Appeal Board decisions rejecting that argument. Those decisions have not been altered by any Commission decision or by the October 29, 1987 amendment of 10 CFR § 50.47(c)(1). LILCO's Motion thus constitutes a rehash of arguments which it previously has made and lost.

LILCO first raised the immateriality issue in a motion filed on August 6, 1984, which sought, among other things, summary disposition of Contentions 1-4 and 9-10 on immateriality grounds.<sup>1/</sup> With respect to Contentions 1 and 2, LILCO asserted

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<sup>1/</sup> LILCO's Motion for Summary Disposition of Contentions 1-10 (the "Legal Authority" Issues) (Aug. 6, 1984) ("August 6, 1984 Motion"). Contention 3 was based on LILCO's lack of authority to post "trailblazer" signs within the EPZ. LILCO has since withdrawn that feature from its Plan. Contention 4 pertains to LILCO's lack of authority to remove roadway blockages. Contention 10 concerns LILCO's lack of authority to implement access control at the EPZ perimeter. Contentions 3, 4 and 10 are not the subjects of the instant Motion.

that an evacuation in the absence of any traffic control (an "uncontrolled evacuation") would require 95 minutes more than one in which traffic was controlled in accordance with LILCO's Plan. LILCO then argued that its lack of authority to implement traffic control was immaterial because the uncontrolled evacuation times were comparable to evacuation times at some other plants and, further, because no minimum evacuation times are required under the NRC's regulations. August 6, 1984 Motion, at 52-53. With respect to Contention 9, LILCO argued that dispensing fuel was not required by NRC regulations and that, in any event, LILCO's evacuation time estimates were not affected by LILCO's lack of authority to distribute fuel. Id. at 53.

LILCO's immateriality arguments were addressed by the Board in its April 17, 1985, Partial Initial Decision, LBP-85-12, 21 NRC 644 (1985) ("P. 7"). There, the Board accepted LILCO's evidence that an uncontrolled evacuation would take 95 minutes longer than a controlled evacuation, but rejected LILCO's argument that it was immaterial whether an evacuation was controlled or uncontrolled. Noting that 10 CFR §§ 50.47(a)(1) and (b)(10) require the development of a range of protective measures to protect the public, the Board held:

It is evident that the unplanned evacuation LILCO now proposes will not meet the regulatory requirements as the utility expected to do with its evacuation. The range of protective actions available to the public is reduced, as is the means to achieve dose savings. The emergency

response plans would be framed to cope with a smaller spectrum of accident possibilities.

In seeking to abandon the performance of the traffic-related functions provided for in the LILCO Plan, which would result in an unplanned response with its attendant consequences, Applicant would be acting contrary to the requirements of §§ 50.47(a)(1), 50.47(b)(10), and elements of the federal guidance set forth above.

The fact that the elimination of the traffic-related functions would not make evacuation impossible is of no assistance to LILCO. That is not the test. Although there is no standard time required for evacuation in an emergency, there should be available and employable means to achieve dose savings for a spectrum of accidents, which abandonment of the traffic functions to be implemented in the original Plan effectively limits.

PID, 21 NRC at 917. In short, the Board recognized the critical nature of traffic control in emergency planning and that the absence of traffic control capabilities would seriously hamper an effective emergency response.

On appeal, the Appeal Board upheld the Board's rejection of LILCO's immateriality argument:

LILCO included traffic control as part of its proposed evacuation procedures in light of such requirements. We believe that such inclusion was proper. In the context of this case, at least, something more is needed than an aspiration that the public will be able to fend for itself in the event an evacuation is required.

ALAB-818, 22 NRC 651, 677 (1985).

Upon Commission review, the Commission did not reach the merits of LILCO's immateriality argument. Rather, the Commission concerned itself largely with another one of the issues raised by LILCO -- the so-called "realism" argument. In remanding the "realism" issue to this Board, the Commission remanded the immateriality issue as well, stating:

While NRC regulations may make no explicit mention of some of these emergency planning measures, such measures may nevertheless be required in order that there be reasonable assurance of adequate protective measures. LILCO's materiality argument presents issues that are primarily factual rather than legal. The factual issues are subsumed within the scope of factual issues presented by LILCO's realism argument and can be considered by the Board in the remanded proceeding on realism.

CLI-86-13, 24 NRC 22, 32 (1986).

It is important to note that the Commission did not overturn the Licensing Board's or Appeal Board's findings of the fundamental need for traffic control capability. Indeed, while the Commission remanded the immateriality issues, it gave not the slightest hint that it disagreed with the PID or ALAB-818 conclusions related to "immateriality." This fact was expressly recognized by this Board in its September 17, 1987 Memorandum and Order, LBP-87-26, at 35:

We found [in the PID] that a guided evacuation is a safety feature, and that finding has not been overturned.

As discussed below, the PID, ALAB-832, and LBP-87-26 decisions are conclusive: LILCO's immateriality argument has been addressed; it has been rejected; and the PID, ALAB-832, and LBP-87-26 decisions are res judicata. Likewise, the Commission's new rule has not altered those decisions in the least. It is improper for LILCO to attempt to make arguments which have been rejected. They must be rejected yet again by this Board.

