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UNITED STATES NUCLEAR REGULATORY COMMISSION

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

LOCATION: Hauppauge, New York

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1	UNITED STATES NUCLEAR REGULATORY COMMISSION ATOMIC SAFETY AND LICENSING BOARD
2	In the Matter of:
3) Docket No.
4	LONG ISLAND LIGHTING COMPANY) 50-322-0L-3 (Emergency Planning)
5	(Shoreham Nuclear Power) (School Bus Driver Station, Unit 1) Issue)
6	
7	Wednesday,
8	May 18, 1988
9	State Office Building
,	Hauppauge, New York
10	The above-entitled matter came on for hearing
11	at 9:20 a.m.
12	PERCONAL HOM THERE CITED ON Chalman of the Beard
13	BEFORE: HON. JAMES GLEASON, Chairman of the Board
14	For the Board:
15	JUDGE JERRY KLINE JUDGE FRED SHON
16	
	APPEARANCES:
17	On behalf of Applicants:
18	
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3	Panel:					
4	Dennis Mileti Michael K. Li					
5	Robert B. Kel			19834		
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1	PROCEEDINGS
2	JUDGE GLEASON: Any preliminary
3	matters, gentlemen?
4	MR. CHRISTMAN: I have one.
5	Yesterday there were questions about
6	numbers derived from some phone calls LILCO made
7	earlier this year and they were requested. I have
8	had them tied up and with your permission I will
9	hand them to everybody. I must say I think the
10	question yesterday will be real hard to understand
11	without this document. If the County doesn't
12	eventually offer it as an exhibit, I intend to.
13	JUDGE GLEASON: All right.
14	MR. CHRISTMAN: For clarity's sake, the
15	numbers from the 4/88 phone calls are the
16	right-hand-most column on this document, as you can
17	see. There is the vertical line of hyphens between
18	LILCO 7/87 and NYS 1/19/88 can be ignored. They are
19	not minus signs.
20	JUDGE GLEASON: Ms. Tayloror who is
21	going to proceed?
22	MR. McMURRAY: Mr. McMurray.
23	JUDGE GLEASON: Mr. McMurray.
24	Whereupon,
25	DENNIS MILETI

1	MICHAEL K. LINDELL
2	ROBERT B. KELLY
3	having been previously sworn, resumed and testified
4	further as follows:
5	CROSS-EXAMINATION (Conl'd.)
6	BY MR. McMURRAY:
7	Q. Gentlemen, go to page 26. For the
8	record, I note on page 25 there is testimony from
9	Mr. Crocker which will have to be deferred until
10	tomorrow's cross-examination since he is not here,
11	so let's go to page 26.
12	MR. McMURRAY: Judge Gleason, should I
13	proceed or wait until Judge Shon
14	JUDGE GLEASON: Proceed.
15	Q. On that page, Mr. Kelly, you discuss a
16	report that you did for a project for another client
17	based on 50 emergencies. Do you see that?
18	A. (Kelly) Yes, I do.
19	Q. And those 50 emergencies that you
20	looked at were based on factors such as size, type,
21	geographic location, proximity to nuclear power
22	plants, special problems and location and type, for
23	instance, population density. Correct?
24	A. (Kelly) That's correct.
25	O When you say "special problems." what

1	kind of problems were you looking for that would
2	include that emergency in the 50 you were looking
3	at?
4	A. (Kelly) As we were looking through
5	some of the secondary sources we had, newspaper
6	articles and so forth at that time, we made a
7	subjective judgment as to whether this was a
8	problem-laden type of evacuation. For instance, if
9	we saw a prison was evacuated, probably we would
10	have considered that a special problem that occurred
11	that doesn't happen a lot. If a hospital was
12	relocated may or may not have made it it depended
13	on the circumstances, really, of the article and how
14	it was described. But it was a subjective
15	assessment.
16	Q. Was school evacuation a special problem
17	that would have included one of these accidents in
18	the group?
19	JUDGE GLEASON: Would you hold it one
20	moment, please.
21	(Pause.)
22	JUDGE GLEASON: Let's continue, please.
23	MR. McMURRAY: I have a question on the
24	table.
25	JUDGE GLEASON: Do you recall the

1	question?
2	A. (Kelly) Whether schools were
3	considered
4	Q. A particular problem.
5	A. (Kelly) I would have to say it would
6	have depended on in what circumstances or how the
7	school evacuations were described in the material we
8	were looking at. In and of itself, if it mentioned
9	school being evacuated, probably not.
10	Q. I take it you don't recall whether for
11	any particular accident school evacuation was
12	considered a problem?
13	A. (Kelly) I really can't recall; no.
14	Q. One of the other criterion that you
15	looked at was proximity to a nuclear power plant.
16	Why is that?
17	A. (Kelly) The client wanted to include,
18	to the extent possible, if there were any in an
19	initial set of cases, to include any evacuations
20	that may have occurred within a 10-mile EPZ and then
21	a second category was the 10 to 50 miles, just
22	really to give us an opportunity later to see what
23	effects the planning in those particular areas might
24	have had on the success of an evacuation.
25	Q. Of the 50 that you chose, how many fell

1	within the 10-mile EPZ of a particular power plant?
2	A. (Crocker) As I recall, initially we
3	thought there were two or three based on the
4	readings at the time. Then as we got into more
5	detailed investigation, I think that number rose to
6	probably six.
7	Q. And eventually you narrowed the 50 down
8	to 16 that included bus evacuations. Is that right?
9	A. (Kelly) That, we are kind of mixing
10	projects now. For LILCO I then did that, yes.
11	Q. Maybe it would be useful if we did step
12	back a second. On this bottom paragraph, page 26,
13	you are discussing a project that you did for a
14	client other than LILCO?
15	A. (Kelly) That's correct.
16	Q. And this looked at 50 evacuations.
17	Right?
18	A. (Kelly) That's correct.
19	Q. And the purpose of this study was not
20	to look at bus evacuations, right?
21	A. (Kelly) Not specifically, no.
22	Q. You were not looking at the issue of
23	role conflict among bus drivers in doing this
24	project, right?
25	A. (Kelly) Other than what I described

1	the other day.
2	Q. This project, in other words, formed
3	the data base from which you eventually did the work
4	for LILCO that we will get to later. Right?
5	A. (Kelly) That is correct, yes.
6	Q. When you say that geographic location
7	was one of the factors you were looking at, did all
8	of the evacuations in your initial project for the
9	earlier client deal with emergencies in densely
10	populated areas?
11	A. (Kelly) No, they did not.
12	Could you repeat the question for me?
13	I want to make sure I have it straight.
14	Q. It appears from your testimony that you
15	chose onlyyou looked only at evacuations occurring
16	in densely populated areas. Is that correct?
17	A. (Kelly) No. That onemake if I could
18	back up for a moment. We looked at a number of
19	evacuations more than 50. There were approximately
20	249. When we were narrowing that down to 50 one of
21	the factors we looked at "as population density.
22	The way we got to the 50, the rating mechanism we
23	used tended to favor cases that were in more densely
24	populated areas but did not necessarily exclude

cases in less densely populated areas.

1	Q. I see. To be included in the initial
2	group of 50, an accident didn't have to meet all of
3	these factors that you laid out
4	A. (Kelly) No. Those factors were
5	considered, but the rating mechanisms that we
6	employed using those factors may or may not have
7	resulted inwell, for instance, out of the 50 only
8	six were in the EPZ. There were many others that
9	were not. Many were heavily populated areas, some
10	were not. So you have a spectrum within each of
11	those factors.
12	Q. Mr. Kelly, this is the first time you
13	have done this. You are going to have to let me
14	finish my questions before you jump in with your
15	answers. Okay?
16	A. (Kelly) Sorry. I thought you had
17	finished.
18	Q. That's all right.
19	So I take it that, for instance, one of
20	the factors is whether the accident was quickly
21	developing, and as it turns out, not all of the
22	evacuations that you looked at were in fact quickly
23	developing, were they?
24	A. (Kelly) That's correct.
25	O In fact some of the evacuations had

1	warning times of a couple of days?
2	A. (Kelly) That's correct.
3	Q. From this data base of 50, after you
4	were hired by LILCO you narrowed that down
5	approximately to 16 evacuations?
6	A. (Kelly) That's correct.
7	Q. When were you hired by LILCO?
8	A. (Kelly) Mid-January of this year.
9	Q. What were you asked to do?
10	A. (Kelly) I was asked to look at those
11	50 cases, try to determine to the extent possible
12	with the data I had collected to that point if there
13	were any instances of buses being used and then any
14	instances of role abandonment by bus drivers.
15	Q. Put your finger on page 27 but let's go
16	to Attachment E. Attachment E is the report you
17	initially wrote for LILCO based on your view of
18	those 16 evacuations. Correct?
19	A. (Kelly) That's correct.
20	Q. And this was written by you?
21	A. (Kelly) That's correct.
22	Q. On page four of that attachment you
23	name the 16 cases that you eventually settled on
24	from the 50 in your original data base. Is that
25	correct?

1	A. (Kelly) That's correct.
2	Q. And these 16 were chosen because they
3	involved buses in evacuation. Correct?
4	A. (Kelly) That's correct.
5	Q. How did you know that they involved
6	buses?
7	A. (Kelly) By looking at the information
8	that we had at the time on each of those, and that
9	was page 27 of the testimony has a list of the types
10	of things we had at the time.
11	Q. Page one of the attachment also has the
12	type of information, doesn't it?
13	A. (Kelly) That's correct.
14	Q. So you relied solely on documentation
15	regarding the emergency. Correct?
16	A. (Kelly) That's correct.
17	Q. Such things as newspaper clippings and
18	newspaper service articles?
19	A. (Kelly) That's right, andwell, in a
20	number of cases we had after-action reports from the
21	communities. One or two cases, a report produced by
22	a State agency and so forth. So in addition the
23	bulk of it was newspaper articles from AP and UPI
24	but then there were some other documents as well.
25	Q. Let me ask you this. For how many of

1	the evacuations that you were looking at did you
2	have other than newspaper clippings or news service
3	articles to draw from to determine whether or not
4	buses were involved?
5	A. (Kelly) I couldn't say at this point.
6	Q. I take it that it is quite possible,
7	isn't it, that there could have been buses involved
8	in evacuations other than the 16 that you settled
9	on?
10	A. (Kelly) That's correct. That's
11	correct.
12	Q. And I take it that you are not willing
13	to say that you were able to compile all the
14	documentation that pertains to all these
15	evacuations. Is that right?
16	A. (Kelly) I don't think so, but maybe
17	because I don't understand your question.
18	Q. Well, it may be, for instance, that
19	there are police and emergency service reports that
20	exist about these evacuations that you don't have?
21	A. (Kelly) That's correct.
22	Q. There may be communications logs you
23	don't have?
24	A. (Kelly) There may be.
25	Q. And there may be after-action reports

1	that you don't have?
2	A. (Kelly) There may be.
3	Q. As I understand it, you eventually
4	added three evacuations to this list of 16. Is that
5	correct?
6	A. (Kelly) That's right.
7	Q. What evacuations are those?
8	A. (Kelly) I believe that would bebear
9	with me just a moment. I think Miamisburg was not
10	on the list. Columbus wasn't on the original
11	list I have to compare the two lists.
12	Q. What list are you comparing? If there
13	is a list in the testimony that has it all
14	A. (Kelly) Well, the 16 cases that are
15	listed on page four of Appendix E I am comparing to
16	the list on page one of Appendix G. There is a
17	difference of three cases, and that is the answer to
18	your question.
19	Q. Okay. Do you know what the additional
20	evacuation was?
21	A. (Kelly) It will just take a moment.
22	Q. Could it be Superior, Wisconsin?
23	MR. CHRISTMAN: No. That is in the
24	Appendix E.
25	(Witnesses confer.)

1	A. (Kelly) Elkhart, I guess is the last
2	one.
3	Q. Elkhart, Indiana?
4	A. (Kelly) That's correct.
5	Q. Miamisburg, that is in Ohio, correct?
6	A. (Kelly) Yes, it is.
7	Q. What kind of accident was that?
8	A. (Kelly) That was a train derailment
9	involving several tankers of hazardous materials
10	which occurred over a several-day period.
11	Q. Columbus, Ohio is what kind of
12	accident?
13	A. (Kelly) Columbus, Ohio is some sort of
14	fire involving dynamite.
15	Q. And Elkhart, Indiana, that was what?
16	A. (Kelly) I believe that was a leaking
17	tank car from a railroad accident. It was in a rail
18	yard.
19	Q. On page four of Attachment E you set
20	out the number of evacuees from these various
21	accidents in the last column. Do you see that?
22	A. (Kelly) Yes, I do.
23	Q. Now, that is not the number evacuated
24	by bus, is it?
25	A. (Kelly) No, it is not. That is the

1	total number.
2	Q. In some cases, the number of evacuees
3	by bus was quite small, wasn't it?
4	A. (Kelly) Yes. I don't know the exact
5	percentage of evacuees offhand, yes.
6	Q. In some cases it was just two or three
7	busloads. Is that correct?
8	A. (Kelly) That's right.
9	Q. Do you have anywhere in your testimony
10	the number of evacuees by bus from these
11	evacuations?
12	A. (Kelly) Yes, I do. Appendix G, page
13	two, it shows the range, that range being from zero
14	to five to ten thousand. You might ask mewell, I
15	will let you ask the obvious question.
16	Q. Why don't you answer the obvious
17	question.
18	A. (Kelly) The zero in Pine Bluff as
19	stated is the people, the buses were mobilized, they
20	were brought to I believe a nursing home. People
21	were loaded onto the bus and then they weren't
22	actually pulled out of the area. It was everything
23	up to the actual movement out of the nursing home.
24	Q. I guess we weren't thinking of the same
25	obvious question.

1	You don't have an individual listing of
2	the number of bus evacuees for each evacuation, do
3	you?
4	A. (Kelly) In the actual survey data we
5	gave you we did, and I could read that to you.
6	Q. It is not in your testimony, is it?
7	A. (Kelly) No, not for each individual
8	case. No.
9	Q. And in most cases, you would agree,
10	wouldn't you, that the number evacuated by bus was
11	far below five to ten thousand?
12	A. (Kelly) I believe in all but two
13	cases, that's correct.
14	Q. As a matter of fact, in most of those
15	cases it was much closer to the zero range, wasn't
16	it?
17	A. (Kelly) They usually ranged in the
18	several hundred, and then as I said, a few in the
19	thousands.
20	Q. None of these represented an evacuation
21	of as many as 28,000 people, right?
22	A. (Kelly) No. By bus, no.
23	Q. In your table on page four you have the
24	location of all the evacuations other than the
25	additional three, but you don't have the size of the

1	impact area there.
2	Do you have a listing of the impact
3	area for each individual evacuation that you looked
4	at?
5	A. (Kelly) Where are you looking right
6	now?
7	Q. Page four of Appendix E.
8	A. (Kelly) And the question was what was
9	the size of those areas?
10	Q. Do you have a listing of the impact
11	area for each of those individual evacuations?
12	A. (Kelly) Yes. In most cases, I have
13	that data. Yes.
14	Q. Do you have it listed in your
15	testimony?
16	JUDGE GLEASON: Which data, Mr.
17	McMurray? How are you defining "impact area"?
18	MR. McMURRAY: Well, I better use the
19	definition used by Mr. Kelly.
20	Q. How did you define "impact area"? You
21	asked for radius, correct?
22	A. (Kelly) Yes. No. We asked for square
23	miles. What portion or how many square miles of the
24	community was affected by the hazard. And in most
25	cases they answered in square miles terms.

1	Sometimes they gave me a radius, though.
2	Q. Where they gave you a radius, did you
3	turn that into square miles automatically?
4	A. (Kelly) I can do that. I have it
5	marked. It clearly says it is a radius, not a
6	square mile, so
7	Q. I believe thatwell, in your testimony
8	you don't have the impact areas for the individual
9	evacuations listed. You do have in Appendix G, the
10	note that the average impact area was only two to 20
11	square miles. Is that right?
12	A. (Kelly) In all of the cases, except
13	those other two, fell within that range.
14	Q. All the other cases fell within two to
15	20?
16	A. (Kelly) No, that is not true. I'm
17	sorry. Most of the other cases, I should say, fell
18	within that range. There were some I can go down
19	the list if you'd like.
20	Q. Isn't it true that only two of the
21	evacuations that you looked at had an impact area
22	larger than the 10-mile EPZ at Shoreham? And I am
23	speaking specifically of Marysville and the
24	Pinellas, Florida evacuations.
25	A. (Felly) I believe that is correct.

1	Q. In some cases, the impact areas were no
2	more than a mile or two. Correct?
3	A. (Kelly) That's correct. There were
4	many in that range, yes.
5	Q. There were many in that range.
6	At the time that you did your study and
7	before you did your surveys, which we will get to,
8	did you know where the bus drivers lived who
9	responded to these accidents, in relation to the
10	impact area?
11	A. (Kelly) Prior to the study I did not
12	know.
13	Q. Prior to your surveys which you
14	subsequently conducted, did you know where these bus
15	drivers lived in relation to the accident?
16	A. (Kelly) No, I did not.
17	Q. Prior to your surveys, did you know
18	whether any of the bus drivers' families were
19	threatened by the accident?
20	A. (Kelly) Not directly, no.
21	Q. Do you have listed in your testimony in
22	how many instances school bus drivers were used to
23	conduct evacuation as opposed to bus drivers from a
24	public transportation company that transports the
25	general public?

1	A. (Kelly) There were a number, and I
2	don't know what the number is off the top of my
3	head. There are a number of bus drivers that we
4	used in ourthat we interviewed in our bus driver
5	survey that were school bus drivers.
6	Q. Do you have a listing or have data on
7	how many of the evacuations of these 16 involved
8	school bus drivers as opposed to bus drivers for
9	public transport companies?
10	A. (Kelly) In our organizational survey
11	we asked how many schools were evacuated, so that
12	would give some indication, possibly, as to how man
13	school bus companies were involved.
14	Q. You don't have specific data on it,
15	though, do you?
16	A. (Kelly) Only to say that in the bus
17	driver interviews that we conducted, some of those
18	were school bus drivers.
19	Q. How many of thosewell, you conducted
20	27 interviews of bus drivers?
21	A. (Kelly) That's right.
22	Q. In how many of those cases were they
23	school bus drivers?
24	A. (Kelly) I would have to look to give
25	you an accurate number.

1	Q. We will get to that later.
2	A. (Kelly) Okay.
3	Q. I notice that TMI is not on this list.
4	Is there a reason for that?
5	A. (Kelly) On the list on
6	Q. Not on the list on page four of
7	Attachment E.
8	A. (Kelly) Yes. At the time that I was
9	asked to look at the data that we had, it came from
10	this data base that we were collecting for the other
11	client. For the other client, we were concentrating
12	on those 50 evacuations. For that other client, we
13	had an additional requirement to look at TMI and
14	another major evacuation, Mississaugua. But that
15	fell outside the scope of the main study. They were
16	basically add-on evacuations. For instance, we were
17	only looking at evacuations that occurred in 1980
18	and beyond. Of course, those two were prior to
19	1980. And the client knew those two wouldn't meet
20	the criteria we had established so they just tacked
21	them on.
22	At the time that LILCO asked us to do
23	this study we had not even really begun to look at
24	that, those two cases, and that is why they weren't

included.

