## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

## Before the Atomic Safety and Licensing Board

In the Matter of
LONG ISLAND LIGHTING COMPANY
(Shoreham Nuclear Power Station,
Unit 1)

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

## AFFIDAVIT OF ANDREW C. KANEN

State of Virginia )
County of Fairfax )

to wit:

My name is Andrew C. Kanen. I am vice-president of PRC Voorhees which Suffolk County has retained to assist in preparation of a radiological emergency response plan for the County. Our work for the County has included an analysis of the roadway network in Suffolk County and the preparation of evacuation time estimates. To the best of my knowledge, the following facts are true and correct:

- 1. There are four major factors which would contribute to congestion following public notification of an accident at the Shoreham plant. They are:
  - a. Work to home travel
  - b. Perimeter control
  - c. Evacuating traffic
  - d. Voluntary evacuees

See my direct testimony on contentions EP 2B and EP 5B, at pages 6-12, for a more detailed description of these factors, their contributions to congestion and the time frames in which they are likely to have an impact on travel.

- 2. Ambulance travel from the Shoreham site to Central Suffolk Hospital could be delayed by evacuating traffic for up to an hour in the event of a radiological emergency. It is imprudent to rely on the belief that because certain routes such as Sound Avenue or Roanoke Avenue may not be designated as evacuation routes, they will not therefore be congested (Statement Of Facts As To Which There Is No Genuine Issue To Be Heard [hereinafter "LILCO Statement"] at paragraphs 13-19). On the contrary, it is likely that as designated routes become congested during a radiological emergency, persons attempting to evacuate will seek alternate routes. Non-designated evacuation routes will appear to be attractive alternatives. Therefore, congestion can be expected to become more widespread and affect facilities such as Sound Avenue or Roanoke Avenue.
- 3. Furthermore, it is unrealistic to expect that all traffic will be necessarily moving away from the plant (LILCO Statement at paragraphs 5, 23 and 30). In fact, traffic in some instances may move toward the plant for a number of reasons, including:
  - Evacuees seeking alternate, uncongested routes,

- 3 b. Evacuation (recommended or voluntary) by those to the east of the plant who choose to evacuate to the west because they fear being stranded on the North or South Forks: Work to home travel preceding actual evacuation. This traffic could have an adverse impact on LILCO personnel or emergency vehicles moving toward the plant. 4. Perimeter control (described in my direct testimony on EPs 2B and 5B at page 7) will be established within a very short time after LILCO notifies the County that an emergency is taking place. I have reviewed Attachments 6 and 7 to LILCO's Motion For Summary Disposition and note that many personnel who are expected to augment LILCO's emergency response live a substantial distance from the Shoreham plant. It is likely that a significant number of such personnel may not be able to respond quickly enough to proceed toward the plant and cross the perimeter control points before perimeter control is established. The queuing that will occur almost immediately at the perimeter control points will thus delay those personnel in their attempts to reach the Shoreham plant. 5. As stated in my direct testimony at pages 6-7, work to home travel following notification of an emergency is expected to begin very shortly after notification of an emergency. The congestion that will occur is likely to be at least as intense as rush hour traffic and probably more so.

Therefore, at best, the travel times in Attachment 7 reflect only the minimum amount of time it would take LILCO augmenting personnel to reach the Shoreham plant under emergency conditions. In fact, the travel times could be higher. In addition, those times do not reflect the substantial delay that could result due to perimeter control.

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Subscribed and sworn before me on the 18th day of

November, 1982.

Hela K. Quischer

Notary Public

My Commission expires 1/15/1984.