

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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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-3

(Emergency Planning)

DIRECT TESTIMONY OF ROBERT W. PETRILAK
ON BEHALF OF SUFFOLK COUNTY REGARDING
CONTENTIONS 24.E, 24.N, 61.C, 69, 70 AND 71.

Q. Please state your name and position.

A. My name is Robert W. Petrilak. I am Vice President of the Mt. Sinai Board of Education. The schools in the Mt. Sinai Union Free School District are located in the Shoreham 10-mile EPZ. A description of the Mt. Sinai Union Free School District, its schools and its student population is contained in my previous testimony concerning Contentions 25.C and 25.D. (ff. Tr. 3087)

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to address the concerns stated in Contentions 24.E, 24.N, 61.C, 69, 70 and 71. I am authorized to state that the views expressed herein are not just my personal opinions but also represent the position of the Mt. Sinai Board of Education that the provisions of the LILCO Plan concerning schools are deficient and would not protect the school children of the Mt. Sinai School District.

Q. Are you familiar with the provisions of the LILCO Plan?

A. I have reviewed those portions of the LILCO Plan that contain LILCO's proposed protective actions for school children in the event of a radiological accident emergency at Shoreham.

CONTENTION 24.E - LACK OF AGREEMENTS
WITH SCHOOL DISTRICTS

Q. Have you reviewed Contention 24.E?

A. Yes. It asserts that it is unlikely that LILCO's protective action recommendations for schools would be implemented, because LILCO has no agreements with the schools or school districts on which it relies to implement its recommendations, or with the nursery schools or parents of nursery school children who are expected to permit those children to be transported by LILCO employees.

Contention 24.E is correct. Schools, school districts, nursery schools and parents are under no obligation to participate in or to implement whatever response to a Shoreham emergency may be proposed by LILCO. To my knowledge, LILCO has no agreements with schools, school districts, nursery schools or parents to implement LILCO's recommendations, despite the fact that implementation of the LILCO Plan depends on the cooperation of these groups and individuals. The Mt. Sinai School District has not entered into and does not intend to enter into any agreements with LILCO regarding implementation or protective actions that would be recommended by LILCO. As a result, it is unlikely that LILCO's protective action recommendations for schools would be implemented.

CONTENTION 24.N - LACK OF AGREEMENTS WITH RELOCATION CENTERS

Q. Do you agree with Contention 24.N?

A. As it applies to school children, yes. That contention asserts that because LILCO does not have agreements with facilities to serve as relocation centers for school children and other evacuees, LILCO's evacuation proposals would not and could not be implemented. The administration of the Mt. Sinai School District is not aware of any facilities that have agreed to act as relocation centers for our children if an evacuation

were to occur. LILCO's failure to arrange for relocation centers is one reason that LILCO's evacuation proposal for schools would not and could not be implemented, as stated in Contention 70. The Mt. Sinai School District could not agree to conduct an evacuation without prior knowledge and approval of the location and conditions to be expected at a relocation center.

CONTENTION 61.C.1 - SHELTERING

Q. Are you familiar with Contention 61.C.1?

A. Yes. It asserts that a sheltering recommendation for schools could not be implemented. I agree with this assertion.

First, LILCO is wrong when it assumes in its Plan that school officials have conducted planning for implementing a sheltering recommendation, or any other recommendation in the event of a radiological emergency. (OPIP 3.6.5 at 10a) The Mt. Sinai School District has not made any plans that would enable us to implement a recommendation of sheltering.

Moreover, if a school district attempted to shelter its students in the event of a radiological emergency, there would be many serious practical problems that would make it unlikely that sheltering could be effected. For example, it would be

essential that adequate staff be available to supervise the children. The job of supervising the children could be more difficult than usual because they will be more fearful in the event of a nuclear accident, which represents a threat as to which they will have had no experience, than they would be in the event of a more familiar emergency, such as a hurricane. Moreover, children will be frightened and distressed at being forced to stay at school away from their parents and families for even a few hours. Such fear would be magnified among children ages 5 through 14, which is the age group of almost all the students in the Mt. Sinai district. In addition, the district would have to have provisions of food, medical supplies and beds, as well as medical personnel. These practical needs would make it all but impossible to shelter school children.