1	Q. TMI involved a radiological emergency,
2	correct?
3	A. (Kelly) That's correct.
4	Q. We have heard from Dr. Mileti that
5	there was an early dismissal of schools during the
6	TMI accident. Are you aware of that?
7	A. (Kelly) Based on what Dr. Mileti said,
8	yes.
9	Q. Were you aware of that before his
10	testimony?
11	A. (Kelly) I can't recall that
12	specifically. I may have been aware of it because
13	we have looked at TMI. Another investigator was
14	looking at it in more detail. I just couldn't
15	remember.
16	Q. Did LILCO ever ask you to look at TMI
17	as an example of an incident where buses were used?
18	A. (Kelly) They didn't specifically ask
19	me to do that, no.
20	Q. Don't you think it might be a pertinent
21	inquiry to the issue here as to whether bus drivers
22	experienced any role abandonment at TMI?
23	A. (Kelly) It is possible that that is
24	pertinent. But I can only tell you how we get why
25	we selected that data base of 50. That is what we

1	had. LILCO asked me what we had. That is what I
2	told them. And the reason we hadn't included that,
3	it was outside the scope anyway. That was not a
4	formally ordered evacuation, as you recall, which is
5	another reason why it wasn't included in our initial
6	data base of 50, and the other client asked us to
7	tack it on. It may have been pertinent but it was
8	outside the scope of what we were asked to do.
9	Q. There is certainly no lack of articles
10	on TMI, is there?
11	A. (Kelly) I would say there has been a
12	lot written about that, yes.
13	Q. There is certainly no lack of
14	after-action reports, are there?
15	A. (Kelly) I believe there is quite a few
16	after-action reports. Yes.
17	Q. Would it have been difficult for you
18	and your organization to contact organizational
19	representativesstrike.
20	Would it have been difficult for you to
21	contact representatives of organizations that
22	responded at TMI?
23	A. (Kelly) I don't believe it would have
24	been difficult. No.
25	Q. You did add on three accidents, didn't

	you, in addition to the 16 that you list on page
2	four of Attachment E?
3	A. (Kelly) That's correct.
4	Q. How did you come to add those three
5	accidents?
6	A. (Kelly) Between the time that I
7	produced this report and the time that I was asked
8	to do the survey, we found out that three ofthree
9	more of those 50 cases involved evacuations that
10	included buses. And so when it came time to the
11	surveys, I said, "Should we look at those?" They
12	said, "Yes."
13	Q. Now, your conclusion is based on the
14	inquiry that you did make. You didn't find any
15	documentation that led you to believe that there was
16	role abandonment among bus drivers. Right?
17	A. (Kelly) That's correct.
18	Q. You also come to the conclusion that
19	through training and planning, role abandonment can
20	be minimized. Right?
21	A. (Kelly) That is part of the
22	conclusion.
23	Q. And that is based in part on Dr.
24	Lindell's article, right, which you also quote?
25	A (Valley) Yes What was used in the

1	report.
2	Q. Now, there came a time, didn't there,
3	when you did use some more inquiry about these 19
4	accidents. Right?
5	A. (Kelly) That's correct.
6	Q. And that consisted first of a survey of
7	the organizations, some of the organizations that
8	participated in those various evacuations, right?
9	A. (Kelly) That's correct.
10	Q. Let's start with the organizational
11	study. Okay? Let me back up a second. You did two
12	separate surveys. Right?
13	A. (Kelly) That's correct.
14	Q. One survey was a survey of
15	organizational representatives. Right?
16	A. (Kelly, That's right.
17	Q. Not individual bus drivers?
18	A. (Kelly) That's correct.
19	Q. And the other survey you did was of at
20	least some of the bus drivers who reported to have
21	driven in those evacuations. Right?
22	A. (Kelly) That's correct.
23	Q. Let's concentrate for a second on that
24	first survey.
25	How did you come to conduct that first

1	survey?
2	A. (Kelly) We were asked by LILCO to do a
3	survey of the organizations that were involved in
4	the evacuation.
5	Q. When were you asked to do that?
6	A. (Kelly) I believe it was in February.
7	Q. And it was your understanding, wasn't
8	it, that that survey was for possible use in these
9	hearings?
10	A. (Kelly) Yes.
11	Q. Let's go for a second to Attachment F.
12	Just keep your finger on page 27 as well.
13	Can you tell me what Attachment F is,
14	Mr. Kelly?
15	A. (Kelly) Attachment F is the survey
16	instrument that we used to collect the data in our
17	telephone interviews.
18	Q. How was the questionnaire developed?
19	A. (Kelly) The questionnaire was designed
20	and developed by Drs. Mileti and Lindell,
21	principally.
22	Q. Pid you have any input into it?
23	A. (Kelly) Yes. After they developed it,
24	I had an opportunity to look at it and comment on
25	it, but they were the principal developers.

1	Q. Did you make any changes to what Drs.
2	Mileti and Lindell did?
3	A. (Kelly) I made a recommendation that a
4	question be added toI believe it waslet me
5	double check. Yes. A question be added to the
6	instrument, and that concerned whether or not bus
7	drivers made multiple runs into the evacuation zone.
8	Q. That was the only addition that you had
9	involvement in?
10	A. (Kelly) Other than typos or something
11	like that
12	Q. I am talking about substantial.
13	A. (Kelly) Yes. That is the only thing I
14	thought might be necessary.
15	Q. Did you delete any of the drafts,
16	anything from the drafts that you got from Dr.
17	Mileti and
18	A. (Kelly) I don't recall doing so.
19	Q. Was there any review of this survey
20	instrument by persons not involved in this licensing
21	proceeding?
22	A. (Kelly) By any of the witnesses here
23	today, do you mean?
24	Q. By anybody not involved in these
25	proceedings, either hy being a witness, by being

1	counsel or by being involved with an organization of
2	which you all may be representatives.
3	A. (Kelly) Well, we did a test of the
4	survey instrument. To that extent, someone
5	Q. You did a test?
6	A. (Kelly) Yes. We tested the survey
7	instrumert to make sure it was clear, people could
8	understand the questions and so forth.
9	Q. How did you test it?
10	A. (Kelly) We called up several
11	peoplecivil defense director, bus company
12	official two civil defense officials, bus company
13	official, and then I think we called a County
14	planner. About four or five people that I recall we
15	tested it on.
16	Q. Were these tests involving people who
17	actually were involved in these evacuations that
18	were studied?
19	A. (Kelly) No. They were separate.
20	Q. These were different respondents?
21	A. (Kelly) That's correct.
22	Q. Their answers weren't used in your
23	ultimate tally?
24	A. (Kelly) No.
25	Q. Did you make any changes in the

1	questionnaire based on your test?
2	A. (Kelly) All of the people that we
3	tested it on said they could understand it,
4	everything was fine. They didn't anticipate any
5	problems.
6	Q. Who administered the survey to the
7	actual respondents?
8	A. (Kelly) People at my company, Weston.
9	Q. Had these people ever done any
10	interviewing before?
11	A. (Kelly) Yes, they had.
12	Q. How much experience had they had?
13	A. (Kelly) I would say, on average, they
14	had a couple of telephone interviews. When we had
15	to perform this, I went to the operations manager of
16	my company to ask him who was available to do this
17	work that had done previous telephone interviews,
18	surveys before. And he told me the names of those
19	people.
20	We had recently, sometime prior to this
21	survey, conducted a survey for the Environmental
22	Protection Agency and, I believe it was, the
23	American Petroleum Institute. I believe most of
24	those people were involved in that. There was one

or two that were not involved in those, and I asked

1 them if they had conducted telephone interviews before and they said they had. But I can't tell you 2 3 what surveys those were. Did you supervise these individuals in any way while they were making the phone calls? 5 (Kelly) Yes. What we did was, when we 6 all went over the survey instrument I asked them to 7 phone one person that they knew, to practice using it. We discussed what Dr. Mileti had discussed with 9 me about the way to conduct the interviews. And 10 then we got back together in the middle of the 11 12 interviews -- I won't say middle. A few days later. Some people hadn't been as far along as others, to 13 go over any corrections. And each day in the 14 beginning I would ask each of those people did they 15 have any problems, did any of their people 16 misundarstand the questions. Because we agreed that 17 if any one particular item or if any item seemed to 18 be confusing, that we would come up with a 19 consistent explanation. But fortunately that was 20 not a problem. 21 Then as they completed the interviews, 22 23

I would generally go over it within a day or two after each survey was done.

> Within a day or two? 0.

24

1	A. (Kelly) Usually. Unless I was out of
2	town or we missedthey may have been out of town.
3	Q. I take it from your answer that you
4	determined there really was no confusion in the
5	questionnaire?
6	A. (Kelly) That's correct.
7	Q. And you were satisfied with the work
8	that your interviewers did in conducting the
9	examination?
10	A. (Kelly) Yes. They got the information
11	we needed.
12	Q. And you had faith that they wrote down
13	accurately what was told to them?
14	A. (Kelly) Yes. They were instructed to
15	write down what was told to them. And I have as
16	much faith as I can, without sitting there watching
17	them, but I believe they did write down answers as
18	they received them.
19	Q. Let's go just briefly to Attachment G,
20	which we have already been looking at for a while.
21	Go to page one of that. The type of people you
22	interviewed were what you call emergency managers,
23	such as fire chiefs, police, et cetera. Correct?
24	A. (Kelly) That's correct.
25	Q. And also bus company officials,

1	including owners, managers and dispatchers, et
2	cetera?
3	A. (Kelly) That's correct.
4	Q. That constitutes the two groups of
5	individuals you tried to talk to for these
6	evacuations. Right?
7	A. (Kelly) That's correct.
8	Q. Now, in some cases, or at least one
9	case, you weren't able to talk to what you call an
10	emergency manager. Right?
11	A. (Kelly) That's right.
12	Q. In every case you were able to talk to
13	a bus company official. Right?
14	A. (Kelly) That's correct.
15	Q. But in a number of the evacuations more
16	than one bus company was involved. Isn't that
17	right?
18	A. (Kelly) That's correct.
19	Q. And for some of those evacuations you
20	weren't able to talk to representatives of all the
21	bus companies involved, were you?
22	A. (Kelly) I can't recall. You are
23	saying in some cases we could not interview all the
24	bus drivers
25	O. No.

1	A. (Kelly) All the bus company officials?
2	Q. In some cases, isn't it true that while
3	a bus company was involved in the evacuation, you
4	were not able to talk to a representative of that
5	bus company?
6	A. (Kelly) It may be, but I can't recall
7	at this moment.
8	Q. How were the names of these individuals
9	obtained?
10	A. (Kelly) Of the bus companies?
11	Q. No. The names of the individuals who
12	you called. How were they obtained?
13	A. (Kelly) Well, generally, when we were
14	speaking to the emergency manager, we would ask for
15	the name of a person at the bus company that was
16	used, and they'd give us the name. Often they would
17	give us the number. If they didn't know, then we'd
18	at least try to get the name of the bus company, of
19	course, and then we'd call up the bus company
20	directly and ask who might have this information.
21	Q. Let's step back a second. First you
22	called the emergency manager for a particular
23	emergency?
24	A. (Kelly) That's correct.
25	Q. How did you determine who the

1	appropriate emergency manager was?
2	A. (Kelly) In some cases we had names
3	based on work we had done for another client. In
4	cases where we might not have the name of an
5	emergency management official, we would generally
6	try to get in touch with the emergency management
7	agency in the community, county or what have you and
8	start there and see where we got.
9	Q. You say that from them, then, you got
10	also the names of someone at one of the bus
11	companies involved?
12	A. (Kelly) Generally, that's correct,
13	yes.
14	Q. Although you can't say for sure that
15	you were able to contact all the bus companies
16	involved?
17	A. (Kelly) I can'tthat may be true. I
18	just can't remember if there were two companies and
19	one official in one evacuation and we only got to
20	one. I just can't recall right now.
21	Q. Were any steps taken to try to
22	determine how many bus companies were involved in a
23	particular evacuation?
24	A. As I recall, when we were
25	getting the sees from the busfrom the emergency

1	manager, we asked which bus companies were involved
2	and, "Do you know anyone over there we could talk to
3	that would have this information?" If he only gave
4	us the name of one company, it is possible another
5	company could have been used and we didn't know
6	about it. So that is a possibility.
7	Q. What steps, if any, did the
8	interviewers take to assure that the bus company
9	official interviewed had knowledge of what was being
10	asked of him?
11	A. (Kelly) Well, we asked him if he had
12	knowledge of the incident. I mean, we didn't go to
13	a supervisor or anything like that to check, but if
14	the person said, "Yes, I was involved in that," or
15	"I am aware of the facts of that," we'd interview
16	them. Beyond that we didn't try to confirm anything
17	else.
18	Q. For instance, you asked some pretty
19	specific information. For instance, how many people
20	live within the impact area. Right?
21	(Pause.)
22	Q. Isn't that one of the questions on the
23	organizational survey?
24	A. (Kelly) It is. Number six.
25	Q. How do you know whether or not the

1	information you got was just a best guess or was
2	based on actual knowledge?
3	A. (Kelly) Generally, the person who
4	answered that question would be the emergency
5	manager. In most cases, I think that is true. A
6	few, it may not be. Those peoplein any
7	evacuation, in any emergency, all you have is the
8	best guess by an emergency management official. Is
9	it accurate? It is accurate to a degree because the
10	guy is familiar with his community.
11	When we give damage assessments, things
12	like that, it is always a best guess in emergency
13	response.
14	Q. Well, you say that that information was
15	answered by the emergency manager? How many bus
16	drivers were in the impact
17	A. (Kelly) You asked how many people were
18	in the impact area, didn't you?
19	Q. If I did, then let's back up.
20	The question was asked of the bus
21	driver or bus representative, "How many of your bus
22	drivers had families in the impact area?" correct?
23	A. (Kelly) That is correct.
24	Q. That is question 37, which actually
25	asks what percentage of the bus drivers had families

	in the area at risk during the emergency. Right?
2	A. (Kelly) That's correct.
3	Q. Now, what did you or your interviewers
4	do to assure that the information you
5	were getting was accurate as opposed
6	to just a best guess?
7	A. (Kelly) We relied on that bus company
8	official to give a knowledgeable answer, a
9	knowledgeable estimate of how many people, how many
10	of his drivers had family in the risk area, and that
11	is all we did.
12	Q. Did you ask him to check records?
13	A. (Kelly) No, we did not.
14	Q. In some of these cases, the accident
15	had happened several years prior to your survey.
16	Right?
17	A. (Kelly) That's correct.
18	Q. And you would agree, wouldn't you, that
19	there could be a substantial difference between the
20	actual number of people who lived in the impact area
21	and the estimate that you got from your respondents.
22	Isn't that correct?
23	A. (Kelly) I would say when you ask a
24	personif you ask a person, a bus company official,
25	who was involved in an evacuation yesterday, he

1	would probably have a best guess that is probably as
2	good as all these best guesses. It is not something
3	you carry around on the tip of your tongue. I think
4	it is reliable within a certain degree of error.
5	Q. What degree of error?
6	A. (Kelly) Well, obviously, that can't be
7	answered. But I think
8	(Witnesses confer.)
9	A. (Kelly) I am just going to have to
10	answer your question as I did earlier. If they
11	guessed five to ten percent, could there be a margin
12	of error? Yes, there could be. But I think it is
13	still a pretty reliable piece of information.
14	Q. What assurance do you have that the
15	official you spoke to knew where the bus drivers
16	lived in relation to the impact?
17	A. (Kelly) Because he said he knew and
18	that is the estimate he gave. Beyond that, I can't
19	confirm it any more.
20	Q. A related question is did you or your
21	interviewers take any steps to assure that a
22	representative from a particular bus company was the
23	most knowledgeable person at that organization on a
24	particular incident?
25	A. (Kelly) As I said before, usually an

1	emergency management person would tell us who was
2	the bus company to contact. I am assuming that
3	emergency manager gave us the name of a person that
4	he has dealt with on emergency matters before and
5	therefore he probably felt they knew the most. If
6	we had to call a bus company official without any
7	references we would ask whowe'd ask for a manager,
8	generally, and ask who would have the information
9	about this, and we'd get referred to a person. I am
10	assuming the person we eventually were referred to
11	had good knowledge about that emergency evacuation.
12	Q. Did you ever ask, for instance, whether
13	anybody else in the organization had better records
14	about where people lived?
15	A. (Kelly) No.
16	Q. Let's turn back a second to page 28.
17	On page 28 you give or start to give the results of
18	your organizational survey. Isn't that right, Mr.
19	Kelly?
20	A. (Kelly) That's correct.
21	Q. The first conclusion you draw or
22	finding that you draw is that there were no refusals
23	to drive the buses by any notified bus drivers.
24	A. (Kelly) That's correct.

Q. Let me show you a document.

1	MR. CHRISTMAN: Other witnesses need a
2	copy as well.
3	MR. McMURRAY: At this time I would
4	like to have marked as Suffolk County Bus Driver
5	Exhibit No. 6 a document which is a 12-page
6	document. On the first page there is a listing of
7	information. The first bit of information is
8	"Incident, Marysville Flood." In the upper
9	right-hand corner is the notation "1 o'clock call at
10	4:00 p.m." I would like to have this marked Suffolk
11	County Bus Driver Exhibit No. 6.
12	JUDGE GLEASON: It is a document of how
13	many pages?
14	MR. McMURRAY: I believe it is 12. It
15	starts at page two and goes to 13.
16	JUDGE GLEASON: The pages don't run
17	consecutively, but it will be so designated as
18	Suffolk County Bus Driver Exhibit No. 6.
19	(The document referred to was
20	marked for identification as
21	Suffolk County Bus Driver Exhibit
22	No. 6.)
23	JUDGE GLEASON: Proceed.
24	Q. Let's turn to page six of the survey.
25	Now, I would just like to state for the record, I

apologize for the quality of these copies. This is 1 how we received them from LILCO and we asked again 2 for clean copies and because of the quality of the 3 originals -- it is not LILCO's fault -- the copies are not that good. We have the originals here. LILCO 5 has brought them in case there is any question about 6 any of the handwriting on here. I think we can 7 proceed, though, without the originals, until there 8 9 is a question. On page six the question is asked, "Of 10 those bus drivers contacted, what percentage refused 11 to drive evacuation buses during the emergency?" Do 12 you see that? 13 (Kelly) Yes, I do. 14 Let me back up a second. Suffolk 15 County Bus Driver Exhibit No. 6 is one of the survey 16 instruments used in your survey. Right? 17 (Kelly) That's correct. 18 A. And the incident that it pertains to is 19 the Marysville flood. Right? 20 (Kelly) That's correct. 21 A. And that occurred in California? 0. 22 (Kelly) Yes. 23 A. And the woman who was interviewed is 24 0.

Alice Colbert. Is that right?

1	A. (Kelly) Yes, that's correct.
2	Q. Even though it says "interviewer name,"
3	actually that is the interviewee. Right?
4	A. (Kelly) That's correct.
5	Q. And she was asked various questions
6	about the bus drivers who drove during that
7	particular evacuation. Right?
8	A. (Kelly) Right.
9	Q. Turn to page six, then. The question
10	is asked, "Of those bus drivers contacted, what
11	percentage refused to drive evacuation buses during
12	the emergency?" Do you see that?
13	A. (Kelly) Yes, I do.
14	Q. The answer is, "Two drivers, one
15	mechanic." Correct?
16	A. (Kelly) Yes, I believe so.
17	Q. On page 17sorry. Question 17, the
18	question is, "Why did these drivers refuse to drive
19	evacuation buses during the emergency?" The answer
20	there is that "Their homes/families were in danger."
21	Is that right?
22	A. (Kelly) Yes. That is what it says.
23	Q. Let's go to the second survey. This is
24	a 13-page document, the first page of which states,
25	"Interview schedule, bus driver study for

1	organizational respondents." In the upper right is
2	written "Taft," T-a-f-t.
3	MR. McMURRAY: I would like this marked
4	Suffolk County Bus Driver Exhibit No. 7.
5	JUDGE GLEASON: It will be so
6	designated.
7	(The document referred to was
8	marked for identification as
9	Suffolk County Bus Driver Exhibit
10	No. 7.)
11	Q. Mr. Kelly, you have seen this document
12	before, haven't you?
13	A. (Kelly) Yes, I have.
14	Q. This is another one of the interview
15	schedules prepared by people working under you,
16	right?
17	A. (Kelly) That's correct.
18	Q. In this case, the intervieweron page
19	two, where it says "Interviewer's name: Pamela
20	Emig," that is actually one of the interviewers. Is
21	that right?
22	A. (Kelly) That is correct.
23	Q. The people who were interviewed are
24	written in handwriting at the bottom of the page.
25	Correct?

