#### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

## BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
LONG ISLAND LIGHTING	COMPANY )	Docket No. 50-322-013 (Emergency Planning)
(Shoreham Nuclear Power Unit 1)	Station,	

# AFFIDAVIT OF THOMAS URBANIK II CONCERNING LILCO'S MOTION FOR SUMMARY DISPOSITION OF CONTENTIONS 1, 2 AND 9

- 1. Thomas Urbanik II, being duly sworn, do depose and state the following:
- 1. I am a Research Engineer associated with the Texas Transportation Institute of the Texas A & M University System, College Station, Texas. My professional qualifications have been admitted into evidence in this proceeding during the reception center hearings as part of Staff Exhibit 3 (Tr. 18955).
- 2. As stated in my direct testimony admitted into evidence during the reception center hearings (Staff Exhibit 3; Tr. 18955), I was principal author of NUREG/CR-1745, "Analysis of Techniques for Estimating Evacuation Times for Emergency Planning Zones" (November 1980), which described the limitations of several methodologies and some alternatives for determining evacuation time estimates. I provided input to the development of the current guidance for ETE studies which appears in Appendix 4 to NUREG-0654 (NUREG-0654/FEMA-REP-1, Rev. 1,

November 1(90). I also appeared and testified on behalf of the Staff during the Shoreham hearings on ETEs.

- 3. I have reviewed the "Affidavit of Edward B. Lieberman In Support of LiLCO's Motion for Summary Disposition of Contentions 1, 2 and 9 Immateriality" which was filed by Applicant as an attachment to "LILCO's Motion for Summary Disposition of Contentions 1, 2 and 9 Immateriality".
- 4. KLD has prepared new ETEs (incorporated into Revision 5 to LILcO's plan) based on a revised network and increased population, which results in a different distribution of traffic from the previous analysis. The new analysis indicates the EPZ roadway network is capable of handling evacuating traffic nearly as well without special traffic control measures as with those measures in place.
- 5. The term "special traffic control measures" does <u>not</u> presume the absence of normal police traffic control to handle normal incidents, such as breakdowns of vehicles or traffic signals. ETEs cannot reasonably estimate the small number of incidents that would occur during an evacuation. These events are assumed to be handled through routine police procedures.
- 6. Mr. Lieberman draws no conclusions from the revised analysis. He only indicates a reduction in the time differential between controlled and uncontrolled evacuations for the summer normal weather evacuation. It is my opinion that the appropriate estimate for an uncontrolled evacuation would be one that includes some degree of noncompliance with evacuation routing. Using what I believe to be the upper limit of noncompliance, 50%, the revised ETEs, which range from 5 hours, 5

minutes to 6 hours, 25 minutes, are essentially the same as the previous ETEs which ranged from 4 hours, 55 minutes to 6 hours, 30 minutes.

- 7. The term "uncontrolled" should <u>not</u> be construed to mean "unplanned". The presence of a plan results in residents being informed of appropriate evacuation routes, as is the case with Shoreham. Traffic control personnel implement and support the plan which has also been made known to the public.
- 8. In regard to the guidance of NUREG-0654 for complying with the requirement of "a range of protective actions", special traffic control is only suggested as an appropriate action that may be considered. It is not necessarily a requirement that the ETEs or emergency plans include special traffic controls to enhance capacity.
- 9. The intent of NUREC-0654, Appendix 4, is to identify potential traffic control strategies for consideration by local authorities. There is no intent in the guidance of NUREC-0654 to require local authorities to implement strategies they believe to be inappropriate. The intent is to identify strategies which are notentially effective in aiding evacuation, and are also within the resources of local authorities.
- there is any reason to provide such service based on the small number of vehicles requiring the service and the alternatives for handling such contingencies. My experience indicates that those individuals who run out of gas would secure rides with others, while the empty vehicle would be pushed or towed out of the way, causing minimal impact on evacuation times.

The statements above are true and correct to the best of my current knowledge and belief.

Thomas Urbanik II

Subscribed and sworn to before me this 25th day of January, 1988.

Notary Public

My commissiones R. RHODES

Notary Public - State of Texas My Commission Expires 2-25-90

#### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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# BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DOCKETING & SERVICE.

In the Matter of

LONG ISLAND LIGHTING COMPANY

(Shoreham Nuclear Power Station,
Unit 1)

Docket No. 50-322-OL-3 (Emergency Planning)

## CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO LILCO'S MOTION FOR SUMMARY DISPOSITION OF CONTENTIONS 1, 2, AND 9 - IMMATERIALITY" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 2nd day of February 1988.

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Administrative Judge
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