B. LILCO's Motion

1. Contentions 1 and 2 (Traffic Control)

The basis for LILCO's Motion with respect to Contentions 1 and 2 purported is a reanalysis of the evacuation time estimates which were the subject of an earlier hearing before this Board. The evacuation time estimates litigated in that hearing were issued in Revision 3 ("Rev. 3") of the Plan. For purposes of discussing LILCO's Motion, those estimates may be summarized as follows for an evacuation of the full 10-mile EPZ under normal summer conditions:<sup>2/</sup>

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<sup>2/</sup> In discussing the Revision 3 estimates herein, it should be understood that the Governments do not agree to the accuracy of those prior estimates. However, for purposes of the instant Motion, we assume for the sake of argument that those prior estimates were generally accurate.

<u>Controlled/ Uncontrolled</u>	<u>% Non-Compliance</u>	<u>Time (hours-minutes)</u>
Controlled	0%	4-55
Uncontrolled	0%	6-30
Controlled	25%	4-55
Controlled	50%	5-30
Uncontrolled	25%	6-30
Uncontrolled	50%	6-30

Motion, Lieberman Affidavit, ¶ 4.

As the data demonstrate, there was formerly a 95-minute difference between a controlled and an uncontrolled evacuation. It is also important to note that, according to the Rev. 3 analysis, LILCO's evacuation times were insensitive to non-compliance with LILCO's prescribed routing scheme.<sup>3/</sup> Thus, there

<sup>3/</sup> The LILCO Plan prescribes specific evacuation routes to persons in each zone (and, in many cases, subzones) of the EPZ. One of the issues pursued by the Governments in the litigation of LILCO's evacuation time estimates was that while such an approach optimizes travel times on paper, there was no basis in reality to assume that all evacuees would follow their assigned routes without deviation. Thus, the County presented evidence and testimony demonstrating that, for a number of reasons, there would be significant noncompliance with LILCO's prescribed routing, which would in turn raise evacuation times significantly. For a discussion of the many reasons why evacuees would deviate from their assigned routes, see generally, Suffolk County and State of New York Proposed Findings of Fact and Conclusions of Law on Offsite Emergency Planning, Vol. II

(footnote continued)

was no difference in the time required for an uncontrolled evacuation (6.5 hours), no matter whether there was 0%, 25% or 50% non-compliance with LILCO's prescribed evacuation routes.

On August 2, 1985 -- 11 months after the close of the record on LILCO's evacuation time estimates and 3 1/2 months after the issuance of the PID -- LILCO issued the results of a reanalysis of its evacuation time estimates in Revision 5 ("Rev. 5") of the Plan. According to LILCO's Motion, the revised evacuation time estimates were derived from certain modifications to the analysis which was the basis for the evacuation time estimates found in Rev. 3 of the LILCO Plan. Motion, Lieberman Affidavit at ¶¶ 5-7. Specifically, the new estimates are said to be based on different treatment of EPZ Zones Q and F. LILCO alleges that in reanalyzing evacuation from Zone Q, a more detailed evacuation network was devised. More cars were assumed to travel along that evacuation network out of the EPZ, and less cars were assumed to evacuate on unmodeled local roads, than had earlier been assumed. Traffic was also reassigned in two subzones of Zone F. Motion, Lieberman Affidavit at ¶¶ 5-7.

As set forth in Mr. Lieberman's affidavit at paragraph 7, the revised estimates showed the following evacuation times:

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such reasons include intentional deviation because evacuees perceive they know a shorter route or perceive that another route would be less congested, and unintentional deviation because routes may be forgotten or never known in the first place. Id.

<u>Controlled/ Uncontrolled</u>	<u>% Non-Compliance</u>	<u>Time (hours-minutes)</u>
Controlled	0%	5-05
Uncontrolled	0%	5-40
Controlled	25%	5-25
Controlled	50%	5-25
Uncontrolled	25%	6-00
Uncontrolled	50%	6-25

As a result of its reanalysis, LILCO asserts that its Rev. 5 evacuation time estimates now reflect a smaller time difference between a "controlled" and an "uncontrolled" evacuation than had previously been calculated. For reasons which are not adequately explained in either Rev. 5 or the Motion, the 95-minute differential which the Board held in the PID could unacceptably limit available protective actions was reduced to 35 minutes. On this basis, LILCO now argues that the reduced time differential is within the range of error of the evacuation time estimates and is thus insignificant. Accordingly, LILCO concludes that it is immaterial whether LILCO is able to implement traffic control or not. Motion, at 13.