1	A. (Kelly) That's right.
2	Q. The person who answered questions one
3	through 18 was somebody named John Ikey, I-k-e-y,
4	Lucas, who is the emergency coordinator. Is that
5	right?
6	A. (Kelly) That's correct.
7	Q. Turn then to page six of the survey
8	instrument. Question 16 asks, "Of those bus drivers
9	contacted, what percentage refused to drive
10	evacuation buses during the emergency?" Do you see
11	that?
12	A. (Kelly) Yes, I do.
13	Q. It says, "Two or three bus drivers."
14	Right?
15	A. (Kelly) Yes, it does.
16	Q. For question 17 it is asked, "Why did
17	these drivers refuse to drive evacuation buses
18	during the emergency?" Correct?
19	A. (Kelly) That's right.
20	Q. It states, "Frightened themselves, but
21	most importantly wanted to take care of own
22	families." Correct?
23	A. (Kelly) Yes.
24	Q. Is that written in Pam Emig's
25	handwriting?

1	A. (Kelly) Yes, it is.
2	Q. Let's go back to page 28
3	MR. McMURRAY: Before we do that, at
4	this time, Judge Gleason, I would like to move
5	Suffolk County Bus Driver Exhibits 6 and 7 into
6	evidence.
7	JUDGE GLEASON: Is there objection?
8	MR. CHRISTMAN: No, sir.
9	MR. ZAHNLEUTER: No objection.
10	MS. YOUNG: No objection.
11	JUDGE GLEASON: Exhibit Nos. 6 and 7
12	will be placed in evidence.
13	(Suffolk County Bus Driver
14	Exhibit Nos. 6 and 7 were
15	received in evidence.)
16	Q. The next item says that "All bus
17	drivers reported for duty after being contacted."
18	Do you see that?
19	A. (Kelly) Yes, I do.
20	Q. Isn't it true that in at least one case
21	and perhaps more, while some bus drivers reported
22	for duty, they left to go take care of their
23	families?
24	A. (Kelly) After reporting to duty they
25	left?

1	Q. After reporting to duty.
2	A. (Kelly) As I recall, in one caseit
3	may have been Marysville
4	(Witnesses confer.)
5	A. (Kelly) As I recall, there was at
6	least one case where they let people go home
7	afterwards, after the had reported.
8	Q. And they let them go home to take care
9	of their families. Right?
10	A. (Kelly) I'd have to look at the exact
11	reason, but it had something to do with the hazard.
12	If people wanted to go I think one percent of the
13	people chose to go home at that point. It may have
14	been that reason.
15	Q. You don't recall?
16	A. (Kelly) Not offhand, no. I have to
17	look.
18	Q. Do you know whether those were the one
19	percent whose family lived in the impact area?
20	A. (Kelly) Well, if that was the reason,
21	one could assume that they went home because they
22	lived in the impact area. As I said, I'd have to
23	look at that particular case.
24	MR. McMURRAY: Judge Gleason, this is
25	probably a good time for the break if you want to

1	take it.
2	JUDGE GLEASON: All right. We will
3	take a five-minute break.
4	(Brief recess.)
5	JUDGE GLEASON: Proceed, Mr. McMurray.
6	BY MR. McMURRAY:
7	Q. Let's go to the bottom of page 28, the
8	last line item there, Mr. Kelly. There you report
9	three cases where bus drivers were reported to have
10	arrived late for duty. Correct?
11	A. (Kelly) That's right.
12	Q. And in one case, that was due to
13	traffic congestion. Right?
14	A. (Kelly) That's right.
15	Q. You report that based on your
16	corrections of the other day, that one of the bus
17	companies in the Pinellas, Florida incident reported
18	that about 10 of their bus drivers showed up late
19	because they first helped to take care of their
20	families?
21	A. (Kelly) It was 10 percent, which was
22	about
23	Q. What did I say? 10 drivers?
24	A. (Kelly) 10 drivers.
25	Q. 10 percent. And that 10 percent is

1	about 20 drivers?
2	A. (Kelly) That's correct.
3	Q. Isn't it true that another bus company
4	involved in the Pinellas incident also reported that
5	its drivers reported late?
6	A. (Kelly) I don't believe so. I'd have
7	to look at the particular document that you are
8	referring to. I thought it was that one bus
9	company.
10	MR. McMURRAY: Let me hand out another
11	one of the survey instruments. This is a 12-page
12	document. It starts on page two. The incident that
13	is reported is Hurricane Elena. Location is
14	Pinellas County, Florida. Where it says
15	"Interviewer name," it is actually the interviewee.
16	It is David R. Bilodeau, B-i-l-o-d-e-a-u.
17	I would like this document marked as
18	Suffolk County Bus Driver Exhibit No. 8 for
19	identification.
20	JUDGE GLEASON: It will be so marked.
21	(The document referred to was
22	marked for identification as
23	Suffolk County Bus Driver Exhibit
24	No. 8.)
25	Q. Mr. Kelly, have you seen this document

1	before?
2	A. (Kelly) Yes, I have.
3	Q. This is one of your survey instruments,
4	correct?
5	A. (Kelly) Yes, it is.
6	Q. Actually, Mr. Bilodeau was one of the
7	people interviewed, right?
8	A. (Kelly) Yes, he was.
9	Q. He was not a bus company official but
10	rather the director of emergency management?
11	A. (Kelly) That's correct.
12	Q. Let's go to page seven of the document.
13	Let me ask you first, as director of emergency
14	management for Pinellas County, what were Mr.
15	Bilodeau's duties during the time of Hurricane
16	Elena?
17	A. (Kelly) I'd have to answer that on the
18	basis of what most emergencycounty emergency
19	managers would do. They would be in charge of
20	coordinating the emergency response, probably from
21	the emergency operations center in that community.
22	Q. Here, he is one of the people that you
23	assumed had socurate information about the accident.
24	Right? Not the accident, but about the disaster?
25	A. (Kelly) Yes, that's correct.

1	Q. On page seven, question 22 asks the
2	question, "Of those bus drivers contacted, who did
3	show up to drive evacuation buses? What percentage
4	showed up late?" Do you see that?
5	A. (Kelly) Yes, I do.
6	Q. The percentage given there is "UK," for
7	unknown. Right?
8	A. (Kelly) That's correct.
9	Q. Then it goes on to say, howeverand on
10	the copies everyone has this is sort of blurry, but
11	I have looked at the originals and I will read what
12	I have seen and you can correct me if I am wrong,
13	Mr. Kelly. It says after that, though, "But some
14	problems since dispatch took three hours. Normal is
15	30 minutes."
16	Is that what that says?
17	A. (Kelly) Yes.
18	Q. Question 23 asks, "Why did those
19	drivers show up late?" And below it, and again this
20	is blurred, I will read what the original says. It
21	says, "Odd hour of notice/tending to personal
22	business." Right?
23	A. (Kelly) Yes. He was apparently
24	referring to that other company that I just
25	mentioned.

1	Q. You say "apparently." Do you know that
2	he was referring to the other company?
3	A. (Kelly) Well, the point was we talked
4	to the companies themselves, and the one reported
5	that 10 percent. And this person is referring to
6	bus drivers that he knew to have shown up late. The
7	natural assumption is that it is that company. It
8	wouldn't be a separate company.
9	Q. It took dispatch of those buses three
10	hours whereas the normal was 30 minutes. Right?
11	A. (Kelly) That is what he reports.
12	Q. Wasn't there another example, Mr.
13	Kelly, where 75 percent of one bus company's
14	personnel were reported to have arrived late?
15	A. (Kelly) I don't recall that at all.
16	There was a case in Miamisburg, which is in my
17	testimony. I don't think it was that many. I don't
18	believe so.
19	Q. I am referring to the Pinellas County
20	incident.
21	Let me show you another document. This
22	is a 13-page document, also an interview schedule.
23	The first page says, "Interview schedule, bus driver
24	study for organizational respondents." The second

page notes that the incident is Hurricane Elena.

1	The location is Pinellas County, Florida. Where it
2	says "Interviewer name," the interviewee is noted as
3	Larry C. Newman.
4	MR. McMURRAY: I would like to have
5	this document marked Suffolk County Bus Driver
6	Exhibit No. 9 for identification.
7	JUDGE GLEASON: It will be so
8	designated.
9	(The document referred to was
10	marked for identification as
11	Suffolk County Bus Driver Exhibit
12	No. 9.)
13	Q. Have you seen this document before, Mr.
14	Kelly?
15	A. (Kelly) Yes, I have.
16	Q. Mr. Newman is identified as the
17	interviewee here. Correct?
18	A. (Kelly) That's right.
19	Q. Is he with a different company from the
20	company that reported the 10 percent arriving late?
21	A. (Kelly) Yes, he is, I believe. Yes.
22	Q. As a matter of fact, he is the
23	executive director of theI think it says Sun Coast
24	Transit Authority. Is that right?
25	A. (Kelly) Yes.

1	Q. Let's go to page eight of the exhibit.
2	It says, "Did any evacuation bus drivers help to
3	evacuate their families before showing up for duty
4	to drive evacuation buses?" Do you see that?
5	A. (Kelly) Yes.
6	Q. There are two answers given?
7	A. (Kelly) Yes.
8	Q. There is an "X" that says, "No, none in
9	low-lying area, none with need to move family."
10	Do you see that?
11	A. (Kelly) Yes, I do.
12	Q. But also it says 75 percent helped to
13	secure family possessions. Do you see that?
14	A. (Kelly) Yes, I do. The reason is
15	fairly obvious to me. If you want me to provide
16	some explanation in answer to question 22, he said
17	no one showed up late and there there is obviously
18	notes about what people were doing. If you refer to
19	question number 15, there were a lot of people out
20	of town for the weekend, off day for operatives.
21	Obviously, in my opinion since he
22	answered "No, no one showed up late," he was
23	referring to these other people who were either out
24	of town for the weekend or helping to secure the

family, that they couldn't get in touch with. It is

1	a little unclear exactly, but that is the conclusion
2	I came to on this case, where he clearly, without
3	any notes, said no one showed up late.
4	Q. Was there a matter cleared up by the
5	interviewee with the respondent sorry. By the
G	interviewer?
7	A. No. That is my explanation.
8	Q. Your interpretation of this?
9	A. (Kelly) That's correct.
10	Q. You didn't go back and call Mr. Newman
11	about this?
12	A. (Kelly) No, I did not.
13	Q. Isn't it true also that in some other
14	cases respondents that you spoke to didn't know
15	whether bus drivers arrived late or not?
16	A. (Kelly) I'm sorry. Can you
17	Q. Isn't it trueI will restate itthat
18	some of the other respondents that you and your
19	people spoke to did not know whether or not bus
20	drivers arrived late?
21	A. (Kelly) As I recall, there was
22	maybewell, at least one other case where people
23	didn't provide an answer, as I recall. Lidn't know.
24	Q. Was it only one or was it more?
25	A. (Kelly) It may have been more. I can

1	look through and find out but
2	Q. When you say they didn't provide an
3	answer, you mean it wasn't answered at all?
4	A. (Kelly) I'd have to look.
5	Q. For instance, some of them said they
6	don't know. Right?
7	A. (Kelly) I'd have to look right now.
8	They didn't know or didn't provide an answer, which
9	would indicate to me they didn't know.
10	Q. You are unable to say at this time how
11	many either didn't know or didn't provide an answer?
12	A. (Kelly) Right. I could look if you
13	would like me to.
14	Q. Maybe we can save that for the lunch
15	break.
16	Let's go to page 29. There it says,
17	the first bullet says, "After receiving the duty
18	call, only three to five bus drivers in one event.
19	Miamisburg, helped evacuate their families before
20	showing up for duty." Do you see that?
21	A. (Kelly) Yes, I do.
22	Q. But it is true, isn't it, that in the
23	document we have marked as Suffolk County Bus Driver
24	Exhibit 9 for identification, there, 75 percent was
25	stated to help secure their family possessions.

1	Right?
2	A. (Kelly) What was the name of the
3	incident on that exhibit?
4	Q. That is Mr. Newman in Pinellas County.
5	A. (Kelly) Okay. And your question was?
6	Q. The question was, isn't it true that we
7	just saw from that exhibit that 75 percent helped to
8	secure their family possession before showing up
9	for duty to drive evacuation buses?
10	A. (Kelly) It didn't say that they were
11	evacuating their families.
12	Q You are drawing a distinction between
13	those who evacuated their families and those who
14	merely took the time to secure possessions. Right?
15	A. (Kelly) On that question, I am. We
16	asked very specifically to any bus driver who helped
5.7	to evacuate the family before showing up for duty.
18	Q. Do you state in your testimony how many
19	bus drivers helped secure family possessions or do
20	other things that might delay their arrival prior to
21	reporting for duty?
22	A. (Kelly) Well, there were other things.
23	If you look at question 22, it asks how many were
24	late. 24 talks about did they arrive late because
25	of concern for the safety of their family. It also,

1	in 23, asks why did those drivers show up. It asks
2	for the length of time on 25. 26 asked if the
3	reason was for evacuation. Here, in this particular
4	case you are referring to, they clearly say "secure
5	family possessions," which is not evacuate. I am
6	not sure why the person wrote it in that particular
7	space, but it is clear they didn't help them
8	evacuate.
9	Q. So, there are other things that a bus
10	driver might do besides reporting for duty or
11	evacuating. Right?
12	A. (Kelly) That is correct.
13	Q. For instance, taking time to secure
14	family possessions. Right?
15	A. (Kelly) That's correct.
16	Q. In how many instances do you know
17	where, in your surveys, did respondents state that
18	the first thing done before reporting for duty was
19	to secure family possessions?
20	MR. CHRISTMAN: Objection.
21	Q. Or take care of the home?
22	MR. CHRISTMAN: The issue here is role
23	conflict. I think Mr. McMurray is asking about
24	other reasons one might be delayed in reporting for
25	duty.

1	MR. McMURRAY: Absolutely not.
2	JUDGE GLEASON: We are trying to
3	clarify what the reasons were, so proceed.
4	(Witnesses confer.)
5	JUDGE GLEASON: Is there a question
6	pending?
7	MR. McMURRAY: I thought there was. I
8	thought you were going to supplement your answer.
9	WITNESS KELLY: Could you ask me the
10	question again, please?
11	(Record Read.)
12	A. (Kelly) They could have provided an
13	answer like that in a number of different
14	categories. They could have written it after number
15	22 or number 23 or in clarifying number 24. So, I
16	would need a few minutes to go through and look for
17	that reason.
18	Q. Let's not take time for that now.
19	You make the statement in that first
20	bullet on page 29 that in only one event,
21	Miamisburg, did people help evacuate their families
22	before showing up for duty, but isn't it true you
23	have already stated that in Pinellas County 10
24	percent from one bus company were late because they
25	were first taking care of their family?

1	A. (Kelly) Taking care of the families.
2	They didn't say evacuating the families.
3	Q. You mean because the words written down
4	were "taking care of family," you made a distinction
5	between taking care and evacuating?
6	A. (Kelly) The fact of the matter is I
7	couldn't say "evacuate" if they said "taking care of
8	the family." They could have been boarding up the
9	house, which many people do. There were a number of
10	explanations or reasons for that. I could not
11	clearly say they evacuated those families. That is
12	all.
13	Q. You seem to be making the assumption,
14	though, that they did not evacuate the family.
15	A. (Kelly) That is because all I can say
16	is what is said on the form, and that was "take care
17	of families," as I recall. But I don't know what
18	"takes care of families" means.
19	Q. It could mean evacuate, couldn't it?
20	A. (Kelly) But when we are talking
21	about it is possible it could have meant that, yes.
22	Q. You didn't ask your interviewer to go
23	back and find out "what take care of family" means,
24	did you?

A. (Kelly) Did we pull out that form?

1	Q. That is not an exhibit yet.
2	A. (Kelly) The 10 percent
3	Q. The 10 percent is not an exhibit yet.
4	We can make it an exhibit.
5	A. (Kelly) I thinkwell, I will wait for
6	the exhibit.
7	MR. McMURRAY: At this time I will hand
8	out a 13-page document which says on the front
9	"Interview schedule, bus driver survey for
10	organizational respondents." In the upper
11	right-hand corner it says "Jim Gray, Pinellas School
12	Transportation, " and something that is obscured.
13	I would like to have this document
14	marked as Suffolk County Bus Driver Exhibit No. 10
15	for identification.
16	JUDGE GLEASON: It will be so
17	designated.
18	(The document referred to was
19	marked for identification as
20	Suffolk County Bus Driver Exhibit
21	No. 10.)
22	A. (Kelly) I can answer your previous
23	question more clearly now if you'd like.
24	¿. You have seen Suffolk County Exhibit
25	No. 10 before, Mr. Kelly?

1	A. (Kelly) Yes, I have.
2	Q. This is responded to by a man named Ji
3	Gray. Correct?
4	A. (Kelly) Yes, it is.
5	Q. And he is, as it says on page two, the
6	director of transportation, Pinellas County School
7	
	Board?
8	A. (Kelly) That's right.
9	Q. On page seven, in answer to question
10	22, it is asked, "Of those bus drivers contacted wh
11	did show up to drive evacuation buses, what
12	percentage showed up late?" The answer is 10
13	percent. Right?
14	A. (Kelly) That's right.
15	Q. And the answer for why they showed up
16	late is "Taking care of family," correct?
17	A (Kelly) Right.
18	Q. This is the incident that you do cite
19	in your testimony. Correct? You cite this on the
20	previous page, right?
21	A. (Kelly) Yes, on the previous page, in
22	reference to the bullet that you asked me about,
23	about evacuation, I said
24	Q. But you don't cite it with respect to
25	the statement at the top of page 29, that after

1	receiving the duty call only three to rive bus
2	drivers in one event, Miamisburg, helped evacuate
3	their families, correct?
4	A. (Kelly) That's correct, because they
5	answered "no" to number 26, and that is why I
6	assumed "taking care of the family" meant something
7	other than evacuating the family.
8	Q. And what did you do to assure yourself
9	that in fact, other than that, that "taking care of
10	family" meant something other than evacuating, meant
11	something other than just securing the family or
12	help secure the house?
13	A. (Kelly) Since there was no comment
14	about it, it seems to be very clear that it was not
15	to help evacuate the family. That is all I felt I
16	needed. It was pretty clear to me.
17	Q. Did anyone call Mr. Newman back to try
18	to find out exactly what he meant by "taking care of
19	family"?
20	A. (Kelly) No.
21	Q. You state that in nine of the
22	evacuations, five percent to 100 percent of the
23	drivers had families in the area at risk during the
24	emergency. Do you see that?
25	A. (Kelly) That's correct.

