OFFICIAL TRANSCRIPT PROCEEDINGS BEFORE

ORIGIN

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DKT/CASE NO. 50-247 SP and 50-286 SP CONSOLIDATED EDISON COMPANY OF NEW YORK (Indian Point Unit 2) - POWER AUTHORITY

	(Indian Forme Onic 2) - POWER AUTHORITY OF
	THE STATE OF NEW YORK (Indian Point Unit 3)
PLACE	White Plains, New York
DATE	March 16, 1983
PAGES	9806 - 10,037

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1 UNITED STATES OF AMERICA 2 NUCLEAR REGULATORY COMMISSION 3 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD - -X : Docket Nos .: 5 In the Matter of: : 6 CONSOLIDATED EDISON COMPANY OF NEW YORK : 50-247 SP (Indian Point Unit 2) : 7 : POWER AUTHORITY OF THE STATE OF NEW YORK : (Indian Point Unit 3) 50-286 SP 8 : : 9 -x Ceremonial Courtroom 10 Westchester County Courthouse 11 111 Grove Street White Plains, N.Y. 12 Weinesiay, March 16, 1983 13 The hearing in the above-entitled matter 14 15 convened, pursuant to notice, at 9:15 a.m. 16 BEFORE: JAMES GLEASON, Chairman 17 Administrative Judge 18 OSCAR H. PARIS Administrative Judge 19 FREDERICK J. SHON 20 Administrative Judge 21 22 23 24 25

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23	JOAN HOLI
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PROCEEDINGS

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JUDGE GLEASON: If we can proceed, please. Prior to commencing with the receipt of testimony this morning, I thought in the light of some of the cross interchanges yesterday it might be helpful -- I hope it will, in any event -- for me to attempt to verbalize again or verbalize even for the first time several matters that appear to be matters of controversy.

10 First of all, there was an interchange 11 involving the exclusion based upon motions filed by the 12 Power Authority and/or the Licensees of certain panel 13 witness testimony. And counsel for the Intervenors felt 14 very strongly, as I can certainly understand, that was 15 affecting a part of their case that they considered. 16 important.

17 We have attempted in the past to have the 18 parties, all the parties, particularly the Intervenors, 19 who have at one point proposed a substantial number of 20 witnesses, some 170 witnesses, I believe, to try to get 21 those witnesses consolidated and reduced so that the 22 testimony when it was produced for the record was 23 meaningful in term of the responsibilities that the 24 Board has to carry on, making recommendations to the 25 Commission on the six questions that it has propounded

1 to it.

It really is not helpful to have an individual come and say that that person will or will not do something in terms of an emergency. That kind of testimony is not probative, it is not material. It only indicates to the Board what a particular individual would or would not do.

8 In a larger sense, of course, we cannot, 9 although there were some objections -- although we are 10 permitted to receive hearsay if we think there is 11 materiality involved, we are attempting to keep this 12 record as to make it as complete and as responsive to 13 our needs as is possible, and it is in that light, of 14 course, we cannot rule out applying the rules of 15 procedure to the various motions.

16 This is not, as has been said several times 17 before, this is not a legislative type of hearing; it is 18 a judicial hearing. I think that the special -- or the 19 alternate Board member who was appointed also referred 20 to this fact of the cumulative type of testimony that 21 was being propounded by Intervenors in terms of panel or 22 community-type panel witnesses, and made a strong 23 recommendation that the Intervenors attempt to try to 24 put on the best of their witnesses and to make their 25 testimony as strong; and that he found, without any

reference to this Board, that a great deal of the testimony was cumulative and immaterial, and in fact recommended, which in effect we were attempting to carry out yesterday, that if this was not accomplished then of course the only alternative that was left was to consider motions to strike.

7 Now, this is not to say -- having said this, 8 this is not to imply that we think the testimony of an individual is unimportant. We think every person's view 9 10 of matters affecting them has an importance. But we are incosel with the responsibility to make some, what we 11 feel are very serious, recommendations, to carry out a 12 13 very serious responsibility, and we can only do this by attempting to the best of our ability to apply these 14 rules equally, whether they apply against the 15 16 Intervenors or against the Licensees.

17 And we will continue to attempt to do so. AS we go on, there may be occasions that there will be some 18 culings with respect to some testimony that will appear 19 20 inconsistent with other rulings, in connection with motions made, and I think some of those may come up 21 today. And if that occurs it will only be because --22 23 and we will point it out at the time -- that the Board 24 considers that, even though that testimony may be based 25 on hearsay or it may be speculative, we think it is the

1 kind of testimony that should be in the record because
2 the Board wants to consider it, depending upon the
3 persons who are giving it, what their function is, and
4 what their role is.