It is important for this Board to recognize, however, that under the revised analysis the difference between a controlled

and an uncontrolled evacuation was reduced to 35 minutes only where 100% compliance was assumed. LILCO's Motion fails to direct the Board's attention to the fact that, for reasons which are unknown and unexplained, its revised evacuation time estimates are now sensitive to non-compliance, unlike its previous estimates. Thus, the difference in estimated evacuation time between a controlled evacuation with full compliance and an uncontrolled evacuation with 50% non-compliance is still 80 minutes -- only 15 minutes less than the 95 minute difference that was previously noted by the Board when it earlier denied LILCO's immateriality argument. Likewise, the difference between a controlled evacuation with full compliance and an uncontrolled evacuation with 25% non-compliance is almost an hour. See Motion, Lieberman Affidavit, at ¶ 7.4/

LILCO fails to bring these pertinent comparisons of LILCO's data to the Board's attention. Furthermore, LILCO offers no reason why full compliance should be assumed in an uncontrolled evacuation or why the 35-minute differential it has focused upon is the only valid comparison between its data. These omissions are significant in light of the fact that LILCO's time estimates are now sensitive to varying degrees of compliance.

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<sup>4/</sup> LILCO acknowledged this new sensitivity to non-compliance in the following new language inserted into Rev. 5 of OPIP 3.6.1 at 2:

In addition, the evacuation time estimates are sensitive to evacuee compliance with recommended routes, traffic shadow beyond ten miles and road accidents.

At the time Rev. 5 was released, LILCO did not provide the Governments with the documentation underlying its revised time estimates except to the extent that revisions to Appendix A of the Plan were provided; nor were the Governments apprised of the details or bases supporting the revised assumptions and revised evacuation network incorporated within the analysis. Likewise, no such documents or information were provided to the Governments when LILCO filed the instant Motion. Affidavit of Christopher M. McMurray, attached hereto, ("McMurray Affidavit"), ¶ 4.

Accordingly, the Governments are in no position at this time to evaluate the adequacy or accuracy of the revised estimates. For example, some of the significant unanswered questions raised by LILCO's new data and conclusions issues are: what factors brought about the reduction in uncontrolled evacuation times; whether that reduction is based on valid methodology; how the assumptions about the number of subzone Q automobiles traveling on the revised route were derived; how traffic in Zone F was reassigned; why Zones Q and F were singled out for special treatment; and why the estimates are now sensitive to non-compliance? Affidavit of David T. Hartgen, attached hereto, ("Hartgen Affidavit"), ¶¶ 4-5; McMurray Affidavit, ¶ 4.

These questions are especially important in light of the fact that: (1) LILCO's results are counter-intuitive since adding more automobiles to a network would generally be expected to raise evacuation times; and (2) the timing of the release of

LILCO's reanalysis raises legitimate questions about whether it was "result-oriented" -- i.e., designed specifically to reduce the previously-existing 95-minute differential between a controlled and an uncontrolled evacuation. See Hartgen Affidavit, ¶ 7; McMurray Affidavit, ¶ 6.

It was within LILCO's power to provide the detailed data which would provide answers to the foregoing questions. However, LILCO's Motion, including the Lieberman Affidavit, are devoid of such data. Thus, LILCO has only itself to blame for creating a situation where the Board must reject summary disposition under 10 CFR § 2.749(c).

## 2. Contention 9

As alleged in Contention 9, it is established that LILCO lacks legal authority to distribute fuel to evacuees traveling along evacuation routes. In seeking summary disposition on this Contention, LILCO offers no new argument. It simply reasserts the arguments it presented earlier to the Board, which arguments have been rejected. See PID at 917-18; LBP-87-26, at 39. Thus, LILCO argues that distribution of fuel is not required by NRC regulations and that, in any event, the absence of fuel distribution is immaterial because evacuation time estimates are insensitive to the roadway blockages (such as accidents or cars running out of gas) which would occur if drivers ran out of fuel.

Accordingly, LILCO concludes that the overall population dose would not be reduced by implementing the fuel distribution portion of its Plan. Motion, at 13-14.

Again, LILCO appears to be confusing its prior evacuation time estimates with its current time estimates. LILCO's prior time estimates did, in fact, find that time estimates were largely insensitive to road blockages. Notwithstanding that fact, the Board, as noted, ruled for the Governments on Contention 9. However, LILCO specifically states in Rev. 5 of OPIP 3.6.1 that its evacuation time estimates are now "sensitive to . . . road accidents." Plan, OPIP 3.6.1 at 2 (emphasis added). The extent of this sensitivity is not readily apparent from the Plan or from LILCO's Motion. Nevertheless, just as LILCO's revised estimates demonstrate that noncompliance is now a factor affecting evacuation time estimates, LILCO, according to its own words, has apparently determined that roadway blockages (such as accidents or cars running out of fuel) may now affect evacuation time estimates as well.

LILCO has failed to provide any quantification of the sensitivity of its new time estimates to road blockages. Because the Governments have not been provided the data and other documents which purportedly form the basis for LILCO's new evacuation time estimates, the Governments are in no position to quantify the new sensitivity of LILCO's new evacuation time

estimates to roadway blockages. See Hartgen Affidavit, ¶ 4; McMurray Affidavit, ¶ 6. Nevertheless, LILCO's description of the results of its own revised analysis contradicts the basis for its Motion.