1	Q. And that means, then, that, since you
2	had 19 evacuations you looked at, in 10 of those
3	incidents the bus drivers didn't even have any
4	family in the impact area. Right?
5	A. (Kelly) They either didn't have family
6	or an answer wasn't provided to that question. They
7	didn't know.
8	Q. Then you say five percent to 100
9	percent of the drivers had families in the area at
10	risk in those nine evacuations you cite. Right?
11	A. (Kelly) That's right.
12	Q. That is a fairly large range, Mr.
13	Kelly. Which of the emergencies was 100 percent?
14	A. (Kelly) I believe that was in the
15	Woodburn, Hicksville incident.
16	Q. The Woodburn, Hicksville incident?
17	A. (Kelly) That's correct.
18	Q. How many buses were involved in that?
19	How many bus drivers?
20	A. (Kelly) Ten. There were 10 buses used
21	so I am assuming there were 10 bus drivers.
22	Q. Isn't it true in that incident that
23	some of the respondents reported doing something to
24	secure their family before they reported?
25	A. (Kelly) Yes. I would like to take a

1	look at that because I think in that case, as I
2	recall, this person helped evacuate his family prior
3	to being notified to report to work. But I think if
4	we looked at that, that would clarify that matter.
5	Q. But nevertheless, you included that
6	among those you state did not help evacuate the
7	family before showing up for duty. Right?
8	A. (Kelly) Because the statement says
9	"after receiving the duty call." This person hadn't
10	received the duty call, as I recall.
11	Q. You are making a distinction between
12	whether the notice towhether the evacuation that
13	was performed of family units occurred before or
14	after the duty call. Right?
15	A. (Kelly) For this matter, you would
16	have to.
17	Q. In that incident, isn't it true that
18	there was time to evacuate the family before the
19	duty call?
20	A. (Kelly) There obviously was some time
21	between the time he evacuated his family and the
22	duty call came in. The point is, my statement said
23	after receiving a duty call, after he had been
24	informed that they wanted him to drive a bus, he had

evacuated his family and that was an important --

1	Q. Let's back off of that. We will come
2	back to it.
3	For a number of the incidents, I think
4	we already established, you called more than one bus
5	company. Right?
6	A. (Kelly) Yes.
7	Q. Isn't it true that various bus
8	companies gave you different figures for the number
9	of drivers who were at risk or whose families were
10	at risk?
11	A. (Kelly) Yes, I believe so.
12	Q. For instance, I have looked at the
13	Marysville surveys and I see that one person said
14	that nobody was at risk. Another said 25 percent
15	were at risk. Another said two out of 23 were at
16	risk. Another said zero at risk and another one
17	stated that 90 percent were at risk.
18	Now, you can accept that or check my
19	figures yourself, but let's assume for the moment
20	that those are right.
21	How did you determine for the purposes
22	of tallying up the responses whether or not you
23	considered that evacuation to have zero drivers at
24	risk or 90 percent at risk or something in between?
25	A. (Kelly) I think I probably looked at

the percentages, as opposed to the number of drivers 1 2 and--3 (Witnesses confer.) (Kelly) I think my -- it is hard for me A. 4 to recall at this point, but I think I looked at the 5 percentages -- it is hard- I'd have to look at the 6 figures and the numbers to tell you exactly why -- how 7 I came up with that because I can't recall whether I 9 just did it by bus company or added them all together to come up with a percentage. I just can't 10 recall at this point. 11 Did you actually do the tallying of--12 (Kelly) I did. I just can't recall 13 A. thic. If I could look at your figures, I could give 14 15 you an answer in a moment. I am giving you the figures for all the 16 Marysville respondents. Don't do it now. Let's do 17 it at lunch. We can come back to it after lunch. 18 The figures I gave you, by the way, are those 19 drawn -- I can read them again, but why don't you just 20 look at the Marysville surveys and we can come back 21 and talk about that. 22 You state in the next bullet down that 23 there were no reports of bus drivers not doing their 24

25

job as well as they could have. Do you see that?

1	A. (Kelly) Yes, I do.
2	Q. And that was despite the fact that at
3	least in some of these emergencies that we have seen
4	either some bus drivers did not report or reported
5	late. Right? That is still in light of those data,
6	right?
7	A. (Kelly) That's correct. That was
8	derived from the question, "What percentage of the
9	drivers who actually did drive evacuation buses did
10	not do their jobs as well as they could have?"
11	Q. So that some of the respondents
12	reported that drivers may have arrived late, for
13	instance, but nevertheless reported that there were
14	no reports of bus drivers not doing their job as
15	well as they could have. Is that right?
16	A. (Kelly) That's correct.
17	Q. In the next bullet down you state that
18	in seven of the 19 evacuations bus drivers did not
19	know beforehand that they had an emergency role. Do
20	you see that?
21	A. (Kelly) Yes, I do.
22	Q. In any of those emergencies, did the
23	drivers have families inside the impact area? Do
24	you know right now?
25	A. (Kelly) Yes. I believe there were

1	five families who knew they hadfive families of
2	bus drivers who knew they had roles that were
3	located some percentage of those drivers had
4	families in the risk area.
5	Q. I am not sure we are communicating.
6	In this bullet you are talking about
7	bus drivers who didn't know beforehand that they had
8	an emergency role. Right?
9	A. (Kelly) That's right.
10	Q. Of those who didn't know they had an
11	emergency role
12	A. (Kelly) Who did not know they had an
13	emergency role?
14	Q. Who did not know they had an emergency
15	role, how many had family inside the impact area at
16	the time of the impact?
17	A. (Kelly) Let me give you a complete
18	answer so you know I answered correctly. There were
19	four bus drivers who did not know they had a role in
20	the emergency prior to the emergency that did have
21	families in the risk area, in the impact area.
22	Q. Are you basing that on your bus driver
23	survey or your organizational survey?
24	A. (Kelly) Organizational.
25	Q. Could you state that for me again?

1	A. (Kelly) Sure. There were four cases
2	where the response was no, they did not know they
3	had a role in the emergency where some of those bus
4	drivers had families in the impact area.
5	Q. At the time of the impact?
6	A. (Kelly) Let me double check how the
7	question was worded. It was number 37, what I am
8	looking at.
9	Q. 37 on any one of these surveys we have
10	introduced at exhibits.
11	A. (Kelly) The question read, "What
12	percentage of these potential bus drivers had
13	families in the area at risk during the emergency?"
14	And there were a number. Of that, in four cases
15	people did not know they had a role prior to the
16	emergency that did have families in the risk area at
17	the time of the emergency.
18	Q. In those cases, how many instances were
19	there in which drivers either showed up late or did
20	something before reporting?
21	A. (Kelly) Onein one case, the
22	Marysville case, there was one or two drivers I
23	believe showed up late. That was one of four is
24	the answer.

Q. Marysville, some didn't show up at all.

1	Right
-	1129110

A. (Kelly) In the Marysville, as I
recall, there were two drivers who physically
couldn't show up because the bridge was out or
something like that. What they did instead was they
proceeded to a nursing home and helped them
evacuate. They just physically couldn't show up,
not that they chose not to show up, as I recall.

- Q. Let's look for a minute at Suffolk
 County Exhibit 6, which has been received as an
 exhibit. On page six, two drivers, one mechanic
 didn't report because their homes and families were
 in danger. That is what it says there. Isn't that
 right?
- A. (Kelly) Could you just tell me the name on the front because I didn't mark them with the exhibit number?
- Q. Yes. That is Alice Colbert, Marysville flood.
 - A. (Kelly) On page six?
- Q. Page six. We have gone over this before. On page six, the answer to question 16 is--the question is, "Of those bus drivers contacted, what percentage refused to drive evacuation buses during the emergency?" The answer

is, "Two drivers, one mechanic." Pight? 1 2 (Kelly) Right. A. Number 17, the reason given is, "Their 3 homes/families were in danger." Isn't that right? 4 (Kelly) Right. In that particular 5 case they were not actually called in to drive the 6 evacuation buses because their homes were in danger. 7 That is not what that says here. It 8 says, "Of those contacted, what percentage 9 refused" -- refused -- "to drive evacuation buses during 10 the emergency?" It says, "Two drivers and one 11 mechanic, " right? 12 (Kelly) Right. When I was preparing 13 the testimony and going through the data, and 14 obviously this and I think one other case were the 15 other places where there was a possibility of role 16 abandonment. So I called Alice Colbert to get the 17 details of why these people abandoned their role, 18 because obviously that was of interest to the study. 19 She said to me that she thought she had made it 20 21 clear to the interviewer that they had not actually called those people because they were in the risk 22 23 area. So, in fact, they did not abandon their role.

driver function.

They were just never called to perform the bus

24

	Q. Tou mean, it says here that these
2	werethose drivers were contacted but now you are
3	saying those drivers weren't contacted?
4	A. (Kelly) The womanwhen I called and
5	said, "I have a report that two or three of your
6	people did not show up and it was because their
7	families had homes in the danger area, " she said, "I
8	tried to make this clear to your interviewer. We
9	didn't call them because we knew their homes were in
10	the danger area."
11	Q. Did you talk to the person who did the
12	interview about this?
13	A. (Kelly) Yes, I did. I asked her if
14	she knew, and she didn't recall anything like that.
15	Q. She didn't recall that?
16	A. (Kelly) She just wasn't sure.
17	Q. You said before that you had faith that
18	what was written down here on these interview sheets
19	was accurate.
20	A. (Kelly) I did. And when it came time
21	to prepare testimonyafter I prepared this the
22	first a day or two after it was done, I looked at
23	that and there was one other case wherethe other
24	one you mentioned, Taft. I said, "Good, there is at
25	least two examples." That was not bothersome to me

1	in any way. When it came time to prepare the
2	testimony, I obviously needed more explanation so
3	then I called them. Intellectual curiosity.
4	Q. You are saying you called
5	A. (Kelly) I believed what they said. I
6	was just calling to get more information. At that
7	time they denied it happened. That is all.
8	Q. Who did this interview?
9	A. (Kelly) That was a person named John
10	Klucsik.
11	Q. John Klucsik didn't get the information
12	right, did he?
13	JUDGE GLEASON: Excuse me, Mr. Kelly.
14	Whom did you call?
15	WITNESS KELLY: I called Alice Colbert,
16	the person who was interviewed.
17	JUDGE GLEASON: You said you called
18	them?
19	WITNESS KELLY: Sorry. I called her.
20	I called to get an explanation. I
21	assumed the information was correct as I assumed all
22	the information was correct. And she said that that
23	wasn't the case, that the interviewer apparently
24	misunderstood or didn't write down completely or
25	what have you in this one case.

1	Q. How do you know it was just this one
2	case? How do you know Mr. Klucsik didn't put down
3	incorrect information in other places?
4	A. (Kelly) Well, I already told you how
5	we went through our quality control and how assured
6	I was the accurate was data (sic). There is always
7	the possibility of error. In the information in
8	these two cases, I thought it was important to find
9	out the reasons why there was role abandonment so I
10	called. So I happened to find out that they were
11	wrong in this case.
12	Q. Did you go back and call the people who
13	stated there wasn't role abandonment to find out
14	whether or not your interviewer had
15	A. (Kelly) I hadn't called anyone where
16	there was roleI called the two cases where there
17	was a possibility where role abandonment occurred.
18	There was only the two cases. Everywhere else there
19	was not a potential for it.
20	Q. After finding out that Mr. Klucsik did
21	not get this particular answer right, did you go
22	back and check any other of Mr. Klucsik's work?
23	A. (Kelly) I checked through all of the
24	work. I made two follow-up calls on the two most

important pieces of information and that is all--

1	Q. And when you found out Mr. Klucsik
2	hadn't gotten it right, did you then go back and
3	check all of his work after that?
4	A. (Kelly) Did I re-phone the person is
5	what you are asking?
6	Q. Did you do anything to assure yourself
7	after that that Mr. Klucsik had done his job
8	correctly?
9	A. (Kelly) No. I don't think one error
10	like that is indicative of major problems all over.
11	Q. This is an important issue in the
12	testimony, isn't it?
13	A. (Kelly) That is why I called to
14	clarify that.
15	Q. But you didn't call up to clarify
16	instances where people may have stated that there
17	wasn't role abandonment, did you?
18	A. (Kelly) No. I didn't recall everyone
19	that had been interviewed.
20	Q. When did you call Ms. Colbert?
21	A. (Kelly) I believe it was late March,
22	possibly. We wereI was preparing to write the
23	testimony and I believe that was late March.
24	Q. Your survey data was provided to the
25	Governments, wasn't it, your survey questionnaires,

1	is that right?
2	A. (Kelly) Provided to whom?
3	Q. Suffolk County and the State. Isn't
4	that right?
5	A. (Kelly) These formsyes. The lawyers
6	apparently provided that to you.
7	Q. When you made your second survey of
8	Mrs. Colbert, did you write anything down?
9	A. (Kelly) Well, I didn't go through the
10	survey again. I, in preparing the testimony, I
11	called to ask for an explanation, a more detailed
12	explanation of why these people hadn't reported.
13	Q. Did you write down a new answer to this
14	question?
15	A. (Kelly) In this case, I did write the
16	comment in the column.
17	Q. But that information was not passed on
18	to Suffolk County or New York State. Is that right?
19	A. (Kelly) I don't know. I mean, this I
20	got from you. I am assuming that you had that. You
21	just handed this to me.
22	Q. I didn't hand that to you.
23	A. (Kelly) This is one of your exhibits.
24	MR. CHRISTMAN: It is a Suffolk County
25	exhibit?

*	A. (Kelly) I don't know it you had it of
2	not but I got this from you.
3	Q. You called Ms. Colbert and what did you
4	ask her?
5	A. (Kelly) I saidI said who I was. I
6	said that I was going over the data and I said it
7	was interesting to me that I am paraphrasing.
8	Obviously I can't remember exactly. I said, "It was
9	recorded on our form that there were two or three
10	drivers or two drivers and one mechanic that refused
11	to work and, apparently, because their homes and
12	families were in danger." And I asked her if she
13	could provide any additional information about that.
14	And she responded that that was not the case, that
15	thosethere were two or three of her people that
16	had families in the area and that is why they didn't
17	call. And she said, "I thought I made that clear to
18	the original interviewer."
19	Q. That may be an indication that the
20	questionnaire was unclear, isn't it, Mr. Kelly?
21	A. (Kelly) If it is, that is the only
22	time it showed up and I never heard of any other
23	problem.
24	Q. On the Taft
26	A (Kelly) As I recall she didn't say

1	she didn't understand the question. She thought
2	that she had answered it in this way to begin with.
3	So I don't think that is a reflection on the
4	question itself.
5	Q. It may be a reflection on the
6	interviewer, right?
7	A. (Kelly) He may have missed putting in
8	a couple of the words. That's correct.
9	Q. Let's go to the Taft. Since you stated
10	you made another call on the Taft accident, let's go
11	through there. That is Suffolk County Exhibit 7.
12	Mr. Kelly, let me ask you, did your
13	interviewers know what the purpose of the study was?
14	A. (Kelly) Yes. I mean, we had a meeting
15	prior to this and I discussed with them that well,
16	that I had a client who asked us to do this. We
17	went over the survey. I think they understood the
18	purpose of the survey was to collect information
19	about bus drivers and how they responded.
20	Q. And they understood that this was with
21	respect to the issue of role conflict or role
22	abandonment. Is that right?
23	A. (Kelly) Yes.
24	I believe II probably told them that
25	the issue dealt with role conflict, should people

1	stay with their families or would theyabandon
2	their roles or help their family. Briefly, I
3	described the issue to them, yes.
4	Q. On page six, of Suffolk County Bus
5	Driver Exhibit 7, there it says two or three bus
6	drivers refused to drive evacuation buses because
7	they were frightened themselves, but most important,
8	they wanted to take care of their own families. Do
9	you see that?
10	A. (Kelly) Yes, I do.
11	Q. Apparently you made another call about
12	that. Correct?
13	A. (Kelly) Yes, I did.
14	Q. Apparently you have drawn the
15	conclusion that there was no refusal to report
16	there. Is that right?
17	A. (Kelly) That's correct.
18	Q. What is the basis for your conclusion?
19	A. (Kelly) I called the person, John Ikey
20	Lucas. He was not there, but PeggyI can't
21	remember no, it wasn't Peggy. What was the woman's
22	name? Could I pull that out, that document? I may
23	have notes on it.
24	Q. Suffolk County Exhibit 7, it is the
25	only one dealing with the Taft. Louisiana chemical

tank	explosion
Cany	evbrogrou

A. (Kelly) I may have written an extraneous note on another copy, though. Can I look for that one?

(Pause.)

A. (Kelly) I can't seem to find it right now. But when I called Mr. Ikey's--or Mr. Lucas' office, I spoke with an assistant, his assistant in that office. And she said that he wasn't there. I asked her if she knew anything about it and she said, "No, I didn't hear that any bus drivers refused."

She suggested I call Mr. Mahady, the transportation officer. I did so. He said, "No, none of my bus drivers refused to drive the buses."

It was either later that day or the next day I called Mr. Lucas back and I asked him, "Mr. Lucas--" I explained who I was.

I said, "You recently underwent an interview by one of our people and in response to a question about bus drivers refusing to evacuate, you said two or three bus drivers refused to evacuate--" I mean, "refused to participate because they were frightened and so forth." And he says he has no recollection of saying that.

So I said, "Well, there is something about testimony, you found this out later, after the fact." And he couldn't recall what, if anything, he said about testimony. So I clarified.

"So you are saying no bus drivers refused to drive?" He said, "No bus drivers refused to drive."

I went and asked, I believe it was Pam Emig in this case, what she knew about it. At this point--it was some time later, I don't know how much time, several weeks at any rate--and she just maintained that she thought he said that and didn't have any additional explanation for why that was there.

So the basis of my comment a few moments ago was I called back, spoke to three people, two emergency management officials and one bus company official to see if there was refusal, and they said "no."

Q. Let's look at question 18, on page six. The question is, "Did any of these refusals occur because bus drivers were concerned about the safety of their family?" The answer is given, "Three out of 20, 15 percent," and the notation is, "found out in testimony later on." Correct.

1	A. (Kelly) Yes.
2	Q. That is the reference to testimony you
3	are talking about?
4	A. (Kelly) That's correct.
5	Q. What testimony is being referred to
6	there?
7	A. (Kelly) I don't know specifically from
8	talking to these people. I do know that there were
9	lawsuits over the with Union Carbide, I believe was
10	the company involved. I was assuming it may have
11	had something to do with that, but I don't know for
12	sure.
13	Q. Did you tell Mr. Lucas whether or not
14	you were involved in those lawsuits.
15	A. (Kelly) I wasn't involved in that.
16	Q. Did you tell Mr. Lucas whether you were
17	involved in those lawsuits.
18	A. (Kelly) I am not involved in those
19	lawsuits.
20	Q. Did you tell him you weren't.
21	A. (Kelly) I didn't tell him anything
22	about that. You just asked what testimony he was
23	referring to. I told you what my opinion was of
24	what that meant. I am not telling you that I
25	discussed that with him. I did not discuss that

1	with him. I told him what was written down. I
2	asked if he knew what it was in regard to. He said
3	"no."
4	Q. Could he have believed your call had
5	something to do with those lawsuits?
6	A. (Kelly) I don't believe so.
7	Q. Why?
8	A. (Kelly) For one thing, based on other
9	knowledge I have, I think that case was settled some
10	time ago, so I don't think there is any pending
11	litigation. We told him who we were, and you can
12	see the explanation that we gave to him. I can't
13	tell you what he was thinking of, but I don't have
14	any reason to believe he thought I was involved in
15	that.
16	Q. You are saying that these were court
17	cases that this testimony came out in about bus
18	drivers not showing up. Is that right?
19	A. (Kelly) It says here, "found out in
20	testimony later on." You asked me what testimony is
21	that.
22	Q. What testimony was it?
23	A. (Kelly) I don't know from talking to
24	them. I am only telling you what I know because of

other reasons.