5 So we do not view that as an inconsistency,6 although you might and we can understand it if you do.

7 The second area that I would like to make some
8 comments on, that there was also some controversy, is
9 with respect to the order of the Board that
10 cross-examination will be only permitted if it is
11 adversarial in content. I think that all parties
12 recognize that this is a complex case. There are many,
13 many parties involved.

I think all parties recognize that under the rules and regulations, that the Board has a responsibility to regulate, to control the process of this hearing. It has the authority to eliminate cumulative testimony, repetitive testimony, and that duty becomes a higher duty when we have two things involved, both of which we have involved in this case: First of all, the element of complexity, that it is a complex case with many parties involved; and secondly, that we have a time schedule to adhere to. Now, in that light, there is nothing wrong and

25 I think everything right with restricting

1 cross-examination to cross-examination that is
2 adversarial in nature. As we have gone through other
3 contentions or other questions in the past, I regret
4 that this ruling was not put in at that time originally,
5 simply because we have found that much of what we could
6 call or I would term sympathetic cross-examination,
7 which is referred to in some of the trade as sweetheart
8 type of examination, is merely direct or redirect
9 examination in disguise.

Now, the power to do this stems in my opinion
from the power of consolidation, the power of parties.
It stems from the regulations to control the conduct of
this proceeding, and that is the basis for our sending
out that kind of a restriction on this proceeding.

15 The question has been asked, how would I 16 define something that is adversarial in nature. I 17 cannot define that because I am not sitting where you're 18 sitting. That is up to you to define, and it is up to 19 me to rule as to whether it is adversarial in nature.

20 With respect to the representative of the New 21 York City Council, even though the witness -- we do not 22 consider the witnesses adversaries in the context, the 23 questions have generally talked about extension of 24 testimony. In connection with keeping it related to 25 what is on direct that involved New York City, we will

generally permit, because we recognize that as your role
 in being here. But other questions just remedying
 things that could be remedied on redirect we will not
 permit.

5 So I hope that perhaps this rather lengthy 6 explanation will make for a little bit more harmonious 7 attitude in the conduct of this proceeding, and I wanted 8 to put these views on the record as best as I could.

9 All right, if we could proceed with the10 testimony.

MS. POTFERFIELD: Yes, Judge Gleason. Excuse
 me.

MS. FLEISHER: Excuse me, Your Honor. I would
14 like to ask if we could have a schedule for next week so
15 that we could start preparing. We don't know what date
16 what witnesses will be on as yet.

JUDGE GLEASON: Well, you have received a telex that gives the days that have been set aside for witness parties. There is still an effort going on trying to arrange some additional time, if it is reasonable, for Rockland County, which we have not accomplished up to this point.

I can't give you any more than I have, and we have requested the witness list to be there. The Intervenors have provided us with a list of witnesses,

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and that is going to take us over the next three or four
 days. And that is about as well as I can accommodate
 you at this time.

4 MS. FLEISHER: I am thinking of the witnesses
5 for the Licensees and for the State.

6 MR. CZAJA: I would say generally, Judge, 7 we're going to put on the onsite panels first. There 8 will be one for the Power Authority and one for Con Ed, 9 and then offsite panels. There are two panels at this 10 time I anticipate.

11 JUDGE GLEASON: And that is a jointly 12 sponsored panel?

13 IR. CZAJA: There's two jointly sponsored
14 panels, one the Parsons Brinkerhof panel and the other
15 the Dr. Dynes-Dr. Lecker panel, and I will anticipate
16 they will come on in that order.

17 JUDGE GLEASON: Does the Staff want to respond18 at this point?

MR. HASSELL: The Staff intends to put on a
20 panel consisting of Sears and Schwartz, and it is
21 considering calling back Dr. Urbanek for some limited
22 cross.

23 JUDGE GLEASON: I guess that is about as good24 as we can io.

25

MS. FLEISHER: That is a help, thank you.

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MS. POTTERFIELD: Judge Gleason, the Intervenors' objection to yesterday's rulings by the Board is that the Board has erred in ruling that the testimony of individual witnesses about their response to emergency is immaterial; secondly, that the Board has erred in ruling, one, that individual witnesses' response in terms of their testimony is immaterial, and yet two or more individuals who testified that their response would be the same is cumulative.

We find that puts us in a position making it impossible for us to rebut and refute the testimony to be presented by the Licensees and the Staff regarding their experts' opinion of how these same people will tespond.