### III. DISCUSSION

A. LILCO's Motion is Premature Because  
The Governments Have Insufficient Data  
On Which To Provide a Complete Response

It has been common practice in this proceeding that analyses conducted by LILCO's traffic experts have been subject to full and open exploration by the Governments. Thus, in the initial emergency planning hearings on LILCO's evacuation time estimates, the Governments had access to the documentation underlying the estimates and were able, through depositions and other means, to explore the bases and assumptions behind the time estimates. McMurray Affidavit, ¶ 3. This practice was continued in subsequent hearings. For instance, in the reception center hearings, the Board permitted full exploration of the capacity analyses conducted by LILCO's traffic expert. When those analyses were revised, the Board ruled that the Governments were entitled to further discovery on the revisions. See Memorandum and Order (Ruling on LILCO's Motion to Substitute Written Testimony) (June 12, 1987); McMurray Affidavit, ¶ 3.

LILCO's Motion seeks summary disposition based on a revised analysis of its evacuation time estimates. However, the Governments have not been provided with the documents and underlying data which would allow them to verify or dispute LILCO's new estimates; nor have they had an opportunity to question LILCO's traffic expert on issues relating to the Motion. As the Board has recognized in the past, the Governments have a right to explore those revised data and all facts and circumstances underlying those data, before the Board makes any ruling as to their accuracy, and 10 C.F.R. § 2.749(c) specifically provides for relief where such an opportunity has not been provided.

It barely needs expression that summary disposition motions assume other parties in a proceeding have had an opportunity to determine and respond to matters potentially in controversy . . . .

Memorandum and Order (Ruling on Applicant's Motion of November 6, 1987 for Summary Disposition of the WALK Radio Issue) (Dec. 21, 1987), at 4. See also Memorandum and Order (Ruling on Applicant's Motion of October 22, 1987 for Summary Disposition of Contention 25.C Role Conflict of School Bus Drivers) (Dec. 30, 1987).

Consistent with Section 2.749(c) and these Board rulings, it is improper to expect the Governments to be able to respond

meaningfully to the merits of LILCO's Motion when the Motion is based on technical analyses and data to which the Governments have not been given full access. Neither the Board nor the Governments can merely accept at face value a new analysis without inquiry into the appropriateness of the revisions that led to the new estimates. This is especially true in light of the fact that LILCO generated the new estimates after the Board's PID ruled against LILCO's prior immateriality motion on the basis of LILCO's earlier estimates. The Governments are thus entitled to an opportunity to review and analyze the documents underlying LILCO's revised estimates, and to other discovery (such as depositions), before they can be required to respond to a dispositive motion based on revised technical data.<sup>5/</sup>

In short, this Board cannot grant summary judgment on the basis of new, untested data which the Governments have not been given the opportunity to explore. Accordingly, LILCO's summary disposition motion must be denied.

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<sup>5/</sup> It is irrelevant that Rev. 5 was issued over two years ago and that the time estimates themselves are not new to the Governments. That is beside the point. The data and documentation underlying those results have never been revealed to the Governments. The emergency planning record was closed and the PID had already been issued when LILCO issued Rev. 5. The Governments had no way of knowing when Rev. 5 was issued, or at any time prior to the filing of this Motion, that the revised estimates would ever be relied upon by LILCO, much less would be the basis for a summary disposition motion on an issue that had already been ruled upon. Thus, the Governments had no reason to seek the underlying data. In any event, the Governments had no legal basis for seeking such discovery as the record was closed when Rev. 5 was issued and thus there were no grounds for obtaining such discovery.

B. LILCO's Immateriality Argument  
Is Defective as a Matter of Law

Even if the analyses discussed above were ultimately found to be accurate, LILCO's Motion must still be denied because it is clear that a traffic control capability is a required under 10 CFR § 50.47. LILCO's argument, therefore, constitutes a challenge to the regulations and must be rejected.

LILCO asserts that it does not matter whether traffic control can be implemented or not because, based on its post-PID reanalysis of evacuation time estimates, only a 35-minute differential now exists between an evacuation with traffic control and one without traffic control. Thus, LILCO argues, in essence, that its Plan should be approved even in the absence of any capability to control traffic or prevent cars from running out of fuel, thus blocking traffic. LILCO's argument, however, is contrary to the NRC's regulations, NRC precedent, and fundamental emergency planning principles.

1. LILCO Fails To Distinguish  
Applicable Case Law Precedents

Section 50.47(a)(1) of the Commission's regulations requires "reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." Likewise, Section 50.47(b)(10) requires the development of a

"range of protective actions" for the public and "[g]uidelines for the choice of protective actions . . . ." (emphasis added).

While traffic control is not specifically mentioned as a protective action in the Commission's regulations (no particular protective action of any kind is mentioned specifically in Section (b)(10)), there can be no doubt that traffic control is one of the most basic requirements of emergency planning and a necessary means to implement the protective action of evacuation. As generally, Affidavit of James C. Baranski, attached hereto, ("Baranski Affidavit"). No plans for nuclear plants in the State of New York lack traffic control capabilities. Baranski Affidavit, ¶ 3. Indeed, FEMA interprets elements J.10.g and J.10.j of NUREG 0654 as requiring traffic control and further requires an exercise of traffic control capability to demonstrate that it can be implemented. Baranski Affidavit, ¶¶ 4-5. LILCO's Motion presents no evidence to the contrary.