In addition, the staff of the Mt. Sinai School District does not have any means of determining whether sheltering would be an adequate protective action. As I will discuss further in my testimony on Contention 15.C, we would not trust LILCO's advice on the subject, and we have no independent knowledge of how much protection from radioactive materials could be provided by our school buildings. Moreover, neither of the school buildings in the district have basements suitable for sheltering. The elementary school building has only a small

basement area that is used for storage, and the junior high building has no basement at all. Further, the school buildings in our district have very large windows in much of their space.

Finally, LILCO's proposals for notifying schools also make sheltering difficult, if not impossible, even assuming schools would follow a LILCO recommendation. LILCO plans to advise schools to begin early dismissals when an accident is first announced, (unless it is an accident whose great severity is immediately clear and thus sheltering or evacuation is ordered immediately). But if LILCO subsequently recommends that persons in all or part of the EPZ shelter, LILCO does not intend to advise the schools to shelter their students. (OPIP 3.8.2 at 5) This means that some schools might not learn of the subsequent need to stop sending children out into a health-threatening situation and, assuming they had begun an early dismissal in response to LILCO's recommendation, they would therefore continue their early dismissal routine of sending children home, either on foot or on buses that will travel long, slow routes through residential areas inside the EPZ. And, even if there were knowledge of the need to get children into an adequate shelter, there would be no way to recall those students who had already left school. They would all be exposed to risk.

CONTENTION 69 - EARLY DISMISSALS

Q. Are you familiar with Contention 69?

A. Yes. It asserts that, contrary to LILCO's apparent assumption, recommending early dismissals when an accident is first announced would not result in students being protected from health-threatening radiation doses for several reasons, which are listed in subparts B, C, D and E. I agree with the Contention.

Q. Please explain.

A. First, the LILCO Plan is incorrect in its apparent assumption that school districts in or near the EPZ have, or intend to implement, an early dismissal plan for use in the event of a Shoreham emergency. The Mt. Sinai School District has stated that the early dismissal plan it uses for snow and other such emergencies is not designed, nor would it be appropriate, for use in a Shoreham emergency. (See Attachment 1 to my testimony on Contention 25.C and 25.D, ff. Tr. 3067.)

Second, LILCO seems to assume that early dismissals, assuming they were implemented, would allow children to reunite quickly with their families. In fact, an early dismissal in the Mt. Sinai district would take several hours, for a number

of reasons. First, our district does not have a senior high school. Instead, we send our senior high students to schools in Port Jefferson. Consequently, in an early dismissal, eight district buses -- almost half of our district's fleet -- must travel from Mt. Sinai to Port Jefferson to pick up the high school students and then return them to one of the Mt. Sinai schools, where they can board separate buses that will take them home. In a normal early dismissal, this trip does not delay the Mt. Sinai early dismissal, because our district usually is able to coordinate with the Port Jefferson administrators, who agree to begin their early dismissal before ours. That way, our senior high students return to the Mt. Sinai schools as our early dismissal begins. In a Shoreham emergency that coordination would not be possible if both our district and the Port Jefferson district followed LILCO's advice and initiated an early dismissal as soon as the accident were announced. Moreover, in an early dismissal caused by a Shoreham accident, the round trip bus travel necessary to transport our high school students would be along two major evacuation arteries (Route 25A and North Country Road), where the buses would encounter the heavy evacuation traffic expected by other witnesses for the County. Therefore the trip would take longer than it normally does. The unavailability of those

eight buses for the amount of time necessary to get back and forth from Port Jefferson under these likely conditions of a Shoreham accident would delay the dismissal of the rest of our school children. Thus, it could be hours before early dismissal even began for many children in the Mt. Sinai School District.