JUDGE GLEASON: I understand that, Ms. Potterfield. As I pointed out yesterday, you have the rame rights under the rules of procedure that the Licensees have, and I would expect that you would use them.

20 MS. POTTERFIELD: Yes, Judge. And I feel 21 ethically constrained to put on the record that I had an 22 ex parte communication with you yesterday in which you 23 warned me not to make that objection again in the same 24 terms today or ever again on the record as I did 25 yesterday.

1 JUDGE GLEASON: I don't mind that being put on 2 the record, but I would object to your characterization 3 of it. I took you aside yesterday simply because I was 4 disturbed by the tenor of the comments that were made, 5 and what I indicated to you ex parte -- if you will, we 6 can put on the record -- is that I thought you were 7 challenging the integrity of this Board with your 8 comments, and that I would not condone that kind of a 9 handling of comments by counsel before us, and if it 10 continued to happen again we would have to take some 11 action, which I would intend to do. 12 MS. POTTERFIELD: We would call to the stand 13 Supervisor Wishnie and Chief Goldfarb. 14 Whereupon, RICHARD WISHNIE 15 16 RONALD GOLDFARB, 17 called as a witness by counsel for Intervenor NYPIRG, having first been duly sworn by the Chairman, was 18 examined and testified as follows: 19 DIRECT EXAMINATION 20 BY MS. POTTERFIELD: 21 Supervisor Wishnie, would you state your name 22 0 23 and address for the record, please. A (WITNESS WISHNIE) My name is Richard 24 25 Wishnie. I live at 95 Apple Lane, Briarcliff Manor, New

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1 York.

2 Q Chief Goldfarb, will you state your name and 3 adiress.

A (WITNESS GOLDFARB) Yes. My name is Ronald
5 Goldfarb, Chief of Police, Village of Ossining, 63
6 Watson Avenue, Ossining, New York.

7 Q Supervisor Wishnie, do you have before you the
8 testimony that you wish to submit before the Atomic
9 Safety and Licensing Board?

10 A (WITNESS WISHNIE) Yes, I do.

11 Q Do you have any additions or corrections to12 that testimony?

13 A (WITNESS WISHNIE) Not at this time.
14 Q Is it true and correct to the best of your
15 knowledge and belief?

16 A (WITNESS WISHNIE) Yes, it is.

17 MS. POTTERFIELD: I move the admission of
18 Supervisor Wishnie's testimony into evidence as if
19 read.

20 JUDGE GLEASON: Is there objection? 21 (No response.)

JUDGE GLEASON: Hearing none, the testimony of the witness will be received into evidence and bound into the record as if read.

25 (The issument referred to, the prepared

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		JI	Supervisor	wishnie,	received	11	evidence,
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My name is Richard Wishnie and I am the Supervisor of the Town of Ossining. The Town of Ossining has been and will continue to be cooperative in planning for an emergency at Indian Point. But we are concerned about our ability to respond adequately even in the case of a partial evacuation. We have a small police department in the Town and lack equipment for communicating with other responsible officials in the event of multi-community activity. Our police force has received a two hour crash course in which they learned the definition of radiation and how to read a dosimeter. The dosimeters which we were given for the March 3 drill do not properly register low level exposure to radiation. We do not have any protective gear for our police officers and emergency workers. We have requested more training and equipment, but we do not know how money for such training and equipment will be provided. If the proper equipment exists, we do not know where it is or how it will be acquired in an emergency.

Our police force will do a good job with what they have, but the point is that it is above and beyond the capacity of our department to respond to the kind of emergency contemplated by the radiological emergency response plan. Our entire on duty police staff gets tied up when a one-car accident occurs. Cars frequently break down on route 9A, which is very hilly and has no pull-off lane. If the roads are crowded with evacuation traffic, emergency equipment will have difficulty reaching a stalled vehicle. The complete back-up which would be caused by one stalled vehicle heading out of the 10 mile area on 9A will hamper evacuation efforts, causing severe concern by motorists and a breakdown in the system.

The March 3 drill was taken seriously by my office and by the Town police. Lt. Lloyd Tompkins did an excellent job preparing the local officers for their roles in the drill. We were notified by the County hot line to set up a roadblock at the intersection of Pinesbridge Rd. and Brookside Lane. When Chief Joynes called to verify this directive, he was told by County personnel that they were unfamiliar with this order, but it should be carried out. Two policemen were dispatched to the location, but there was confusion as to which way to direct traffic. According to the emergency plan, this location was to be staffed in case of an evacuation of Ossining. According to the NRC scenario, the Yorktown ERPA should have been evacuated. We were using a radio communication system which had been loaned to us for the drill and which has since been returned.