The obvious and critical importance of traffic control to emergency planning is well-recognized in NRC case law. As stated by the Licensing Board in Pennsylvania Power and Light Co. (Susquehanna Steam Electric Station, Units 1 and 2), LBP-82-30, 15 NRC 771, 796 (1982) (Judge Gleason, Chairman):

Arguably, no more critical item in emergency planning exists than that which deals with the movement of people and vehicles during an evacuation. Traffic control raises issues of policing the activity, the manpower forces

assigned to it and the manner in which they are expected to operate . . . .

[D]ue to its unique level of importance, proper planning in traffic control for evacuating an area of over 50,000 people requires precise operations. To that extent, the potential for problems is minimized and the proper development of the range of protective responses recommended by NUREG-0634 is assured.

Likewise, this Board's PID recognized the fundamental importance of traffic control to effective emergency planning and response when it rejected LILCO's immateriality claims. Thus, the Board stated:

In seeking to abandon the performance of the traffic-related functions provided for in the LILCO Plan, which would result in an unplanned response with its attendant consequences, Applicant would be acting contrary to the requirements of §§ 50.47(a)(1), 50.47(b)(10), and elements of the federal guidance set forth above.

21 NRC at 917. The Appeal Board agreed:

We believe that the Board properly rejected LILCO's "immateriality" argument. We recognize that the Commission's regulations do not spell out the precise manner in which an evacuation is to be conducted if necessary. Nonetheless, the Commission has construed its emergency planning regulations to require "provisions for evacuating the public in times of radiological emergencies." We have likewise observed that the Commission's emergency planning scheme contemplates that emergency evacuation procedures be developed for the 10-mile area surrounding a nuclear plant . . . . LILCO included traffic control as part of its proposed evacuation procedures in light of such requirements. We believe that such inclusion was proper. In the context of this

case, at least, something more is needed than an aspiration that the public will be able to fend for itself in the event an evacuation is required.

ALAB-818, 22 NRC 651, 677 (1985) (emphasis in original, footnotes omitted). The Commission's remand in CLI-86-13 did not alter these decisions. See LBP-87-26, at 35. Nevertheless, LILCO now asks this Board to approve precisely what has unequivocally been rejected in the past -- leaving the public to fend for itself.

Under settled principles of res judicata and collateral estoppel, this Board must reject the Motion.<sup>6/</sup> LILCO's new, unsupported conclusions regarding an alleged 35 (vs. 95) minute difference in time estimates do not change the law: there must be a capability to institute effective traffic control measures. That is the clear law of Susquehanna, the PID, ALAB-818, and LBP-87-26. Accordingly, the Motion must be rejected.

## 2. LILCO's Arguments Cannot be Considered

LILCO's Motion fails to explain how the failure to provide any capability for traffic control satisfies the obligations imposed by 10 CFR §§ 50.47(a)(1) and (b)(10) to provide a range of protective actions that can and will be implemented. Rather,

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<sup>6/</sup> The NRC recognizes res judicata and collateral estoppel. See e.g., Southern Calif. Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-673, 15 NRC 688, 695 (1982) and cases cited therein. Here there is privity of parties and the same issue is presented which has been ruled upon previously.

LILCO attempts to demonstrate that traffic control is not significant to an evacuation by declaring that its previous estimates (with a 95-minute differential between controlled and uncontrolled evacuations) are no longer accurate, and advancing new estimates with a new alleged differential that it asserts is roughly within the margin of error of the analysis. LILCO then concludes that the differential is insignificant and that the Plan should be approved on that basis. This approach, however, ignores the clear NRC precedent which holds that such traffic control is a critical means of complying with the NRC's emergency planning regulations.

LILCO's approach must also be rejected for a number of other reasons. First, LILCO's argument turns the purpose of evacuation time estimates on its head. Such estimates are meant to be a tool to assist emergency personnel at the time of an emergency in determining the type of protective actions which are necessary. See PID, 21 NRC at 208. They were never intended, however, to be a means of justifying the failure to provide a key element of emergency planning.

Second, LILCO's evacuation time estimates are just that -- estimates. Evacuation time estimates are not such a precise science that the results can justify the removal of a critical item of emergency planning that has consistently been recognized as vital. PID, 21 NRC at 806 ("traffic modeling has

uncertainties if the goal is literal prediction of future scenarios"); id. at 808 ("LILCO's evacuation time estimates . . . are reasonable statements of capability and not literal predictions of how a future evacuation might play out"). LILCO's effort to portray its new estimates as being precise must be rejected.