Third, it is very likely that many parents would come to the schools to pick up their children, rather than waiting for several hours for them to be bussed home. Parents are well aware of how long early dismissals take even under normal conditions, and they are likely to believe that the dismissal will take longer in a radiological emergency. The conversion of concerned parents on the schools would create added traffic congestion and confusion around the schools. As a result, buses would be slowed in arriving and departing, and children could more easily miss their buses or their parents, which would cause even more concern and distress on the part of parents and children. Also, dealing with the parents and confusion their presence will create, would add substantially to the work required of the district's staff.

Fourth, the time necessary to initiate an early dismissal probably would take longer during a Shoreham-related accident

than during other emergencies such as a snowstorm, because as noted above, the District probably would not trust information provided by LILCO, and would have little independent means of deciding what action would be appropriate to protect our children. Accordingly, attempts to verify information provided by LILCO, and to obtain advice from more credible sources would be necessary before the District could decide whether to begin the early dismissal process.

In addition, when schools are dismissed early, problems always arise because some parents are not at home during the day. The LILCO Plan appears to ignore this problem. If such children were sent home as the LILCO Plan appears to contemplate, the children would be left unattended and, in some cases, unable to get into their homes. Consequently, they would not be protected. Moreover, the normal procedures in our District for identifying an alternate adult contact in the event of an early dismissal would not solve this problem in the event of a Shoreham emergency. In our opinion, it would be difficult to contact many parents, or other adults, at their homes or work places if there were an announcement on the radio that there had been an accident at Shoreham. Based on information we have received from parents, we believe that many parents would go to the schools to pick up their children, and

therefore they would not be at home to receive a phone call. For example, Attachment 1 hereto is, a resolution adopted by the Mt. Sinai Parent Teacher Organization, which states that LILCO's emergency plans do not offer adequate protection to the school children of the Mt. Sinai School District in part because in the event of an accident at Shoreham many parents would attempt to pick up their children at school and thereby increase confusion.

Q. What is the basis for your agreement with Contention 69.E?

A. As that contention asserts, LILCO's plans would not provide protection for school children in the event of an escalation of an emergency after early dismissals had begun. As I have noted before, early dismissals take a long time. Therefore, it is very possible that if LILCO advised the public to shelter or evacuate after early dismissals had begun, many of our school children would still be on their way home. Those children could not be protected. As a result, we believe LILCO's proposals for protecting school children are deficient.

CONTENTIONS 70 AND 71 - EVACUATION

Q. Do you agree with Contentions 70 and 71?

A. Yes. Those contentions assert that LILCO's proposal that schools be evacuated if evacuation were recommended for the public would not work and would not result in the protection of school children.

Q. Please explain the basis for your agreement with those contentions.

A. First, as I noted above with respect to Contention 24.N, LILCO's failure to arrange for relocation centers for evacuated children makes the LILCO proposal unworkable.

Second, the LILCO Plan is wrong in assuming that school officials have conducted "preplanning" for a Shoreham emergency. (OPIP 3.6.5 at 10a) The Mt. Sinai School District has conducted no planning for an evacuation of its children in the event of a Shoreham emergency, because it believes that such an action would be impossible and would not provide adequate protection for its students. (See Attachment 1 to my Testimony on Contentions 25.C and 25.D, ft. Tr. 3087.)

Third, the LILCO Plan does not contain any information or procedures as to how LILCO expects the schools to perform an evacuation. An evacuation would require a large number of additional school personnel to supervise and care for school

children at schools, on buses and at relocation centers. The LILCO Plan seems to ignore this practical need, and the District could not assure that adequate staffing would be available. Indeed, as stated in Attachment 2 hereto, a resolution adopted by the Mt. Sinai Teacher's Association, the teachers in our district believe LILCO's emergency plans do not offer adequate protection to the school children in the Mt. Sinai School District, in part because of their concern that teachers would not travel to or remain at relocation centers to supervise school children until their parents arrived.