1	Q. So, apparently the fact that two or
2	three bus drivers didn't report was stated by
3	somebody in testimony, sworn testimony, according to
4	this?
5	A. (Kelly) No. That is not what thatin
6	answer to question 16, they said two to three
7	drivers and they stated a reason why. Then, whoever
8	said this to the interviewer said this the way I
9	interpret it was, "This fact was found out later on
10	in testimony."
11	I guess that answers your question.
12	Q. This fact was stated by somebody in
13	testimony. Right?
14	MR. CHRISTMAN: Objection. Asked and
15	answered.
16	JUDGE GLEASON: Well, I believe he is
17	trying to clear it up and it is unclear in my mind.
18	Let him proceed.
19	A. (Kelly) It may have been. Again, all
20	I can say it is, I called three people to find out
21	if they knew about it and they denied the one guy
22	who apparently said this, denied he said this.
23	JUDGE GLEASON: I believe, Mr.
24	McMurray, he is saying he doesn't know what the
25	testimony means.

1	Q. Did you ever ask who gave the testimony
2	at which it was stated that two or three bus drivers
3	may not have reported?
4	A. (Kelly) No. Because the person who
5	apparently said this, said he hadn't said it at all,
6	so
7	Q. Did you make any efforts to find out
8	where that testimony might be?
9	MR. BACHMANN: Objection. Asked and
10	answered many times, sir.
11	MR. McMURRAY: That has not been asked.
12	JUDGE GLEASON: No, it has not been
13	asked.
14	A. (Kelly) The question is, did I attempt
15	to find whatever testimony that might have been?
16	Q. That's right.
17	A. (Kelly) No, I did not.
18	Q. In light of this conflicting
19	information, you chose to credit Mr. Lucas' second
20	statement, rather than dig further as to whether or
21	not there was actually role abandonment. Is that
22	your testimony?
23	A. (Kelly) No, it is not. I chose to
24	speak to Mr. Lucas, the transportation officer at
25	the bus company, and Mr. Lucas' assistant.

1	Q. It is your testimony, then, that
2	despite what is written on this survey and despite
3	the fact that there might have been information in
4	testimony, you chose to believe those people rather
5	than dig any further. Correct? That is your
6	testimony, isn't it, Mr. Kelly?
7	A. (Kelly) I chose to talk to the people
8	who were initially involved in this and the person
9	who apparently said that he didn't say it.
10	Q. Well, apparently he did say it first,
11	right?
12	A. (Kelly) I think I have answered that.
13	I don't know if he said it or not. When I asked him
14	if he said it, obviously, he said no. That is what
15	I have testified to.
16	Q. Pam Emig was the one who did this
17	interview. Right?
18	A. (Kelly) That is correct.
19	Q. She did a number of these interviews,
20	didn't she?
21	A. (Kelly) Yes, she did.
22	Q. Did you check to see how many others
23	she may have gotten wrong?
24	A. (Kelly) What was that?
25	O. Did you check to see how many others

1	she may have gotten wrong?
2	MR. CHRISTMAN: I object to the
3	question. It is objectionable and offensive. If he
4	wants to know how many questionnaires this person
5	completed, that is okay.
6	JUDGE GLEASON: I don't understand why
7	it is objectionable.
8	MR. CHRISTMAN: The statement in the
9	question is how many others she may have gotten
10	wrong. For one thing, it is compound. He really
11	wants to know how many questionnaires this person
12	completed.
13	MR. McMURRAY: No. That is not the
14	question.
15	JUDGE GLEASON: I don't think that is
16	the question.
17	MR. CHRISTMAN: The question is how
18	many other questionnaires might have been gotten
19	wrong.
20	JUDGE GLEASON: How many questionnaires
21	might she have gotten wrong is the question.
22	It does assume certain things. That is
23	why I asked what your objection was.
24	MR. CHRISTMAN: It assumes all sorts of
25	things.

1	JUDGE GLEASON: You ought to make your
2	objections clear, Mr. Christman, as to what your
3	basis is. I can't read your mind.
4	A. (Kelly) The question is how many may
5	she have gotten wrong?
6	Q. Yes.
7	A. (Kelly) Well, there is two ways I can
8	answer that: I mean, obviously, any person can make
9	any mistake on any of these forms. The process we
10	used for checking this is, I looked, I reviewed
11	every questionnaire shortly after they completed it.
12	If there appeared to be anything, you know,
13	confusing to me or out of the ordinary, then I would
14	have followed up with questions and did so with many
15	of these just to make sure I understood. In this
16	particular case there was nothing to indicate to me,
17	the day after, that there was anything wrong with
18	that. It didn't bother me at that time.
19	When I was preparing testimony, at that
20	point I needed additional information to prepare the
21	testimony, about why they did, in fact, abandon
22	their role or refuse to drive. So, I
23	Q. Sorry. You said when you were
24	preparingwhen? For this cross-examination?
25	A. (Kelly) No. Preparing the testimony.

1	Q. After you determined that Ms. Emig had
2	gotten this one wrong, did you do anything after
3	that point to check all her work, to make sure she
4	had gotten it right?
5	A. (Kelly) I didn't call back and
6	reinterview all her people, no, I did not.
7	Q. What I hear you saying, Mr. Kelly, is
8	that in two instances you made further inquiry to
9	determine further what the nature of the appearance
10	of role abandonment was, right?
11	A. (Kelly) Yes.
12	Q. In both those instances, the
13	information that you were inquiring about was
14	unfavorable to LILCO's case, right?
15	A. (Kelly) No, it was not.
16	Q. It showed instances of role
17	abandonment, right?
18	A. (Kelly) Yes, but I thought I explained
19	that earlier. When I first got this information, I
20	saw, okay, role abandonment. It didn't bother me
21	because LILCO's position is role abandonment can
22	occur, it is just not an extensive problem. It is a
23	possibility, not a probability. So the fact that a
24	couple of bus drivers abandon their role wouldn't

have a negative effect on LILCO's position.

1	Later on, when I am preparing
2	testimony, it was obvious that I needed to get
3	information, additional information. So I called
4	and found out not what I thought I was going to find
5	out. I thought I was going to get more
6	clarification as to why they refused to drive. What
7	I found out was, she said there were no refusals.
8	Had I found out other things, I would have reported
9	that.
10	Q. The number of drivers, how many drivers
11	were contacted in the Taft chemical explosion?
12	A. (Crocker) Three.
13	Q. Let's go down to the next bullet which
14	says that "In all evacuations there are enough
15	drivers to drive evacuation buses," and you mention
16	a roster of evacuation bus drivers in Denver. Do
17	you see that?
18	A. (Kelly) Yes.
19	Q. Have you made any inquiry to determine
20	whether there is such a roster of local school bus
23	drivers here in the local area who would drive in a
22	radiological emergency at Shoreham?
23	A. (Kelly) Just based on what I have been
24	hearing, I am not personally aware of any roster.
25	JUDGE GLEASON: Is this a convenient

1	place for you to stop?
2	MR. McMURRAY: I have about five
3	minutes more.
4	JUDGE GLEASON: Okay.
5	Q. It is also true, isn't it, Mr. Kelly,
6	that in several instances the point was made in the
7	survey, in the responses to the surveys, that
8	certain bus drivers were called out specifically
9	because they didn't live in the area of risk.
10	Right?
11	A. (Kelly) Yes. I can recall off the top
12	of my head at least one. In Marysville, at least
13	one of the bus companies, I believe, called people
14	from outside the impact area.
15	Q. Isn't it true it also happened in
16	Pinellas County?
17	A. (Kelly) It could be. I do recall
18	there was more than one. I just don't know which
19	ones.
20	Q. Isn't it true it also happened at Taft.
21	A. (Kelly) It could very well be.
22	Q. You were just saying they didn't call
23	the people specifically because they lived in the
24	impact area?
25	A. (Kelly) I'm sorry. I am confused by

1	the last question and this question.
2	Q. You have now testified that specific
3	bus drivers were not called because they lived in
4	the impact area. Isn't that right?
5	A. (Crocker) Yes. I said I can recall,
6	at least in the Marysville incident, at least one of
7	the bus companies called people from outside the
8	impact area. It is stated on the form. You
9	mentioned two areas.
10	Q. I am talking about Taft right now,
11	which is Suffolk County Exhibit 7. Is that the case
12	where they were not called because they lived
13	outside the area?
14	A. (Kelly) On question numberpage
15	seven, number 21, Mary Mahady said that bus drivers
16	who lived outside the evacuation zone were
17	contacted.
18	Q. So, in that specific accident, the bus
19	drivers who were called were from outside the area.
20	Right?
21	A. (Kelly) Apparently.
22	Q. Isn't it true also that in Pinellas
23	County there was also an effort made to call drivers
24	from outside the area.

A. (Kelly) Is this one of the exhibits

1	you had just given me?
2	Q. Yes. The Larry Newman, which is
3	Suffolk County Bus Driver Exhibit 9 for
4	identification.
5	Look at page 12, question 37.
6	"What percentage of these potential bus
7	drivers had families in the area at risk during the
8	emergency?"
9	"Answer: They were selectively
10	contacted based on proximity to reporting station
11	and low risk of family." Correct?
12	A. (Kelly) I see. Yes. That is what it
13	says.
14	Q. You said also, that you recall it
15	happened in Marysville that people were specifically
16	called who were outside the impact area.
17	A. (Kelly) That is what I recollect. I
18	would have to look at it, but I recollect that, yes.
19	MR. McMURRAY: I think, then, that this
20	is a good place to stop, Judge Gleason.
21	JUDGE GLEASON: Fine. We will come
22	back at 1:30.
23	(Whereupon, a luncheon recess was
24	taken.)

1 2 AFTERNOON SESSION 3 (1:35 p.m.) 4 5 MR. CHRISTMAN: I have a preliminary 6 matter, if you don't mind. 7 We served on the Board the testimony on hospital ETE's, rebuttal testimony. It goes to Dr. 9 Harkin's testimony. With it, is a motion to file 10 the testimony. All I suggest is that it would be 11 12 nice to resolve that issue by the end of the week. I also offer that Dennis Sisk, the lawyer who will 13 be handling that issue for us, will be here tomorrow 14 and can explain or argue as you wish, on that 15 16 motion. JUDGE GLEASON: We we will take it up 17 18 tomorrow, then. Mr. McMurray? 19 MR. McMURRAY: Judge Gleason, just with 20 respect to that, I appreciate if it could be held 21 later in the day. Obviously, I am involved in this 22 cross-examination. I am also involved in the 23 hospital ETW issue. This is an extensive piece of 24

25

testimony and I am not going to have a chance to

1	read it until tomorrow. So if we could do it
2	towards the end of the day.
3	JUDGE GLEASON: We can even do it
4	Friday.
5	MR. McMURRAY: Or the end of the day,
6	as long as it is not first thing tomorrow morning.
7	MR. CHRISTMAN: We will have an
8	assistant come out toward the end of the day
9	tomorrow and everybody will be here.
10	MR. McMURRAY: The first thing I would
11	like to do at this time, Judge Gleason, is move
12	Suffolk County Bus Driver Exhibits 8, 9 and 10 into
13	evidence.
14	JUDGE GLEASON: Is there objection?
15	(Pause.)
16	JUDGE GLEASON: Hearing none, the
17	exhibits will be received in evidence.
18	(Suffolk County Bus Driver
19	Exhibit Nos. 8, 9 and 10 were
20	received in evidence.)
21	MR. McMURRAY: I have one other matter
22	to clean up. If we can go to Exhibit No. 6, which
23	is the Alice Colbert survey instrument.
24	Q. Mr. Kelly, let me refer you to page six
25	of that. We already went over the answers to

A. (Kelly) Yes, I do. Q. That is not the writing that was put there by the interviewer. I don't know who that was. That is not the interviewer's handwriting, right? A. (Kelly) No, that is my handwriting. Q. That is handwriting you put there as a result of your follow-up call to Ms. Colbert? A. (Kelly) That's correct. JUDGE SHON: Mr. McMurray, before we leave that particular exhibit, I would like to clear up something that is on the page before that, page five. I understood the witness to say that the people that didn't show up, didn't show up because they were never called. The persons in charge knew that they lived where their families might be in danger and didn't call thom.		
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24 buses were needed, the drivers showed up, " which		

suggests that, indeed, none of the drivers were

1	contacted at all. I don't know whether you were
2	making the point, Mr. McMurray, awhile ago, that
3	these people either were or weren't contacted or
4	something like that.
5	Mr. Kelly, could you clear that up?
6	Was no one contacted? And if so, then what is
7	special about the people who weren't contacted
8	because they were known to live in a danger area?
9	WITNESS KELLY: Well, the reason I
10	called there was that they said two or three people
11	didn't show up.
12	JUDGE SHON: Yes, but it seems as if
13	they didn't show up and everybody else did.
14	WITNESS KELLY: That is my handwritten
15	note as well. I am just trying to recall the
16	rationale for that.
17	(Witnesses confer.)
18	JUDGE SHON: I trust on question 15
19	that is not your handwriting, is it?
20	WITNESS KELLY: No, that is not. What
21	does that say?
22	JUDGE SHON: I can't read it exactly,
23	but I think it says, "As soon as the word was out
24	that buses were needed, drivers showed up."
25	MP McMIPRAY: Judge Shop, we do have

1	the originals of these.
2	JUDGE SHON: Do you? Could you look at
3	it?
4	MR. McMURRAY: I don't, but counsel for
5	LILCO does or Mr. Kelly does. One or the other.
6	WITNESS KELLY: Yes, (referring) it
7	says, "As soon as word was out that " I can't even
8	read it here.
9	Oh. "That levee broke, drivers showed
10	up."
11	What I think the comment what the
12	problem here is, some bus drivers may have been
13	called and other bus drivers just showed up. Then I
14	don't know why, on 16, this problem ever arose to
15	begin with. I can't explain it beyond what I have
16	already said.
17	JUDGE SHON: So, then, doesn't this
18	sort of vitiate the notion that they didn't show up
19	because they were never contacted? Apparently a lot
20	of people did.
21	WITNESS KELLY: Are you saying why
22	isn't this an issue
23	JUDGE SHON: No. I say doesn't this
24	rather the word I used was vitiate or reduce the
25	force of the notion that these people didn't show up

1	because they weren't contacted? It appears that
2	many people did show up, because they weren't
3	contacted and that the drivers whose families were
4	in the danger area did not.
5	JUDGE GLEASON: Is the question clear
6	to you, Mr. Kelly?
7	WITNESS KELLY: Yes. An explanation, I
8	am trying to think ofall I can
9	JUDGE GLEASON: You made reference in
10	the testimony before somewhere that a lot of drivers
11	showed up even though they weren't contacted.
12	JUDGE SHON: And you also said nobody
13	refused to show up or nobody, in effect, failed to
14	show up. But there were these three people who
15	hadn't shown up and you said, "Well, that is because
16	thry weren't contacted."
17	WITNESS KELLY: Right.
18	JUDGE SHON: But an awful lot of other
19	people did in the same situation.
20	WITNESS KELLY: But if they weren't
21	contacted, they weren't ever required to. If they
22	had problems at home but still weren't required, it
23	can't be a role conflict. They were never required
24	to perform this role.
25	JUDGE SHON: I see. I think that is

1	the only question I wanted to ask.
2	JUDGE GLEASON: Proceed, Mr. McMurray.
3	MR. McMURRAY: Thank you.
4	Q. Mr. Kelly, at lunch, did you happen to
5	tally up the number of respondents who did not
6	answer the question as to how many of the bus
7	drivers or what percentage of the bus drivers'
8	families were in danger?
9	A. (Kelly) I hadn't gotten to that. I
10	only worked on the question about how many didn't
11	know if they showed up late. That is the only one I
12	got to do.
13	Q. Can we have that, please?
14	A. (Kelly) Yes. As I counted, in
15	PittsburghPittsburgh, the company didn't know.
16	They replied, "Unknown." In Miamisburg, one of two
17	companies, as I counted, said, "I don't know" and
18	the emergency manager didn't know. In Pinellas,
19	none of the companies, but the emergency manager
20	didn't know. He didn't know pretty much anything
21	about the bus drivers.
22	Then in Miamisburg, the emergency
23	manager replied he didn't know.
24	Q. I have Miamisburg being referred to
25	twice.

1	A. (Kelly) I'm sorry. Marysville. I
2	can't read my writing.
3	Q. Your last reference was to Marysville?
4	A. (Kelly) That's correct.
5	Q. How many of the respondents there
6	didn't know?
7	A. (Kelly) I believe it was just the
8	emergency manager. And that was in answer to
9	question number 22.
10	Q. You haven't had an opportunity yet to
11	tally up how many didn't answer the question as to
12	how many had family in the risk area?
13	A. (Kelly) No. I have not done that yet.
14	Q. Would you do that at the next break?
15	A. (Kelly) I will try to. If I have
16	enough time I certainly will do it.
17	Q. Let's stay on this survey just a
18	second. How many of these surveys were accidents
19	that involved the evacuation of schools?
20	A. (Kelly) I believe five of the cases
21	involved the evacuation of schools.
22	Q. And in those cases where schools were
23	evacuated, only a few buses were used. Isn't that
24	correct?

A. (Kelly) In one case there were 38

buses -- I'm sorry. In one case, a total number of 64 1 buses were used for the evacuation. In the next 2 3 case, a total of 10 buses; a total of 25 buses in another case; total of 3 buses in another case; and total of 3 buses in the other case. 5 Q. . me focus my question more clearly. With respect to those evacuations, I believe you 7 gave a total number of buses used for everybody who had to be evacuated? 9 (Kelly) That's correct. 10 11

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- Q. Can you break that down? For those five emergencies, can you tell us how many buses -- we can also say how many bus drivers -- had to be used to evacuate school children?
- (Kelly) I was just looking back at the questionnaire. I believe the questions we asked related to schools were how many schools needed to be evacuated by bus, and then how many school children needed to be evacuated by bus. Then there is a question that deals with total number of buses. I don't believe we have the number of buses used just for school children.
- Q. One last question on the survey and then we will move on. In three of those evacuations, the information I have is that only two

1	schools were evacuated. In the other twoone other
2	had four schools evacuated, another had five schools
3	evacuated. Is that what your information is?
4	A. (Kelly) All but the last one. My
5	notes that I prepared have seven, not five.
6	Springfield, are you referring to?
7	Q. In Springfield, that was five schools
8	and two colleges?
9	A. (Kelly) Okay. Yes. I had a total of
10	seven. Correct.
11	Q. Is it your understanding that those
12	schools had to be evacuated by bus or just that they
13	were evacuated and we don't know how they were
14	evacuated?
15	A. (Kelly) In Springfield?
16	Q. Yes.
17	A. (Kelly) In Springfield, at this point,
18	all I can recollect is that they closed the high
19	school and the students walked to the bus area that
20	they would normally walk to and they were taken
21	away. It was an evacuation. It was because of a
22	gas leak or something of that nature, so I would you
23	say it was an evacuation.
24	Is that what your question was? I'm
25	sorry. I got lost in my answer.