Third, potential differences in evacuation times is only one of the reasons why traffic control is important. The ability to field traffic control personnel gives assurance that an evacuation can be carried out and provides the flexibility to deal with unexpected events. For instance, traffic control personnel are critical to detecting bottlenecks, congestion, accidents and similar obstructions to the flow of traffic. Upon detection of such obstructions they can: (1) take action themselves to ease or eliminate the obstruction; and/or (2) inform evacuation controllers of the obstruction so that methods can be considered for diverting the traffic around the obstruction. Baranski Affidavit, ¶ 6. Traffic control is also necessary to keep traffic flowing away from the accident. Chaos could result from as many as 160,000 people attempting to evacuate the EPZ without any direction from personnel in the field. See Baranski Affidavit, ¶ 7. Traffic control is also necessary to ease flow in adverse weather conditions. Baranski Affidavit, ¶ 7.

In light of the foregoing, it is plain that LILCO's immateriality argument must fail as a matter of law. Traffic control is an essential element of emergency planning which cannot be obviated by after-the-fact recalculations of necessarily imprecise, prior evacuation time estimates, attempting to reduce the difference between controlled and uncontrolled evacuations to show that traffic control makes no difference. The NRC's regulations, NRC precedent, the facts, and common sense refute this approach.

C. LILCO's Immateriality Argument  
Is Factually Incorrect

Even taking the sparse data provided by LILCO at face value, they belie LILCO's claim that the difference between an evacuation that is controlled and one that is uncontrolled is insignificant. As demonstrated above, the time estimates show that there is still as much as an 80-minute difference between a controlled and an uncontrolled evacuation.<sup>7/</sup> LILCO argues otherwise only by conveniently ignoring the compliance factor, which now affects evacuation times in LILCO's reanalysis. Thus, LILCO claims that there is only a 35-minute difference between a controlled and an uncontrolled evacuation. LILCO's argument is

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<sup>7/</sup> As noted above, this is the differential between a controlled evacuation assuming full compliance with LILCO's prescribed routes, and an uncontrolled evacuation assuming only 50% compliance.

deceptive because it focuses on only some of the data while ignoring other data refuting it.

At the earlier emergency planning hearing, the Governments presented substantial evidence demonstrating that many people would fail to follow their LILCO-assigned routes from the EPZ during an evacuation. Because LILCO's estimates assumed compliance with prescribed routing, the Governments argued that those estimates were unreliable. Governments' Findings at 349-58. LILCO countered this testimony with sensitivity analyses which, at that time, concluded that non-compliance with prescribed routing had little, if any, effect on overall evacuation times. Cordaro, et al. (Contention 65) ff. Tr. 2337, Atts. 11 and 12. The evidence presented by LILCO showed that uncontrolled evacuation time estimates were the same whether one postulated 0%, 25%, or 50% noncompliance. In all of those cases the evacuation time was 6.5 hours -- 95 minutes longer than LILCO's base case of controlled evacuation with full compliance. At that time, controlled evacuations were also relatively insensitive to non-compliance. See Lieberman Affidavit, ¶ 4; PID, 21 NRC at 791-93.

In light of this evidence, the Board in its PID did not reach the issue of whether there would be significant non-compliance with prescribed routing. Rather, the Board held that the issue was moot since non-compliance would have little if any

effect on evacuation times. See PID, 21 NRC at 791-93. As noted above, however, the Board did find significance in the 95-minute differential between a controlled and an uncontrolled evacuation. Recognizing this differential, the Board correctly reasoned that LILCO's lack of authority to implement traffic control would unacceptably limit available protective action options and thus reduce dose savings. Accordingly, the Board rejected LILCO's immateriality argument. See PID, 21 NRC at 917.

Now, however, the data from the reanalysis show completely different results. It is true (if one accepts the accuracy of LILCO's revised analysis) that the differential between a controlled and uncontrolled evacuation shrinks to 35 minutes if 100% of the compliance is assumed. But, unlike LILCO's prior estimates, LILCO's new estimates are now highly sensitive to noncompliance with the routing assumed in LILCO's analysis. See Lieberman Affidavit, ¶¶ 7-8; see also Hartgen Affidavit, ¶¶ 4-5. When noncompliance with assigned routing is assumed in the uncontrolled scenario, the spread between controlled and uncontrolled evacuation is in fact reduced only slightly in the new analysis. Rather than the 95-minute differential existing in the Rev. 3 time estimates, there is an 80-minute differential between an uncontrolled evacuation with 50% noncompliance and a controlled evacuation with full compliance. Likewise, there is a 55-minute differential between an uncontrolled evacuation with 25% noncompliance and a controlled evacuation with full

compliance.<sup>8/</sup> These are still significant differences which cannot be ignored. See Affidavit of Gregory C. Minor, attached hereto, ("Minor Affidavit"), ¶ 4.