Fourth, an evacuation would require more buses than the Mt. Sinai School District normally uses. In a normal dismissal, each bus in the Mt. Sinai School District makes three runs. But because the two schools in the Mt. Sinai School District are located directly between Route 25A and North Country Road, which are the only east/west arteries in the area and therefore likely to be very congested during a Shoreham-related evacuation, it might not be possible for buses to make more than one trip from Mt. Sinai schools to a location outside the EPZ in a short timeframe. As a result, to accomplish an evacuation the Mt. Sinai School District would need at least twice as many 60-passenger buses and drivers as it uses in a normal dismissal.

Fifth, Contention 71.B is correct in its assertion that evacuation of schools would take a very long time. Our District does not have the additional staff, drivers and buses that would be necessary to accomplish an evacuation. Indeed, as I noted in my testimony concerning Contention 25, we would have fewer personnel than normal available due to role conflict. The point is that without the assurance of an adequate relocation center, adequate staffing, and an adequate number of buses, an evacuation could not be accomplished in a reasonable amount of time.

Sixth, the LILCO Plan assumes that an evacuation of children to relocation centers will result in reuniting children with their families, but has no provision, or explanation, of how this reuniting is to be accomplished. In my opinion, expecting parents to go to relocation centers to meet their children, hours after they have left school, rather than expecting parents to find their children immediately in the event of a Shoreham emergency, is unrealistic.

Finally, as Contention 71.A asserts, it is unlikely that LILCO's proposal to use its own personnel to evacuate nursery schools could be implemented. For example, the Mt. Sinai School District is not authorized to, nor would it, permit

anyone to drive a bus containing our students unless that person was licensed and certified to drive a school bus. My understanding is that LILCO's employees are not properly certified. Consequently, it is unlikely that any nursery schools or parents of nursery school children, would permit their children to be evacuated by LILCO bus drivers.

Q. Does that conclude your testimony?

A. Yes.

ATTACHMENT 1

Mount Sinai Parents Teachers Organization

RECEIVED

JAN 31 3 21 PM '84

COMMUNITY
SUPERVISOR
MOUNT SINAI
HOSPITAL

North Country Road
Mount Sinai, New York 11766

January 29, 1984

To Whom It May Concern:

Here is a resolution adopted by the Mount Sinai P.T.O.
concerning the licensing of the Shoreham Nuclear Power Plant.

Yours Truly
Alan Berger

Alan Berger
President

MT. SINAI PARENT TEACHER ORGANIZATION--DRAFT RESOLUTION

WHEREAS, the Mt. Sinai Parent Teacher Organization, having discussed LILCO's emergency evacuation plan for schools in the event of a nuclear accident at the Shoreham plant, wishes to advise the Nuclear Regulatory Commission's Shoreham licensing board of the plan's workability for its community; and

WHEREAS, LILCO's emergency evacuation plan is dependent on our schools' early dismissal procedures; and

WHEREAS, this PTO has considered the following weaknesses in the LILCO evacuation plan:

1. Transportation

We are certain that the required number of buses and drivers for successful early dismissal will not be available to the schools. Drivers may need to attend to the safety of their own families first and may refuse to drive school buses. Furthermore, because of the shortage of buses in our school district, transporting children from school to home normally necessitates three bus shifts. Consequently, there is no possibility of a quick evacuation.

2. Needs of School Personnel

We are certain that not all teaching and non-teaching personnel will stay in schools to supervise early dismissal. Many of the teaching and non-teaching staff will leave school to attend to the needs of their own families. Consequently, not enough school personnel will be available to attend to emergency-related jobs. A teacher survey conducted in the Mt. Sinai school district indicated that a majority of the teachers would not remain in school to supervise emergency procedures.