1	Q. We are getting there.
2	There were two colleges involved. You
3	don't know whether those were evacuated by bus or
4	not?
5	A. (Kelly) I can't recollect.
6	Q. Let's move on.
7	Your other survey was one that involved
8	individual bus drivers. Right?
9	A. (Kelly) That's correct.
10	Q. Did you conduct this second survey
11	after the first one?
12	A. (Kelly) Yes.
13	Q. Approximately when did you conduct the
14	second survey.
15	A. (Kelly) Same period. Late March to
16	early April.
17	Q. Again, had this been planned as part of
18	your overall project for LILCO?
19	A. (Kelly) Initially, what we were doing,
20	as I recall, we were going to do an organizational
21	study on those 19 and then, from that, get in touch
22	with the bus drivers to the extent possible, only
23	school bus drivers, only those involved in the
24	evacuation of schools.
25	I think there were a certain number

that were done, and I can't recall how many actual 1 school bus drivers we had success with, but it was 2 maybe a half-dozen to a dozen, in that range. And 3 at that point, we decided to try to interview any school bus drivers, as many as possible. 5 So, at that point we went and got in touch with every organization that we had previously 7 talked to and asked them to give us a list of bus drivers who participated in that evacuation. And 9 that is how we got to that point. 10 I take it originally you had just tried 11 to contact drivers from these five accidents or 12 13 emergencies that we just discussed? (Kelly) I believe that is correct. 14 And you say you didn't have success 15 except for half-dozen or so? 16 (Kelly) Yes. 17 What did you mean by saying you didn't 18 have success? 19 A. (Kelly) We couldn't get people to give 20 21

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1	place, possibly Pinellas. And Nanticoke, the guy
2	ran the company, he and his wife, and he didn't feel
3	like going through records to see if he might be
4	able to determine a wide variety of problems. Just
5	a matter of people not giving us the names of the
6	bus drivers involved.
7	In some cases, they agreed to ask the
8	bus drivers involved to call us collect and that met
9	with limited, if any, success, as I recall. That
10	was probably due to privacy as well.
11	Q. Are you now talking about your success
12	in contacting all bus drivers in general or just
13	school bus drivers?
14	A. (Kelly) Well, that is both, those
15	reasons.
16	Q. For both?
17	A. (Kelly) For both.
18	Q. Let me backup then. I think what you
19	are telling us is that you were only able to
20	interview a very small proportion of the bus drivers
21	who were purported to have driven in these
22	emergencies. Right?
23	A. (Kelly) We could only get, as I said,
24	the 6 to 12.
25	Q. The 6 to 12 who drove school buses.

1	Right?
2	A. (Kelly) That's correct.
3	Q. You eventually were able to reach 27
4	bus drivers in all. Right?
5	A. (Kelly) That's correct.
6	Q. Again, that is only a very small
7	proportion of those who are purported to have
8	driven. Right?
9	A. (Kelly) Yes. Well, without adding it
10	up, there were maybe 400 buses or 500 buses that had
11	been involved in these evacuations.
12	Q. And after all your efforts, you were
13	only able to interview 27 bus drivers. Right?
14	A. (Kelly) That's correct.
15	Q. You weren't able to interview bus
16	drivers who participated in all 19 disasters.
17	Right?
18	A. (Kelly) I believe that's correct.
19	Q. You were only able to interview
20	A. (Kelly) 10.
21	Qdrivers who participated in 10. Is
22	that correct?
23	A. (Kelly) That's correct.
24	Q. For some of those you were only able to
25	interview one bus driver who participated in that

1	disaster?
2	A. (Kelly) That's correct.
3	Q. Let's go to Attachment H.
4	Mr. Kelly, Attachment H is the
5	interview schedule used for the interviews of the
6	individual bus drivers. Is that correct?
7	A. (Kelly) That's correct.
8	Q. Was it prepared by Drs. Mileti and
9	Lindell?
10	A. (Kelly) Yes. The same process applies
11	here as to the lastthe other survey.
12	Q. Did you delete or add any questions?
13	A. (Kelly) I don't believe I did, no.
14	Not in this case.
15	Q. Did anyone not associated with LILCO or
16	with Weston review the questionnaire?
17	A. (Kelly) Yes. In the test. We tested
18	two bus company peopleI tested also on that
19	original civil defense person I mentioned. And then
20	each of the interviewers tested it, practiced using
21	it on someone that they knew, but I don't know who
22	they were offhand.
23	Q. I guess what I am asking is did anyone
24	review it for its scientific validity or for bias or
25	anything like that?

1	A. (Kelly) Our test was more for clarity
2	and understanding and so forth.
3	Q. I take it you are saying no one
4	reviewed it for scientific validity?
5	A. (Kelly) I was not involved with that.
6	I don't know if Drs. Mileti or Lindell did that.
7	A. (Mileti) I might just add, that it was
8	just the two of us who constructed it.
9	Q. You mentioned that you had trouble
10	contacting these bus drivers. How did you
11	eventually get the names of the 27 that you were
12	able to call?
13	A. (Kelly) In those casesfor instance,
14	in Pinellasis it Pinellas?
15	In Marysville, at least one of the bus
16	companies gave us some names. And in Springfield, a
17	bus company gave us the names. We got these names
18	from the bus companies we had initially interviewed.
19	Beyond that oh, another reason why, even when we
20	had some names, some people had moved. I recall
21	maybe it was Greenfield, one guy was amoved on to
22	become a police officer at U. Mass. and we couldn't
23	contact him there. Just people moved on and they
24	didn't have any forwarding addresses.

So, we had more names than interviews,

1	but we just couldn't get in touch with them. But
2	for the most part, the original reasons applied.
3	Bus companies just wouldn't give us names.
4	Q. What you had asked for were the names
5	of people who had driven in these various disasters.
6	Right?
7	A. (Kelly) That's right.
8	Q. So, by definition, you would not have
9	been given names of many people who refused to
10	participate in the disasters. Right?
11	A. (Kelly) Well, in these cases there
12	were none.
13	Q. Well, I think that is questionable,
14	given what we have seen in your other data, but
15	given your question, you would not have gotten names
16	of anybody that didn't participate. Right?
17	A. (Kelly) Given the question and given
18	the fact that in none of these cases people had
19	refused.
20	Q. The question would not have elicited
21	the names of anybody who didn't participate. Isn't
22	that correct?
23	A. (Kelly) Yes.
24	Q. On the bottom of page 29, going over to
25	page 30, you state there that no bus drivers refused

1	to drive buses during the evacuation and only two
2	drivers reported doing something else before
3	beginning their bus driver functions. Do you see
4	that?
5	A. (Kelly) Yes, I do.
6	Q. Isn't it true, Mr. Kelly, that in a
7	number of the responses you got, the bus drivers had
8	actually evacuated with their families, but they
9	were able to evacuate before being notified?
10	(Witnesses confer.)
11	A. (Kelly) Can you refer me to a question
12	number?
13	Q. I am talking aboutfor instance, in
14	two documents here, the first has, in the upper
15	right-hand corner, the date "3/25/88," a 10-page
16	document. It says, "Bus Driver Interview Schedule."
17	The incident is Marysville levee break and flood.
18	Interviewee's name is Jean Pratt. I would like this
19	marked as Suffolk County Bus Driver Exhibit 11 for
20	identification.
21	JUDGE GLEASON: The other?
22	MR. McMURRAY: The other is a similar
23	interview schedule. In this case the interviewee's
24	name is Rochelle Laird. I would like that marked

Suffolk County Bus Driver Exhibit Number 12.

1	JUDGE GLEASON: The documents will be
2	designated with those numbers.
3	(The document referred to was
4	marked for identification as
5	Suffolk County Bus Driver Exhibit
6	Nos. 11 and 12 .)
7	Q. Look at Suffolk County Bus Driver
8	Exhibit 11, Ms. Pratt's interview. On page 3 of the
9	document she states that it was likely that her home
10	would be threatened by the floodthat it was
11	extremely likely her home would be threatened by the
12	flood. Isn't that correct?
13	A. (Kelly) Yes.
14	Q. On page 4, in answer to question 11,
15	the question asked, "What members of your household
16	were at home when you received the activation
17	message?"
18	And the answer is "None. Had already
19	evacuated." Correct?
20	A. (Kelly) That's correct.
21	Q. That same tope of response that is,
22	that the family had already vacuated is given in
23	other interview schedules. Correct?
24	A. (Kelly) It is possible. As I look at
25	your Suffolk County No. 12, in answer to question 8,

1	they said one or more household members evacuated
2	prior to receiving the activation message.
3	Q. And in that case, again the threat to
4	the actual home was extremely likely, but it appear
5	that there had been an evacuation of at least some
6	household members. Correct?
7	A. (Kelly) Yes, it appears so.
8	Q. Prior to notification?
9	A. (Kelly) That's correct.
10	Q. Are you aware of any others where that
11	response was given.
12	A. (Kelly) It may be, but I am not aware
13	of any. I can't recall any others. There may be.
14	Q. That isn't something you tallied?
15	A. (Kelly) Looking at my tally, it says
16	"two"it had two cases one or more household
17	members evacuated.
18	Q. Before or after the notification?
19	A. (Kelly) Well, it was in response to a
20	question, "Prior to your receipt of activation
21	message."
22	Q. Isn't it true that in other instances
23	the respondents said that they prepared their
24	households for evacuation prior to reporting?
25	A. (Kelly) Yes. Looking at my summary,

1	it says five prepared to evacuate.
2	Q. Prior to
3	A. (Kelly) Prior to the activation
4	message, yes.
5	Q. One of the disasters we are talking
6	about here is Marysville. Is that right?
7	A. (Kelly) That's right.
8	Q. In Marysville, there was sufficient
9	notice of the incident for the bus drivers to
10	evacuate their families before being called. Isn't
11	that right?
12	A. (Kelly) In the Marysville incident, as
13	I recall, there had been heavy rains and some
14	flooding in the area and then, as I also recall, a
15	levee broke. You had a combination of flooding
16	conditions which caused a sudden levee break. This
17	Exhibition No. 12 shows, in answer to number five,
18	there was no warning. "Were you aware there was an
19	emergency prior to receiving your activation
20	message?" They said, "No, no warning."
21	Q. Isn't it true, in response to
22	Exhibit in Exhibit 11, in response to question 1,
23	it states there was three days warning or standing
24	by?
25	A. (Kelly) That is No. 11?

1	Q. That's right.
2	A. (Kelly) I'm sorry. Which exhibit are
3	you locking at?
4	Q. 11.
5	A. (Kelly) Question number?
6	Q. Question one.
7	A. (Kelly) Oh, I'm sorry.
8	They had been on alert for three days.
9	I believe that is what they were talking about, due
10	to the heavy rains and flooding. And then I believe
11	what probably happened here is these people were on
12	alert, maybe because the levee was about to break,
13	and then it broke, if it is similar to the other
14	case, and it is the same case. It does say, "three
15	day warning standby."
16	Q. This is an example of a disaster where
17	there was a fairly extended warning time. Right?
18	A. (Kelly) Depending on definition. I
19	mean, with flooding, yes. There was an indication
20	that there was flooding in the area. I don't
21	believe there was all that much warning time for the
22	levee break. I am not certain of that.
23	A. (Kelly) What I was trying to get
24	across, there was the long term warning for the

flooding, but not from the flash flood that resulted

1	from the leves break.
2	Q. Because of that warning time, many of
3	the bus drivers were able either to evacuation their
4	families or prepare to evacuate before being
5	notified to respond to their emergency roles.
6	Right?
7	A. (Kelly) You know, if they had several
8	days' warning time, yes, they would have had time to
9	prepare.
10	Q. It is true, isn't it, I think we just
11	discussed it a large number of these surveys,
12	whether it is before or after the notification,
13	there is a lot of indication about evacuation of
14	family members. Right?
15	A. (Kelly) You are asking me to
16	generalize across the whole thing. I am not sure I
17	can do that right at the moment. Can you ask the
18	question again for me so I am certain I understand?
19	Q. Yes.
20	in a large number of the surveys you
21	did, isn't it true that there were responses given
22	indicating that the bus drivers engaged either in
23	evacuation of the family or preparation to evacuate?
24	A. (Lindell) Frior to what point?

Q. Either prior or after. I am just

1	talking right now about evacuation behavior.
2	A. (Kelly) I think I really would have to
3	look at the data to give you the answer.
4	Q. Let me refresh your recollection.
5	Isn't it true that in the Spark's survey, it
6	indicated that the family was being prepared to
7	evacuate.
8	A. (Kelly) What is the Spark's survey?
9	Q. It is not an exhibit. I am trying to
10	refresh your recollection. I don't want to put all
11	these into evidence.
12	A. (Kelly) What case was that?
13	Q. Marysville.
14	A. (Kelly) Okay. I have the Spark's
15	form.
16	Q. Isn't it true that in the Spark's
17	interview there is an indication that the family was
18	prepared to evacuate prior to the notice to report
19	for emergency duty?
20	A. (Kelly) In response to question eight,
21	"Did you or the members of your household take any
22	protective action prior to the receipt of your
23	activation message, " they said, "Yes, prepared to
24	evacuate."

In response to question nine, "How much

1	time was there between when you first found out
2	about the emergency and when you received your
3	activation message," the answer was, "A few
4	minutes."
5	Q. You don't know, though, whether they
6	prepared to evacuate in that two-minute interval or
7	whether they prepared to evacuate beforehand.
8	Right?
9	A. (Kelly) Yes. I don't know. I don't
10	think I can determine that from this data.
11	Q. Isn't it true that in the Marysville
12	incident one of the respondents, Nyla Rascheim, gave
13	the same sort of response, that family prepared to
14	evacuate?
15	A. (Kelly) The same answers as the last
16	one. Prepared to evacuate, five minutes between
17	when she found out about the emergency and when it
18	was activated. Of course, if they didn't know about
19	the emergency I don't know why they would have
20	prepared to evacuate, necessarily, prior to finding
21	out about it.
22	Q. You are saying there was three days'
23	warning?
24	A. (Kelly) I didn't say that.
25	Q. We established earlier there was three

days' warning time for the Marysville incident.

- A. (Kelly) In this case--let's look at this one. They apparently had rain even more than three days long, possibly, to a week. And then they said they prepared to evacuate sometime between then and the incident. Yet when asked when you first found out about the emergency, and I only evacuate to emergencies, if I were to evacuate, they were five minutes. So I don't know how to answer your question.
- Q. The emergency could mean the call to respond to the emergency role, couldn't it?
- A. (Kelly) No. The question is when did you first find out about the emergency and when you received your activation message? That is five minutes. I think probably since it is only five minutes and they had had rain for a week, they were talking about the levee break.
- A. (Lindell) The three days' warning that is cited in Suffolk County Exhibit 11, it says—it is in the context of the activation message. It says, "Who did you receive the incident (sic) from?" And it says, "Three days' warning." I would interpret that to mean there was three days' warning that they might be activated to take an emergency

1	rolethat is, to drive a bus, but not necessarily
2	that they and three days of warning that their home
3	might be in an impact area.
4	Q. But we don't really know how to
5	interpret it?
6	A. (Lindell) Exactly. That is what we
7	are saying. We don't know how to interpret that.
8	Q. It could be a long warning time.
9	A. (Lindell) We are saying we don't know
10	how to interpret that.
11	Q. This is another example where the
12	information given is not clear, right, Mr. Kelly?
13	A. (Kelly) No. I think the information
14	is very clear.
15	Q. Dr. Lindell just said he didn't know
16	how to interpret it.
17	A. (Lindell) I don't see that there is a
18	conflict there.
19	Q. That is fine.
20	In the next paragraph there is a
21	discussion of family membershow many of the
22	respondents had family members at home when they
23	received the activation message. Do you see that,
24	Mr. Kelly, on page 30: That is the first full
25	paragraph.

1	A. (Kelly) 19 of the 27 respondents?
2	Q. Yes. You have that in front of you
3	now?
4	A. (Kelly) Yes, I do.
5	Q. Then you go on to sayand some of this
6	information has been corrected10 of the 19
7	answered question seven about whether they thought
8	their household would be threatened by the hazardous
9	agent. Do you see that?
10	A. (Kelly) Yes.
11	Q. Question seven is pertinent, right,
12	because if the household, that is, the family
13	members, were in the impact area that would be an
14	important thing to know, right, for the purposes of
15	this issue? Right, Mr. Kelly?
16	A. (Kelly) Yes. I am just looking at
17	question seven again. Yes. It is how likely their
18	home would be threatened.
19	Q. I think you just stated, isn't it a
20	fact that question seven doesn't ask whether they
21	thought their household would be threatened by the
22	hazard agent, but whether their home would be
23	threatened by the hazard agent?
24	A. (Kelly) That is what it says.
25	Q. Isn't it true there is a difference

1	between one's household and one's home? wouldn't
2	household include the family members of people in
3	it?
4	A. (Lindell) Yes, it does. The reason it
5	was asked that way was because we wanted to make
6	clearthis is a problem we have come up across in
7	previous surveys, is that we wanted to make sure
8	that the respondents knew that it was dangerous to
9	be at that location and that if you asked the
10	question would their family be at risk, then that
11	creates an ambiguity in the respondent's mind as to
12	whether they would be at risk assuming that they
13	stayed there or assuming that they left. That is
14	the reason the question was asked that way.
15	Q. So the question was asked referring
16	specifically to where the home is located, right,
17	Dr. Lindell?
18	A. (Lindell) That is correct.
19	Q. The physical structure, right?
20	A. (Lindell) That is the location.
21	Q. And yet here in your testimony, Mr.
22	Kelly, you are talking about whether the question
23	asks whether the household would be threatened by
24	the hazard agent. Do you see that?
25	A. (Kelly) Yes. That is what it says.

1	Q. But isn't it true that at least Suffolk
2	County Exhibits 11 and 12 show that at the same time
3	the home may have been threatened, the households,
4	the people in them were not because they had already
5	been evacuated?
6	A. (Kelly) Yes. The people had been
7	evacuated, apparently, from their home.
8	Q. So, therefore, the relevant question
9	for whether or not the bus drivers thought their
10	families were in danger was not whether their homes
11	would be threatened a: the time but whether their
12	families, their hous holds, would be threatened.
13	Isn't that right:
14	(Pause.)
15	A. (Kelly) Can you ask me the question
16	again?
17	Q. Question seven, we have established,
1.8	talks about the preceding answer to the home.
19	Correct?
20	A. (Kelly) Yes.
21	Q. Let me try to phrase the question this
22	way, Mr. Kelly. In the middle of the paragraph we
23	are looking at, it says, "Even with this perceived
24	danger to their households, six of the seven
25	proceeded immediately with their bus driver duties."

1	Do you see that?
2	A. (Kelly) That's correct.
3	Q. Okay. But question seven measured the
4	dangers to their home, and we have established that
5	in some cases the household members were out of
6	those homes. Right?
7	A. (Kelly) That's correct.
8	JUDGE GLEASON: Mr. McMurray?
9	MR. McMURRAY: Yes, sir.
10	JUDGE GLEASON: Have you devised some
11	way to expedite your cross-examination some way? We
12	have been going about five hours on about
13	five-and-a-half pages of testimony. That is very,
14	very slow.
15	MR. McMURRAY: I understand that, Judge
16	Gleason. I would like to say that there have been
17	three or four or five pages of testimony dealing
18	with these surveys. As is true in all cases, some
19	pages are meatier than others. LILCO relies very
20	much on these surveys for so-called empirical data
21	to support their case. I am trying to explore
22	whether that empirical date is valid. I am almost
23	done with this last survey and I am very confident

that the pages after that are going to move much

more quickly. It is just the fact that some pages

24

1	have more information in them that needs to be
2	explored than others.
3	I will move along quickly.
4	JUDGE GLEASON: Proceed.
5	Q. You mention that of this group, one
6	driver took 20 minutes to evacuate her children
7	before reporting to drive an evacuation bus. Is
8	that correct, Mr. Kelly?
9	A. (Kelly) That's correct.
10	Q. Do you know how far away the high
11	ground was for her to reach and take her family to?
12	A. (Kelly) I don't believe so, no.
13	Q. Since Marysville involved a flood, it
14	was merely a case of taking the family to some area
15	above the flood waters. Correct?
16	A. (Kelly) I don't know if I'd use the
17	term "merely," but it would involve getting out of
18	the impact area. Yes.
19	Q. Now, down at the in the middle of the
20	page you say, "With respect to the nine respondents
21	who did not answer the question about perceived
22	degree of danger to their household, we found the
23	following: That two respondents said their families
24	were closer to the impact area than they were"that
25	is question 10. "Nevertheless, both went directly

1	to the reporting location after being called."
2	Do you see that?
3	A. (Kelly) That is correct.
4	Q. That doesn't mean that their family was
5	in or even near the impact area, does it?
6	A. (Kelly) It doesn't necessarily mean
7	that. We may have to look to see where he was if we
8	could determine that from the questionnaire. But it
9	don't necessarily mean that.
10	Q. Also, two bus drivers said they were
11	with their families in the impact area at the time
12	they received the activation message. One driver
13	made arrangements for his family to evacuate and
14	then reported to work a few minutes later. The
15	other respondent said he felt a great sense of
16	personal responsibility to help his family by
17	staying at home but instead gave instructions to his
18	son to evacuate the family."
19	Do you see that?
20	A. (Kelly) Yes, I do.
21	Q. In both of those cases that dealt with
22	the Hicksville accident, didn't it?
23	A. (Kelly) Yes. Both w re in Hicksville.
24	Q. And in both those cases there happened
25	to be a son over 18 years of age in the household to

1	help evacuate the family. Is that right?
2	A. (Kelly) Yes. It appears so.
3	Q. One last line of questions on this
4	survey. Let's go to Attachment F for a second. I'm
5	sorry. Which attachment has the results for bus
6	driver survey?
7	A. (Kelly) "I."
8	Q. "I"?
9	A. (Kelly) Yes.
10	Q. Thank you.
11	Let's go to page 3 of Attachment I.
12	Attachment I tabulates the answers to the various
13	questions on the survey. Correct, Mr. Kelly?
14	A. (Kelly) Yes.
15	Q. And question 10 is one we have just
16	been looking at, which says, "Where were you located
17	at the time of the impact?" Do you see that?
18	A. (Kelly) Yes, I do.
19	Q. Isn't it true that only two were
20	reported to be with family in the impact area? Is
21	that right?
22	A. (Kelly) Twoyes. Two were with
23	family in the impact area.
24	Q. And two with were family in the
25	periphery?