By directing the Board's attention only to the data that pertain to assumed full compliance with prescribed routes, LILCO impliedly argues that even in the absence of any traffic control, full compliance should be assumed. But, LILCO's Motion offers no reason why full compliance should be assumed under such conditions, nor could any such reasons be justified. While the Board did not reach a decision one way or the other about whether noncompliance would occur, the record demonstrates that it would. See Governments' Findings at 349-58. In its findings, LILCO argued that noncompliance would not be substantial for three reasons, including:

- (a) The erection of trail blazer signs showing evacuees the proper routes out of the EPZ;
- (b) The presence of traffic guides to guide evacuees along the proper route; and
- (c) LILCO's public education brochure which would contain the prescribed routes for each evacuee.

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<sup>8/</sup> Likewise, there is a one hour differential between a controlled and uncontrolled evacuations where 50% non-compliance is assumed in both cases. Lieberman Affidavit, ¶ 7.

See LILCO Proposed Findings of Fact and Conclusions of Law on Offsite Emergency Planning (Oct. 5, 1984), at 211. The first factor, however, is no longer part of LILCO's Plan. Thus, there will be no signs to guide evacuees from the EPZ along prescribed routes.<sup>9/</sup> The second factor is eliminated by definition when considering an uncontrolled evacuation, which is the basis for LILCO's immateriality argument. Third, there is no evidence in the record that public education alone can reduce noncompliance with prescribed routing in an uncontrolled evacuation below the 25 to 50% levels analyzed in the prior proceeding. Indeed, the record appears to indicate that substantial noncompliance would occur in the absence of LILCO's trail blazer signs and traffic guides. See Governments' Findings, at 349-58.

On the basis of a 95-minute gap between a controlled and an uncontrolled evacuation, the Board found in the PID that LILCO:

acknowledges that the resulting uncontrolled evacuation can limit responses so that it might require sheltering as a protective action where a controlled evacuation would provide greater dose savings.

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<sup>9/</sup> In the PID, the Board stated:

LILCO further agrees that elimination of the "trail blazer" signs would not facilitate an emergency evacuation and enhance the protection of the public health and safety.

21 NRC at 917.

PID, 21 NRC at 917. That finding is no less valid with respect to LILCO's revised evacuation time estimates which still reflect substantial differences between a controlled and an uncontrolled evacuation, depending on what degree of noncompliance is assumed. Accordingly, LILCO's Plan must still be found to be defective to the extent that traffic control cannot be implemented. Since LILCO's Motion assumes no control, it must be rejected.

Likewise, LILCO's Motion must be rejected with respect to Contention 9 in that there is a clear conflict between the statement in the Motion that the failure to distribute fuel will not affect evacuation times and the statement in Rev. 5 of the LILCO Plan that its evacuation time estimates are now sensitive to road accidents. OPIP 3.6.1 at 2. As the Board noted in its September 17, 1987 Memorandum and Order, LILCO's fuel distribution plan is a "safety feature." LBP-87-26, at 39. In light of the implication in OPIP 3.6.1 at 2 that this safety feature may in fact affect evacuation, and accordingly affect dose savings, summary disposition cannot be granted.

D. Substantial Issues of Material Fact  
Exist Precluding Summary Disposition

LILCO's Motion must also be rejected because LILCO has failed to demonstrate that no genuine issues of material fact exist to be heard regarding its immateriality argument. Indeed, it is clear from the discussion above, as well as that which

follows, that substantial factual disputes exist. The attached Statement of Material Facts as to Which a Genuine Dispute Exists ("Governments' Statement") summarizes those disputes.

The law applicable to summary disposition was recently summarized by this Board in its Memorandum and Order of September 17, 1987, LBP-87-26, and by the Vogtle Board in its unpublished Memorandum and Order of October 3, 1985. See Memorandum and Order (Ruling on Motion for Summary Disposition of Contention 8 re: Vogtle Quality Assurance), Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), ASLBP No. 84-499-01-OL, Doc. Nos. 50-424 OL and 50-425 OL (Oct. 3, 1985), slip op. at 2-3.

A licensing board is empowered to grant summary disposition if it finds 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 party seeking summary disposition has the burden of proving the absence of any genuine issue of material fact, Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 753 (1977), with the record viewed in the light most favorable to the motion's opponent. Dairyland Power Cooperative (LaCrosse Boiling Water Reactor), LBP-82-58, 16 NRC 512, 519 (1982) (emphasis added).

LILCO has not carried its burden. First, in Paragraphs 3 through 6 of its Statement of Material Facts,<sup>10/</sup> LILCO alleges a number of facts about its revised evacuation time estimates which the Governments are in no position to agree with or oppose. As stated above, the Governments have not been provided with sufficient information to make such an assessment. LILCO must disclose all information pertaining to those facts before summary disposition can even be considered. See 10 CFR § 2.749(c)(1). The attached affidavits of Christopher M. McMurray and David T. Hartgen document the need for such data.