3. Lack of Parental Supervision

Should there be a nuclear accident at the Shoreham plant, the success of an early dismissal plan depends not only on prompt dismissal from the schools, but on prompt evacuation of children from their homes as well. It is probable, however, that many panic-stricken children will be locked out of their homes; or that even if these children can enter their homes their parents will not be present to carry out the necessary second part of an evacuation.

4. Parental Intercession

We cannot be assured that all parents will wait at home for their children to arrive. Many parents will attempt to retrieve their children at schools, thereby increasing confusion and chaos.

5. Panic

The announcement of a nuclear emergency at Shoreham will cause disorientation and panic in children, teachers, non-teaching staff, and parents. This will further hinder effective and safe dismissal from our schools.

6. Relocation

If an emergency at Shoreham requires evacuating our children from schools directly to a relocation center, our school district would be unable to handle this situation effectively. (See #1, Transportation)

7. Supervision at Relocation Centers

Once again we are certain that teaching and/or non-teaching school personnel will not all travel to and remain at relocation centers to supervise children for a possibly indefinite period of time. The Mt. Sinai teacher survey showed that over 70% of the teachers would have left for their own homes after the first hour, and that a majority of the teachers would refuse to accompany children to relocation centers.

8. Sheltering

The LILCO plan suggests that sheltering, rather than evacuating, may be the preferred protective action in schools in specific Shoreham emergencies. The Mt. Sinai school district has one basement in its elementary school. The size and function (for furnace and boiler facilities and the storage of extra furniture) of this basement preclude the sheltering of all but a small number of our school population.

9. Trust in Public Information

In the LILCO plan, the only source of public information during an emergency is LILCO itself. As a result of LILCO's past statements and actions with regard to Shoreham, many of us in our community are already skeptical of LILCO's words and intentions. The fact that LILCO might also be involved in a conflict of interest--being both operator of the plant and initiator of emergency actions--would tend to intensify doubts about the validity of LILCO's information during an emergency.

Now, be it therefore

RESOLVED, that the Mt. Sinai Parent Teacher Organization finds that LILCO's emergency plans for our schools do not offer us adequate protection or quick and effective evacuation for our children in the event of an accident at the Shoreham Nuclear Power Plant; and

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RESOLVED, that we agree with our Suffolk County legislators
that in fact no safe evacuation of our community is
possible; and

RESOLVED, that we believe that a full-power license should not
be granted to the Shoreham Nuclear Power Plant.

ATTACHMENT 2

SERVED DEC 23 1983

DOCKETED
USNRC

'83 DEC 22 P4:16

TEACHERS' ASSOCIATION

CKET NUMBER 50-322-01-3 MT. SINAI, NEW YORK 11756

516-473-6321

RESOLUTION

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

WHEREAS, federal regulations for full power operation of the Shoreham Nuclear Plant require an emergency plan for communities surrounding the plant which will assure those communities adequate protection in event of a nuclear emergency; and

WHEREAS, the Long Island Lighting Company, in an effort to meet federal regulations, has prepared an emergency plan which LILCO, lacking coordination with local or state governments, will attempt to implement; and

WHEREAS, the LILCO emergency plan includes protective actions to be taken by schools; and

WHEREAS, this association has identified the following weaknesses in the LILCO emergency plan:

1. Early Dismissal

Our emergency early dismissal procedure, which LILCO's plan incorporates, wouldn't bring school children to an uncontaminated area quickly enough to protect their health and safety.

2. Transportation

The requisite number of buses and drivers required for successful early dismissal are not available to the schools. This will prolong childrens' stay at schools in contaminated areas.

3. Needs of Teachers

We cannot guarantee that the teachers will stay in schools to supervise early dismissal. Many of us may need to attend to the safety of our own families and, therefore, may not be available to perform emergency-related tasks.