1	A. (Kelly) That's correct.
2	Q. So only four were with family either in
3	or near the impact area. Right?
4	A. (Kelly) Yes.
5	Q. That is a "yes"?
6	A. (Kelly) What was the question? I'm
7	sorry.
8	Q. Only four were with their family in or
9	near the impact area.
10	A. (Kelly) Yes. Yes.
11	Q. And with respect towell, we know that
12	11 were with the family outside the area. Right?
13	A. (Kelly) That's correct.
14	A. (Lindell) But that is not only in
15	retrospect. What happens is that at the time of the
16	emergency, if you look at question seven, it says,
17	"As a result of the information you received prior
18	to the activation," that is information that they
19	had. That is their perception at the time of the
20	emergency. And we have nine people that said either
21	extremely likely, very likely or even odds of your
22	home being threatened by the hazard agent.
23	We looked at this, we were a little
24	confused by this when we looked at it. When you

look down and see there are 11 people with a family

1	outside the impact area, if you look at the question
2	you can see that allows them to express their
3	knowledge of whether or not their home was
4	ultimately affected. So there is a difference in
5	time perspective there. That is the reason we
6	believe there were nine people that believed
7	themselves and their families to be at risk during
8	the emergency, not just the four that are tabulated
9	here under question 10.
10	Q. Dr. Lindell, we have established on
11	question seven that the word used is "home," not
12	"household." Correct?
13	A. (Lindell) Their location.
14	Q. The location of the home?
15	A. (Lindell) That's right.
16	Q. Not the location, necessarily, of the
17	family, correct, at the time of the impact?
18	A. (Lindell) At the time ofat the time
19	prior to the receipt of the activation message, that
20	location they believed that that location would be
21	at risk.
22	Q. But we don't know where the family was,
23	do we?
24	A. (Mileti) Yes.
25	O. In some cases we know they were outside

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- A. (Mileti) We know where the family was because of question 11, "What members of your household were at home when you received the activation message?" If you combine the answer to question 11 with the answer to question seven, we can find out if the home was in the area of risk and then determine whether or not or what members of the family were there.
- Q. Question 10 notes that 11 said they were with family outside the area. Right?
- A. (Mileti) That, again, was at the time of impact, which could have occurred, theoretically, before, during or after they ever thought to drive a bus, got an activation message. That was when the actual event began impacting the community. The evacuation theoretically could have begun and ended prior to impact.

I am speaking theoretically because I don't recollect what--

- Q. You don't know whether that is the case in any of these accidents, do you?
- A. (Lindell) I think there is very reasonable grounds for believing that what we are saying is the case because we worked our way back

1	through these data. And what you see is that the
2	familywhen it says "with family outside the area,"
3	then that allows them to inject their knowledge that
4	even though they thought during the emergency that
5	they were at risk, that in fact they wound up not
6	being at risk. It is a point you made earlier, that
7	people's perceptions are different from the
8	objective risk. And in this case the objective risk
9	is known with certainty after the fact. But it
10	isn't known during the emergency. That is why we
11	are making this point.
12	MR. McMURRAY: Judge Gleason, I think
13	it is a good time to break.
14	JUDGE GLEASON: We will take a
15	10-minute break.
16	(Brief recess.)
17	JUDGE GLEASON: Let's begin.
18	MR. McMURRAY: At this time I would
19	move Exhibits 11 and 12 into evidence.
20	JUDGE GLEASON: Is there objection?
21	MR. ZAHNLEUTER: No objection.
22	JUDGE GLEASON: Hearing none, the
23	exhibits will be moved into evidence.
24	(Suffolk County Bus Driver
25	Exhibits 11 and 12 were received

1	in evidence.)
2	Q. On page 32 of your testimony, Mr.
3	Kelly, you discuss a call you made to FEMA
4	concerning a disaster response questionnaire.
5	A. (Kelly) Yes, I do.
6	Q. What are these disaster response
7	questionnaires?
8	A. (Kelly) These are a form that is to be
9	used by local officials to answer some basic
10	questions about the emergency response. The local
11	officials have the incentive ofwell, in some cases
12	a requirement to do it if they are receiving federal
13	funds. And by filling out their form they are able
14	to get out of doing some other work that FEMA would
15	normally require.
16	The information covers a variety of
17	topics about what was done during the emergency.
18	Q. You state that you phoned FEMA
19	headquarters to find out whether the DRQ's showed
20	role abandonment to be a significant problem in past
21	emergencies. Is that right?
22	A. (Kelly) That's correct.
23	Q. Who did you talk to at FEMA
24	headquarters?
25	A. (Kelly) I spoke with a Bruce

Hildebrand who is, I believe, in the Office of Civil Defense, and asked him-well, I asked him more about the questionnaire. They were in the process of automating those questionnaires. And he went through those questionnaires that he had already automated. There were no questions specific to role conflict. For instance, they don't say, "Was there role conflict or abandonment?"

The two questions that might have contained information about that were the last two questions, which were generally, "What problems did you encounter in the evacuation?"

So, he scanned through what had been computerized and did not come up with any information about bus drivers not performing their jobs or anyone not performing their jobs.

Subsequent to that phone call, I had spoken to him again and he said that they had lately been receiving a lot more and they hadn't been input into the computer yet. Myself and an associate of mine from the company went over there, spent some time going through them. My associate went through all 300. I went through the first 20 or 25 or so because of another commitment. She went through each of them and reported back to me that she had

1	found nothing in those questions where it might
2	appear to be role abandonment.
3	Q. Can you tell me the earliest disaster
4	reflected in the DRQ's?
5	A. (Kelly) I believe they started this in
6	1986, so it would be from '86 on.
7	Q. This only reflects any emergency since
8	1986?
9	A. (Kelly) That's correct.
10	Q. It wouldn't, for instance, reflect TMI?
11	A. (Kelly) No. TMI was in '79.
12	Q. How many emergencies were reflected in
13	the DRQ's?
14	A. (Kelly) As I said, about 300.
15	Q. So each individual DRQ referred to a
16	different emergency?
17	A. (Kelly) That's correct.
18	Q. You did say that there wasn't a
19	specific question that inquired about role conflict
20	or role abandonment. Right?
21	A. (Kelly) That's correct.
22	Q. On pages 33 and 34, Dr. Mileti,
23	actually going over to 35, you discuss the TMI and
24	you cite 11 or 12 articles, which I think you say on
25	the surface appear to reveal role abandonment by

1	hospital workers. Would you turn to those pages,
2	please?
3	A. (Mileti) Yes, I have all of them.
4	Q. I will turn my question specifically to
5	page 35, if you can turn there.
6	After citing all these articles, you
7	say that they in fact don't reveal role abandonment
8	and your reasoning is that at no time during Three
9	Mile Island was there a medical emergency.
10	Do you see that?
11	A. (Mileti) Yes, I do.
12	Q. Right in the middle of the page.
13	Now, I don't think we disagree, do we,
14	that a lot of medical workers such as doctors,
15	nurses, orderlies and stuff did leave the TMI area
16	during the emergency. Is that right?
17	A. (Mileti) Yes. Many did. I would have
18	to presume that some did to evacuate the area and I
19	have to presume that some did to go to the
20	conference that I reference here in San Francisco.
21	Q. You don't know how many went to the
22	conference in San Francisco, do you?
23	A. (Mileti) No. But it was a major
24	medical conference.

Q. In fact, are you aware of any data that

1	show how many medical personnel actually evacuated
2	as opposed to going to the convention?
3	A. (Mileti) No, I have not. However, it
4	is possible that it potentially could exist, but
5	that would only be if one of the persons who did an
6	evacuation study asked people their profession and
7	where they might have lived, but I don't know that
8	anyone did that.
9	Q. You have done some work at TMI, right,
10	on the TMI accident?
11	A. (Mileti) Yes.
12	Q. But that is not data which you looked
13	up?
14	A. (Mileti) No. I was gathering data on
15	the incidence of post-disaster stress on the public.
16	Q. And that is also not data that you
17	tried to get from other sources. Right?
18	A. (Mileti) No. I think it is safe to
19	presume that many of them evacuated.
20	Q. I would like to address your conclusion
21	that at no time during Three Mile Island was there a
22	medical emergency. I take it that the basis for
23	your statement is that, in fact, there were no
24	physical injuries that you know of that occurred
25	there. Is that right?

1	A. (Mileti) That is my impression of what
2	medical people have said about the event.
3	Q. That is the basis for your saying there
4	was no medical emergency. Is that correct?
5	A. (Mileti) That's correct, yes.
6	Q. You are aware, aren't you, that
7	hospitals in the area reduced their populations at
8	the time of the amergency?
9	A. (Mileti) Yes. And I think some of
10	them even prepared to evacuate, if not did evacuate
11	the hospitals.
12	Q. You are also aware, aren't you, that
13	the Hershey Medical Center attempted to set up the
14	Hershey sports arena to receive up to 5,000 people?
15	Is that right?
16	A. (Mileti) Yes. But as I recall, that
17	was set up not in anticipation of potentially 5,000
18	victims but, rather, as a place where people could
19	spend the night. That is, as shelter for people who
20	weren't at home.
21	Q. Isn't it true that part of the reason
22	for setting up that sports arena was to provide
23	potential services, medical services, to people?
24	A. (Mileti) I would have to say yes.
25	And, in fact, they even prepared for potentially

1	decontaminating people who were exposed. But as an
2	indication of how they thought that might have
3	manifested itself in the emergency, I have to say
4	that that aspect of preparedness was a rolled-up
5	garden hose, so they couldn't have been expecting
6	much.
7	Q. Or it could have been they weren't
8	sophisticated enough, right?
9	A. (Mileti) I suspect that is true, but I
10	think the Hershey Medical Center is a place that has
11	good doctors in it.
12	Q. Have you discussed with any medical
13	personnel at TMI whether they thought there was
14	actually a medical emergency?
15	A. (Mileti) I have said I have not.
16	Q. I take it you are defining a medical
17	emergency as not including any preparations that
18	might be made to receive injured or to provide
19	medical care prior to impact?
20	A. (Mileti) I am defining a medical
21	emergency as one in which, in an emergency
22	circumstance, the provision of medical attention was
23	required.
24	Q. So you are not, in your definition,
25	then, including the part of the emergency where

there might be anticipation of injuries?

- A. (Mileti) I wouldn't think that that would be the anticipation of injuries as opposed to actually experiencing them. And as I recollect saying on this issue the last time we talked about it, that there is no information about whether or not medical personnel were on the periphery after having evacuated, for example, waiting to come and volunteer or do work if there were a medical emergency.
- Q. You made a categorical statement that there was no role abandonment because the medical workers didn't know that they had emergency roles. Are you saying now that we don't have the information as to whether they knew they had emergency roles?
- A. (Mileti) No. But it is unfair to say that somebody who was routinely away from work on the weekend--the hospitals went down routinely to a very small portion of their staff on the weekends--to then say they didn't volunteer to come to work because they should have anticipated that there possibly could have been a medical emergency.
- Q. You stated earlier, didn't you, that if an emergency arose, say, at Shoreham--I think you

1	said that bus drivers, even if they hadn't been told
2	they had a role would think that they did have one
3	and go and report. Haven't you said that?
4	A. (Mileti) Absolutely. And the basis
5	for that is there would have been an obvious need,
6	given the normative overlap between what they do,
7	the presumption that there was an evacuation going
8	on, that they might have had the perception that
9	they might be useful in the evacuation since they
10	routinely drive buses. But that would be analogous
11	at TMI were there an actual emergency medically.
12	Q. Are you saying that prior to an
13	emergency no medical workers would think that there
14	was work to be done to perhaps prepare for the
15	eventuality of injuries?
16	A. (Mileti) I am sure that may have
17	occurred to some people. But there wasn't a medical
18	emergency so
19	Q. There wasn't, we know in hindsight, but
20	they didn't know at the time, did they, that there
21	wasn't going to be a medical emergency?
22	A. (Mileti) I'd have to agree with you,
23	particularly since there was such conflicting
24	information at Three Mile Island.

Q. Let's talk about doctors and nurses. I

1	think you would agree with me that there is also
2	some normative overlap there, that they also
3	routinely respond to emergency situations. Isn't
4	that right?
5	A. (Mileti) Well, I presumemost doctors
6	do. I certainly know a couple that don't but
7	Q. We are not talking about plastic
8	surgeons. We are talking about the typical
9	internist or something like that. Wouldn't they
10	typically respond to emergencies?
11	A. (Mileti) Yes, I think so. One could
12	presume emergency room work or medical work, what we
13	might define as emergency work.
14	Q. Before we make the categorical
15	statement that no medical workers thought they had
16	emergency roles, wouldn't it be a good idea to ask
17	the medical workers whether they did think they had
18	emergency roles?
19	A. (Mileti) If we asked the medical
20	workers to reflect back on some point in history and
21	say what were your perceptions about whether or not
22	you thought you had an emergency role, that would
23	produce interview data on their perceptions. That
24	is oper-one certainly could do that.

Q. You don't know whether anybody has done

1	a survey like that to determine whether or not
2	hospital workers did, in fact, believe they had
3	emergency roles, do you?
4	A. (Mileti) I have to say no, but it is
5	possible that that might exist in some of Peter
6	Houts' data, but I dor.'t think so.
7	Q. Did you look at Peter Houts' data for
8	that kind of information before you made this
9	statement?
10	A. (Mileti) No. I made the statement on
11	the basis of the fact that there was no medical
12	emergency. And wherever we find in history or in
13	popular accounts or M.D.'s doing sociologyI have
14	tried to get most of them to promise to not do
15	sociology if I promise to not do medicine, but they
16	keep doing it.
17	It is unfair to say someone abandoned a
18	role if they didn't have a role they were
19	abandoning.
20	Q. You don't even know whether any medical
21	personnel at Three Mile Island agreed that there was
22	not a medical emergency, do you?
23	A. (Mileti) I haven't done interview data
24	on them. I would have to say, because I always do,
25	it is possible that some of them did. I would also

1	have to say I don't know if they were at work in the
2	EPZ or outside the EPZ, having evacuated, or at the
3	conference in San Francisco. It is possible some of
4	them may have thought that there was a medical
5	emergency. In fact, there wasn't one.
6	Q. In fact, to a doctor, the reduction of
7	hospital population because of a shortage of
8	personnel and the setting up of a reception center,
9	things like that could well mean to that doctor
10	there is a medical emergency going on, couldn't it?
11	A. (Mileti) I suppose it is possible, but
12	I have no information about, nor have I ever heard,
13	having read the available data and reports at Three
14	Mile Island, that where the shelter was set up,
15	Hershey Medical Center, that it was understaffed.
16	Q. That is not my point.
17	A. (Mileti) It was a center that was set
18	up.
19	Q. The bottom line is, you don't know
20	whether your use of the term "medical emergency"
21	comports with that term as used by doctors, do you?
22	A. (Mileti) I am not an M.D. My
23	definition of a medical emergency would have been
24	that the public needed to be attended to by doctors

and nurses, whatever that involves.

1	A. (Kelly) Mr. McMurray, I mightI have
2	a point to contribute in you'd like to hear it.
3	Q. You don't sponsor the testimony, but we
4	will take you up on it.
5	A. (Kelly) I have the opportunity to
6	review a number of emergency plans for hospitals and
7	most of those procedurer have notification plans
8	similar to
9	Q. Mr. Kelly, is this on TMI?
10	A. (Kelly) No. On general practices in
11	the hospitals.
12	Q. Then let's not stray from this. Thank
13	you.
14	MR. CHRISTMAN: I object. I would like
15	the witness to finish. This goes to medical
16	emergency, obviously. That is what the question has
17	been about, the last five questions have been about
18	that.
19	JUDGE GLEASON: He controls the course
20	of cross-examination.
21	MR. CHRISTMAN: He cut off my witness
22	in mid-answer. He allowed the answer to go forward
23	and then cut it off.
24	JUDGE GLEASON: He dia 't understand
25	the area which it covered. Now it is clear he

1	doesn't want to hear the testimony. He is within
2	his rights not to have the answer.
3	Q. Dr. Mileti, %et's go down to the end of
4	page 35. There you discuss a publication by the
5	Pennsylvania National Guard. Correct?
6	A. (Mileti) Yes.
7	Q. I guess the bottom line of this excerpt
8	is that there was some trouble mustering
9	Pennsy vania National Guard personnel because they
10	couldn't be contacted because some of them had
11	already left. Is that the thrust of this excerpt?
12	A. (Mileti) Yes, that is indeed the
13	thrust. They were called up by somebody and they
14	had already evacuated.
15	Q. And
16	A. (Mileti) Or they weren't at home.
17	shouldn't say they had evacuated. I presume most of
18	them did.
19	Q. It is your point, sn't it, that that
20	is not role abandonment because they weren't there
21	to receive the notification and therefore they
22	didn't know they had a role and, therefore, ere
	was no abandonment of that role. Right?
	A. (Mileti) In essence, yes. I think it
25	would be unfair to call it role abandonment for them

to have not evacuated without knowing they were being called up. I think it points to the issue that the National Guard may want to consider early notification of potential personnel so that should they ever, themselves, evacuate an area because it seemed reasonable, that the people calling them up might be able to get in touch with them. But I don't think a person in the National Guard should be expected to be home at all times.

- Q. Apparently it is not just they weren't home. It is that they had evacuated. Isn't that correct? It says here it was later learned many personnel had evacuated their families from the area before being notified of possible National Guard participation.
- A. (Mileti) Yes. And again, I think they did that prior to knowing that they would be called upon to respond in an emergency.
- Q. The National Guard often responds to emergencies. Isn't that correct?
- A. (Mileti) Yes. They used to respond to almost all of them, and I think they are being used a little bit less. But in general, yes, they can be called up.
 - Q. Wouldn't it have been reasonable for

National Guardsmen in the vicinity of TMI to think that they might be mobilized at TMI?

reasonable for some of them to think that and it might not be reasonable for others of them to think that, depending upon if their training had given them any instructions along those lines and/or had they ever been mobilized in emergencies before. So, therefore, I think it might be for a seasoned salt to have that occur to them and it might not be reasonable for someone that didn't have experience or instructions along those lines.