On their face, however, LILCO's data raise substantial questions about LILCO's analysis, such as: how it was conducted; whether the revised evacuation network is appropriate; whether LILCO's assumptions about the number of additional cars on the network are appropriate; why LILCO's uncontrolled evacuation times decreased with more cars on the network than before; what are the reasons for the decrease in uncontrolled evacuation times; and why LILCO's evacuation time estimates became more sensitive to noncompliance with prescribed routing. See Hartgen Affidavit, ¶¶ 4-5; Governments' Statement, ¶¶ 1-5. With respect to Contention 9, the Governments need access to LILCO's data supporting its statement in Rev. 5 of the Plan that its

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<sup>10/</sup> See Statement of Material Facts As To Which There Is No Genuine Issue To Be Heard On Contentions 1, 2 and 9 -- Immateriality ("Statement of Material Facts") attached to LILCO's Motion.

evacuation times are now sensitive to roadway blockages. Governments' Statement, ¶¶ 7-8; McMurray Affidavit, ¶ 5.

Second, even the sparse data which LILCO has provided reveal that genuine issues of material fact exist. For instance, it is now important to resolve what degree of non-compliance with prescribed routing should be expected under uncontrolled conditions, how much evacuation times will increase as a result of such non-compliance, whether such increases would limit available protective actions, and whether dose savings would thereby be reduced. Governments' Statement, ¶¶ 3-6, 10-12. McMurray Affidavit, ¶ 7. Likewise, it is important to determine to what extent evacuation times may be increased as a result of LILCO's failure to provide fuel to evacuees, thus raising the possibility of substantial blockages as significant numbers of evacuees run out of fuel. See McMurray Affidavit, ¶ 5; Governments' Statement, ¶¶ 7-8.

Third, LILCO assumes that the alleged 35-minute difference in evacuation times it relies upon in its Motion is immaterial as a matter of law. That factual assertion, however, is open to dispute. In a fast-developing accident, LILCO's inability to implement a controlled evacuation quickly could have adverse health consequences for the public because of increased exposure to the plume. See Minor Affidavit ¶ 3. There is no basis at all to assume that such increased exposure is insignificant. To the

contrary, such increased exposure could be quite significant. See Minor Affidavit, ¶ 3; Governments' Statement, ¶ 9. Furthermore, it is important to determine whether the longer differentials between other LILCO data are significant in terms of dose savings. See Governments' Statement, ¶¶ 10-12; see also Minor Affidavit, ¶ 4.

In short, there are a number of issues which have not yet been resolved -- but must be resolved -- before this Board could even consider, disposing of Contentions 1, 2 and 9 on immateriality grounds. Accordingly, LILCO's Motion must be denied.

#### IV. CONCLUSION

For the foregoing reasons, LILCO's Motion must be denied.

Respectfully submitted,

E. Thomas Boyle  
Suffolk County Attorney  
Building 158 North County Complex  
Veterans Memorial Highway  
Hauppauge, New York 11788

*Christopher M. McMurray*

Lawrence Coe Lanpher  
Christopher M. McMurray  
KIRKPATRICK & LOCKHART  
1800 "M" Street, N. W.  
South Lobby - Ninth Floor  
Washington, D. C. 20036-5891

Attorneys for Suffolk County

*Richard J. Zahnleuter / Con*

Fabian G. Palomino  
Richard J. Zahnleuter  
Special Counsel to the Governor  
of the State of New York  
Executive Chamber, Room 229  
Capitol Building  
Albany, New York 12224

Attorneys for Mario M. Cuomo,  
Governor of the State of New York

*Stephen B. Latham / Con*

Stephen B. Latham  
Twomey, Latham & Shea  
Post Office Box 398  
33 West Second Street  
Riverhead, New York 11901

Attorney for the Town of  
Southampton

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GOVERNMENTS' STATEMENT OF MATERIAL FACTS  
AS TO WHICH THERE ARE GENUINE ISSUES IN DISPUTE

At this time, it is impossible for the Governments to provide a complete list of all facts as to which there are genuine issues in dispute because the Governments have not yet been provided all pertinent information regarding the matters contained in LILCO's Motion. See Hartgen and McMurray Affidavits. For this reason, the Motion should be denied. See 10 CFR § 2.749(c). Nevertheless, the Governments set forth below those issues which, based on the information available to them, are at issue.

- (1) Whether LILCO's revised analysis was properly conducted?
- (2) Whether the assumptions underlying LILCO's revised analysis are appropriate?
- (3) What degree of non-compliance with prescribed routing should be expected under uncontrolled conditions?
- (4) How much will evacuation times increase as a result of such non-compliance?

- (5) Whether such increases in evacuation times will limit available protective actions?
- (6) Whether dose savings will be reduced by such increases in evacuation times?
- (7) To what extent will evacuation times be increased as a result of LILCO's failure to provide fuel to evacuees?
- (8) Whether protective actions will be limited and dose savings reduced by an increase in evacuation times resulting from the failure to distribute fuel?
- (9) Whether the 35-minute differential in evacuation times which LILCO relies upon in its Motion is in fact immaterial?
- (10) Whether the longer differentials between a controlled evacuation and the data which LILCO has not brought to the Board's attention are material?
- (11) Whether LILCO has complied with the Section 50.47(b)(10) requirement to develop a range of protective actions?

(12) Whether an uncontrolled evacuation impermissibly restricts the range of protective actions available for implementation in an emergency?