4. Lack of Parental Supervision

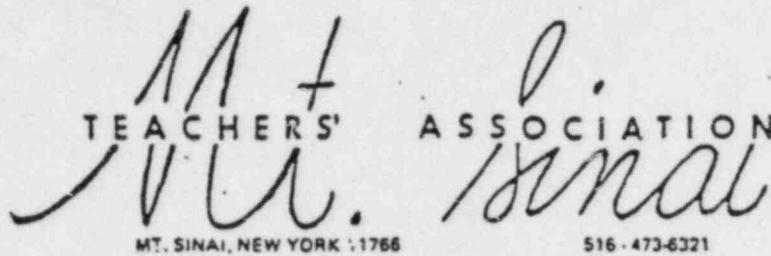
The success of an early dismissal plan depends not only on prompt dismissal from schools, but on prompt evacuation of children from their homes. In those cases in which parents will not be at home during the day, children will be sent to unsupervised homes from which they will not be able to evacuate promptly.

5. Parental Intercession

We cannot be confident that parents will wait at home for their children to arrive. Many parents may attempt to retrieve their children at schools, perhaps causing increased confusion and chaos.

6. Relocation

If a Shoreham emergency develops quickly and requires an evacuation of children from schools directly to relocation centers, this district does not have sufficient buses or drivers to transport all children to relocation centers in a timely, effective manner.



MT. SINAI, NEW YORK 11766

516-473-6321

Mt. Sinai Teachers' Assn.
RESOLUTION - page 2

7. Supervision at Relocation Centers

We cannot guarantee that teachers will travel to and remain at relocation centers to supervise school children until parents arrive to retrieve them.

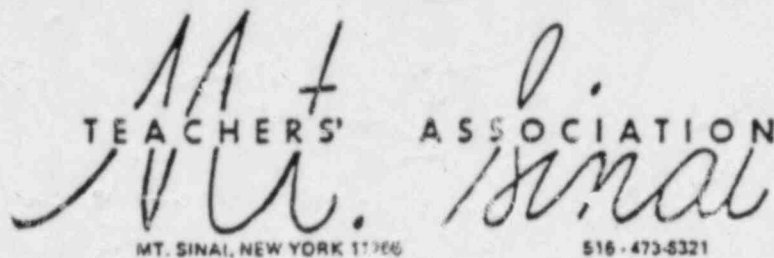
8. Trust in Public Information

In the LILCO plan, the only public information upon which to base decisions for protective actions will come from the utility. LILCO, through its Public Schools Coordinator and WALK-AM Radio, will both describe the extent of the emergency and recommend actions. Because LILCO would be both operator of the plant and initiator of emergency actions, potential for conflict of interest exists. School administrators, receiving information only from LILCO and not from any governmental agency, will be forced to decide upon actions with potentially serious consequences without the benefit of a directive from a responsible governmental source.

Now, be it therefore

RESOLVED, that the Mount Sinai Teachers Association finds that LILCO's emergency plans for schools do not offer children or school personnel of this district adequate protection in event of an accident at the Shoreham Nuclear Plant; and, be it further

RESOLVED, that this association believes that licensing of the Shoreham Nuclear Plant should not be permitted unless or until complete and reasonable resolution of these outstanding, critical emergency planning problems can be achieved.



I have read the Mount Sinai Teachers' Association Resolution on the Shoreham Nuclear Plant. I support the Association's Resolution.

NAME

Johanna Stirling
 Jane Silbert
 Ellen J. Kastner
 Lynn M. Capobianco
 William F. Conway
 John R. Martz
 Juan Sanchez
 John R. Smith
 Lynn Clark
 Joseph F. Calbra
 Linda B. B. B.
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 Jane M. Morgan
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TEACHERS' ASSOCIATION MT. SINAI, NEW YORK 11768 516-473-6321

I have read the Mount Sinai Teachers' Association Resolution on the Shoreham Nuclear Plant. I support the Association's Resolution.

name

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