Again, that would be inventing a role or anticipating a role rather than shandoning one.

- Q. Nevertheless, though, we don't know that some of the people who evacuated with their families weren't, in fact, as you call them, the old salts who either would have had experience or training to let them infer that they did have a role. Right?
- A. (Mileti) It is possible. But that would have been persons who we were now judging should have anticipated a role, which is different than behaving in response to having been called and then choosing to do something else.

1	Q. Well, you stated earlier that you think
2	bus drivers ought to anticipate that they have a
3	role?
4	A. (Mileti) Yes. And I have explained
5	why.
6	Q. So that it is also reasonable to think
7	that National Guardsmen should have thought that
8	they had a role. Right?
9	A. (Mileti) And it wouldn't even end
10	along that line of reasoning with National
11	Guardsmen. We could say voluntary firemen should
12	have anticipated that they could have had a role.
13	Persons like myself, because I am single, could have
14	anticipated that I might have had a role.
15	Q. Dr. Mileti, you don't consider yourself
16	the same type of emergency worker as a National
17	Guardsman, do you?
18	A. (Mileti) No. Emergency researcher
19	and
20	Q. You are not even as emergency worker.
21	Right?
22	A. (Mileti) In the sense that I might not
23	deliver emergency services.
24	Q. Let's stick with emergency workers,

then.

I take it, then, that if bus drivers in 1 2 the Shoreham area evacuated with their families before they were notified that they were needed, 3 that you would not consider that an example of role abandonment? 5 (Mileti) Well, it depends on the 6 7 circumstances. If someone called them up and they weren't home and they had evacuated and it were at 8 9 10 o'clock at night, for example, and the schools were closed, I wouldn't consider that role 10 abandonment. 11 12 Q. Let's stick with where they are being called to evacuate schools. 13 Now, would that be role abandonment? 14 15 (Mileti) I wouldn't define it as role 16 abandonment if they didn't get notified that they were supposed to go. I think that would be unfair. 17 But you have stated earlier that they 18 19 should infer that they have roles, haven't you? (Mileti) No. I said that it was my 20 21 judgment that most of them would conclude that they had roles and that they would do that upon hearing 22 that schools were being evacuated or that the area 23

was being evacuated, and they had that day driven

school children to the school. It would occur to

24

1	them that they might be needed.
2	Q. Let's say, then, that they evacuated.
3	Nevertheless, would you consider that an example of
4	role abandonment or would you require actual
5	notification for that to be called role abandonment?
6	A. (Mileti) If I were doing a
7	post-emergency audit and they didn't have that as an
8	emergency job and they were not notified that they
9	should drive the evacuation bus to the school and
10	they were not trained, I wouldn't call it role
11	abandonment.
12	However, what I might label it versus
13	what someone else might label it doesn't, in my
14	judgment, change what I think that group of people
15	would do, and you know what that is which is think
16	up the idea and go to the school.
17	Q. But the medical personnel at TMI didn't
18	think up the idea that they might be needed.
19	A. (Mileti) But there wasn't a medical
20	emergency.
21	Q. By your definition. You don't know
22	that by their definition there wasn't a medical
23	emergency.
24	A. (Mileti) It is true I haven't measured
25	the perception of doctors, but I can't imagine how a

rational human being would conclude that doctors would have thought there was a medical emergency at TMI. I can't imagine how a bus driver wouldn't think that they might not be needed to evacuate school children in an area that the whole area was being evacuated and they drove those kids to school that morning. I don't think they are comparable events.

- Q. Do you know at all whether or not a doctor would think that preparations need to be made before the actual impact of a disaster, that he might have to engage in before he could provide medical services?
- A. (Mileti) I don't know. I'd have to say that some possibly could and some possibly couldn't and it would vary by, I would presume, the type of medical emergency.
- Q. So, it could be that a doctor, knowing about the possibility of an emergency, would need to make preparations if he were going to respond appropriately. Correct?
- A. (Mileti) I am really way outside what my area of expertise is. I have to say I would presume it is possible for a doctor to presume many things.

1	Q. Let's move on to the testimony about
2	Chernobyl and go through this briefly.
3	Basically, Dr. Mileti, we can't draw
4	any conclusions, solid conclusions about whether
5	role abandonment did or did not occur at Chernobyl,
6	can we?
7	A. (Mileti) Well, it depends on what you
8	mean by "solid." The evidence that is available, I
9	know, to me as a social scientist in this country i
10	not what I would call hard evidence. It is rather
11	accounts that have come out through the popular
12	press and/or through the anecdotal accounts or
13	stories published by researchers who might have been
14	there that were physicists, et cetera.
15	Q. For instance, you cite an extract here
16	fromactually, from The New York Times, but it
17	cites Pravda as the source as saying 1,100 buses
18	were marshaled to evacuate the area around
19	Chernobyl. Do you see that?
20	A. (Mileti) Yes, I do. And that story
21	was repeated again in The New York Times but Pravda
22	was probably their source of information. I don't
23	know.
24	Q. Do you consider Pravda, the Soviet
25	Party newspaper, to be a reliable source for this

4 1 4		W	in an area and a second	
kind	of	ini	format	ion?

- A. (Mileti) It is in fact the only source we have got. What we were attempting to do here is not present information that we would say was true beyond a shadow of a doubt but, rather, present the information that we had access to with appropriate caveats applied to it. Even if it were sound information, we still have the issue of that being the Soviet Union and a communist society and there are all kinds of reasons why that is a different kind of society than this one.
- Q. On page 37, let's go to question 29.

 Is the point there that the bus drivers could have believed their families were in danger because people in Kiev were advised to keep their windows closed and to wash their fruits and vegetables, but nevertheless they went to drive, so that that is not an example—that is an example where they may have felt their families were in danger but they nevertheless drove?
- A. (Mileti) The point there is just to suggest that there is some information available that the home town from which the published accounts claim the bus drivers came was not free of risk.
 - Q. The area that they evacuated was

1	Pripyat, which is close to Chernobyl. Right?
2	A. (Mileti) Yes.
3	Q. These bus drivers came from Kiev,
4	right.
5	A. (Mileti) As reported in published
6	account.
7	Q. Evacuation of Pripyat was around 36
8	hours after the incident. Right? After it began?
9	A. (Mileti) Yes, as I recollect.
10	Q. Isn't it true that people in Kiev
11	weren't told to keep their windows closed and wash
12	their fruit and whatnot until many days after that?
13	A. (Mileti) I have to say I don't
14	remember that.
15	Q. You don't know the timing, then, for
16	when people in Kiev were advised about the danger?
17	A. (Lindell) No. What we are saying is
1.8	we don't know the timing on whichwithin which they
19	were advised to take those particular protective
20	actions. It is our impression that the information
21	got out fairly quickly. We don't remember exactly
22	when the information got to the people in Kiev as to
23	whenas to the fact that they were at risk.
24	Q. Let me try and crystallize that. You

don't know whether the information about the threat

1	to Kiev came before or after the drivers were asked
2	to drive the buses. Right?
3	A. (Mileti) Can I take a moment to see if
4	I can find that out for you in my documents?
5	Q. How long do you think it would take?
6	A. (Mileti) I have everything in this
7	document that I had reference to underlined so it
8	might not take more than half a minute.
9	Q. Okay.
10	(Pause.)
11	A. (Mileti) Mr. McMurray, given the time
12	line evidence I have in this document, it is so
13	close I can't tell. I can't answer your question.
14	It may be yes, it may be no.
15	Q. On pages 37 and going over to 38, you
16	discuss some radiological emergencies. Do you see
17	those?
18	A. (Mileti) Yes, I do.
19	Q. Did any of these involve the use of bus
20	drivers to evacuate any members of the public?
21	A. (Mileti) To the best of my
22	recollection, none of them involved bus drivers.
23	One incident did involve getting ready to evacuate a
24	town and mobilizing big transportation, things like
25	buses. I don't know if they were buses and getting

ready to do that. I don't know if there were bus drivers in them or if it would be appropriate to call them buses. I mean, you might want to call them truck drivers. But one incident did.

- Q. Which incident was that?
- A. (Mileti) That was the Windscale incident in England in 1957, in which the Constable of Cumberland, which is a town in that area, was notified and the reports that I have been able to read in regard to that claim that he quickly mobilized a motor pool to potentially evacuate people from the factory and construction workers on the site. And that is as close as it comes to me being able to find anything about bus drivers.
- Q. Next paragraph down, you note an account in a book by John G. Fuller called "We Almost Lost Detroit," which discusses the Windscale plant. Apparently this is an account of a scientist who packed his wife and child off. You say, "For obvious reasons, we have reason to doubt even this report." I am not sure why you say "for ohvious reasons."
- A. (Mileti) That, by the way, is the same incident we just talked about. But in the book it says that this one scientist went home and got his

1	wife and kids and took off. But that is all it says
2	about that one scientist. It doesn't say whether or
3	not he had any sort of emergency role to fulfill, et
4	cetera. So, it is hard to judge whether or not that
5	was role abandonment because one doesn't know if he
6	had an emergency role to fulfill. But it does say
7	that one person did that.
8	Q. On page 39 of your testimony you
9	mention three radiological three peace time
10	radiological emergencies, Three Mile Island, Ginna
11	and Chernobyl.
12	At Ginna there was no evacuation of the
13	general public, was there?
14	A. (Mileti) No. But there was an
15	off-site release.
16	Q. But no evacuation of the general
17	public?
18	A. (Mileti) No.
19	Q. And there were no bus drivers involved,
20	right?
21	A. (Mileti) There was no evacuation.
22	I am not, by the way, presenting any of
23	this in reference specifically to bus drivers but
24	just in an attempt to review the scraps of

information that do exist for evidence of role

abandonment of any sort, not just in terms of bus
drivers. Certainly, if there were in the accounts
evidence of bus drivers, I would have put it in the
testimony. A lot of my sources were even anti-nuke
books.

MR. McMURRAY: Judge Gleason, at this

MR. McMURRAY: Judge Gleason, at this time I would like the opportunity to review my notes and I think maybe, maybe prematurely, take a break because I think I am within a half hour or so of being done and I think I can condense it pretty quickly.

JUDGE GLEASON: We will take a 10-minute break.

(Brief recess.)

JUDGE GLEASON: All right, Mr.

McMurray.

MR. McMURRAY: Judge Gleason, before we start with the panel, without having conferred with Mr. Miller, I suggested that we argue the LILCO motion to submit supplemental testimony tomorrow afternoon. I would like to defer it until Friday morning for the following reason. Tomorrow—I am going to be done with these folks today. Tomorrow Mr. Crocker is up and we expect that we are going to need all day with Mr. Crocker. In light of that, we

don't want to take up what could be a lengthy amount of time arguing this motion because Mr. Crocker is only free tomorrow and he is not going to be here on Friday. So we need tomorrow to be able to wrap up with Mr. Crocker.

I would like to propose that we argue the matter first thing Friday morning and then the Board would still be able to hear it, hopofully, maybe after all the proceedings on Friday, which I would guess consist mostly of cross-examination of the other parties and redirect.

JUDGE GLEASON: I see a frown on your face and I don't hear anything.

MR. CHRISTMAN: The cross of Mr.

Crocker by other parties and redirect will have to take place tomorrow in any event because he will be gone Friday. I think all that is left for Friday morning is to argue this motion and to have follow-up and redirect on these three witnesses.

MR. McMURRAY: I guess that is all the more reason, if we have to do cross by the other parties of Mr. Crocker tomorrow and redirect of Mr. Crocker, that is all the more reason why we need all the time tomorrow for our cross and it can't be taken up by this argument. I don't think--

1	JUDGE GLEASON: I guess I am trying to
2	figure out why it should take you all day tomorrow
3	to finish with Mr. Crocker?
4	MR. McMURRAY: Mr. Miller informs me
5	that that is how long it is going to take. Given
6	the fact that there is going to be cross by other
7	parties and redirect, perhaps, by LILCO, that seems
8	to be a pretty full day.
9	JUDGE GLEASON: Let's go on and see how
10	it goes. I don't want to rule on anything now.
11	Let's move along and see where we are by noon
12	tomorrow somewhere.
13	BY MR. McMURRAY:
14	Q. Dr. Mileti, on pages 40 and 41, you
15	describe a study you did which included interviews
16	with families regarding certain earthquake
17	prediction scenarios. Do you see that?
18	A. (Mileti) Yes.
19	Q. And at the top of page 41 you state
20	that "Our study concluded that a scientifically
21	credible earthquake prediction would result in large
22	social and economic costs." Do you see that?
23	A. (Mileti) Yes, I do.
24	Q. Can you explain what you mean by "large
25	social and economic costs"? I guess specifically,

1	what behavior are you referring to there?
2	A. (Mileti) There were many. But, for
3	example, that society in the area for which the
4	earthquake was predicted would begin to absorb the
5	costs of the earthquake that was anticipated prior
6	to its occurring. For example, a slight and then
7	increasing outflux of population, a decrease in the
8	sale of durable goods, a decrease in taxes.
9	I am pausing because it has been a long
10	time since I have done the study. But all the other
11	kinds of associated socio-economic impacts that
12	could be associated with anticipating a disaster.
13	Q. Now, further down in that paragraph you
14	say that Professor Turner, in studying the actual
15	response to an earthquake prediction in Los Angeles
16	County, found that people of Los Angeles County
17	showed few of the perverse effects that are often
18	given as reasons for withholding a soundly based but
19	uncertain earthquake forecast.
20	Do you see that?
21	A. (Mileti) Yes.
22	Q. Do you know what he was referring to
23	when he spoke about perverse effects?
24	A. (Mileti) I have to say I don't know.

Q. Do you know whether he was referring to

spoke of large social and economic costs?

A. (Mileti) I'd have to say I don't know. However, I have had enough conversations and been at enough conversations with Ralph to know that our study projected social disruption from an earthquake prediction and his study did not detect social disruption.

Our study looked at and tried to appraise changes in government, changes in corporations in the private sector, as well as changes in family life. As I recollect, his study focused more on family life. But the bottom line was, even though we may have been, and I am sure did look at different things, and some things that were similar, that he found none of the negative things we portrayed, and we projected that there would be some.

- Q. But you don't know that he was looking for the same things that you were looking for?
- A. (Mileti) But he reached the general conclusion that there were none and we reached the general conclusion that there would be some. I just--
 - Q. I am not sure you are comparing the

same thing when you talk about what he was looking
for and what you were looking for.

A. (Mileti) Changes in society. Included in our study were changes that would occur to individuals. Included in his study were changes that would occur to individuals and families. We projected negative impacts. Observed none. He observed a lot of media attention every time new information about the earthquake prediction was given out in southern California and would detect that it would fall off eventually and then go back up when new stories were released and then fall off. but that no social dislocations or impacts occurred.

So, it indeed may be the case that he had different questions on his questionnaire than we had. But we were studying the same phenomena. It wasn't a social experiment in which we used the same instrument.

- Q. Let's go to page 43. Here you give alternative explanations for the data in Professor Cole's bus driver survey. Isn't that right?
 - A. (Mileti) Yes. I do, with Dr. Lindell?
- Q. That's right. Let me direct this, though, to you, Dr. Mileti. Professor Cole's bus driver survey was conducted in 1982. Isn't that

1	correct?
2	A. (Mileti) As I recollect, I think
3	that's true.
4	Q. You say that one alternative is that
5	the survey questions are assessing the bus driver's
6	attitudes toward the utility company. Do you have
7	any data on what the attitude of the public was
8	towards LILCO in 1982?
9	A. (Mileti) No data in the sense that I
10	did a poll. Data in the sense that I was aware
11	that, from published accounts, that it seems like in
12	general the public on Long Island liked LILCO. But
13	I didn't have it quantified. And even then it
14	seemed like the public on Long Island was against
15	Shoreham.
16	I would consider these hearings and how
17	long they have gone on, in that sense, even data.
18	Q. These hearings, though, didn't begin
19	until very late 1983. Are you certain that you
20	arestrike that.
21	A. (Mileti) Was that a question?
22	Q. No. I am taking the statement that
23	these proceedings didn't begin until very late 1983.
24	Isn't it true that there was no measure of the

public's opposition to LILCO or to Shoreham until

after this bus driver survey was conducted?

A. (Mileti) I don't know of any

A. (Mileti) I don't know of any polls that were taken on Long Island, but I do remember writing testimony even about role conflict in 1982.

Now, maybe it wasn't called testimony. Maybe it was called response to interrogatories or some other kind of way of labeling. But it was definitely words about role conflict and other issues in '82.

But you are right, the hearings didn't begin until '83.

- Q. On page 45 you discuss question 26 of Professor Cole's new firemen survey. Do you see that?
 - A. (Mileti) Yes.
- Q. Isn't it true that Professor Cole draws his conclusions about what firemen would do in an emergency from questions that are stated before question 26?
- A. (Mileti) It may well be. I didn't have time. I have to--I didn't have time to do a detailed review or critique of his poll. In fact, I don't enjoy critiquing Steven's poles. I am glad I didn't have time. So that may well be. This was just looking at it in a few hours and chatting with Mary Jo Leugers, in fact, over the phone when I got

1	done about anything that might come to mind in a
2	quick reading.
3	MR. McMURRAY: Judge Gleason, at this
4	time I have no further questions for this panel with
5	one qualification. I would like to take a look at
6	the article that Dr. Mileti was reviewing. I think
7	it was regarding Chernobyl and, if necessary,
8	tomorrow come back with one or two questions. There
9	may be absolutely no reason to do that. I just want
10	to look at what he was looking at to make sure that
11	he reported the data correctly, and I am sure he
12	did.
13	JUDGE GLEASON: Do you have any
14	objection to that?
15	MR. CHRISTMAN: Why don't we just put
16	the article into the record right now? Tomorrow
17	morning we will make copies.
18	MR. McMURRAY: I would still like to
19	look at it.
20	JUDGE GLEASON: I understand. I just
21	asked if he has any objections.
22	MR. CHRISTMAN: No.
23	MR. McMURRAY: The other thing is,
24	obviously we can't close this because Mr. Crocker is
25	not here. There are a counte of questions on one

1	page, I think it is page 25I am not surethat Mr.
2	Crocker sponsors that I would like to start with
3	tomorrow. That should take only a few minutes and
4	then Mr. Miller will continue. But I have no
5	further questions with those qualifications for this
6	panel.
7	JUDGE GLEASON: Are these gentlemen's
8	presence going to be required with respect to Mr.
9	Crocker's cross-examination?
10	MR. McMURRAY: I guess only if LILCO
11	wants them here. Of course, there is
12	cross-examination by the other parties that has to
13	be done, and redirect.
14	JUDGE GLEASON: All right. We will
15	stand in recess until tomorrow at 9 o'clock.
16	(Time noted: 4:00 p.m.)
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1	CFRTIFICATE
2	
3	This is to certify that the attached proceedings before the
4	United States Nuclear Regulatory Commission in the matter of:
5	Name: LONG ISLAND LIGHTING COMPANY (Shoreham Nuclear Power Station, Unit 1)
7	Docket Number: 50-322-OL-3
8	Place: Washington, D.C.
9	Date: May 18, 1988
.0	were held as herein appears, and that this is the original
1	transcript thereof for the file of the United States Nuclear
2	Regulatory Commission taken stenographically by me and,
.3	thereafter reduced to typewriting by me or under the direction
4	of the court reporting company, and that the transcript is a
5	true and accurate record of the foregoing proceedings.
7	(Signature typed): Debra Stevens
8	Official Reporter
9	Heritage Reporting Corporation
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