I would like to make two points about our participation in the drill: (1) Even with the most favorable conditions for communication, the men on the line were inadequately informed as to their duty. The front line workers will be subject to severe stress and <u>must</u> be very well informed on what they are supposed to be doing. We do not at present have a communication system adequate to the task. (2) We were not requested to make a report on our participation in the drill, therefore our experience will not be evaluated and considered in plans for the next drill, if any. In addition to my responsibilities as Town Supervisor, I am also Chairman of the Ossining Red Cross Disaster Team. My experience indicates that the Red Cross in Westchester cannot staff and supply the reception centers without aid from outside New York. At present there are no supplies such as food, water, blankets, or medicines at the reception centers. The civil defense supplies which were stocked in emergency shelters during the 1950's and '60's have been removed and destroyed as outdated.

There are not enough disaster workers within the 10 mile area to handle the job in question; therefore people would have to be brought in from outside the area. The question arises: Who is going to protect the areas from which the emergency workers come as these areas will be receiving thousands of evacuees? The emergency workers will require relief; where will this manpower be supplied from?

Although the Ossining Town Board has not taken an official position on the emergency plan, some members have expressed concern and reservation about the plan. The issue of the availability of busses and drivers to evacuate those that cannot provide their own transportation, including the possibility of school children, is amongst this concern.

We have heard experts on both sides of this issue. Many express their opinion about the problems with Indian Point and the imminent danger the plant poses to the surrounding counties. On the other hand those who built and operate the plant assure us of its safety. Quite frankly we don't know who to believe.

If there is a possibility of an accident at Indian Point, and if it ever came to the point of an evacuation, our community would be severly put to the test, as we are not properly trained or equipped to do the job required.

and S. Wishine

Richard G. Wishnie Supervisor

June 2, 1982

1 BY MS. POTTERFIELD: (Resuming) Q Chief Goldfarb, do you have before you the 2 3 testimony you wish to submit before the Atomic Safety 4 and Licensing Board? 5 A (WITNESS GOLDFARB) Yes, I do. 6 Q Do you have any additions or corrections to 7 that testimony? 8 A (WITNESS GOLDFARB) No, I have none at this 9 time. 10 Q Is it true and correct to the best of your 11 knowledge and belief? A (WITNESS GOLDFARB) Yes. 12 MS. POTTERFIELD: I move the admission into 13 14 evidence of the testimony of Chief Ronald Goldfarb as if 15 read. JUDGE GLEASON: Is there objection? 16 17 (No response.) JUDGE GLEASON: Hearing none, the testimony of 18 19 the witness will be received into evidence and bound 20 into the record as if read. 21 (The document referred to, the prepared 22 testimony of Chief Goldfarb, received in evidence, 23 follows:) 24 25

TESTIMONY OF RONALD GOLDFARB

CHIEF OF POLICE

INSERT#:

VIELAGE OF

1968 Patrolman 1973 - Promoted to Sgt.

- 1975 Resigned to take position in Indianapolis, Indiana as Chief of Airport Authority Police
- 1977 Returned to Village of Ossining and promoted to Provisional Chief 1978 - Promoted to Chief of Police

If we had to evacuate our area as the result of a major accident at the Indian Point Power Stations, we would have many problems. Mass evacuation is a 21st Century problem -- we have the means of the 19th Century to handle such an emergency. The evacuation plan only "presupposes" that local governments have the manpower and backup (i.e., buses, Con Rail, etc.)

we have radio communication with Croton, North Tarrytown, Briarcliff and Ossining Town on low band radio frequency. This itself is ineffective in emergency conditions since it is affected by atmosphere conditions, i.e., lightning. Also, patrol car radios have a short communication range on 1 w band.

If the sirens fail, as was the case in the March 3 drill, the officers must use loud speakers on cars to notify the public. This is ineffective since, on a normal day, only 5 to 6 officers are employed (the night shift a few more). Not nearly enough to handle the entire village.

Telephone lines would be completely jammed. (Experience has proved that to be the case just on "snow days".) During the March 3 drill were were given a portable radio on the County frequency. The County hotline was used to monitor operations by the

Department of Public Safety. When our telephone lines went out of service on that day, we had no 2-way communication with the County for an extended time during the drill. This could have happened during an actual emergency.

-2-

If a mass evacuation is needed, the plan "presupposes" 12 to 14 hours available to us. The reaction to this type of emergency by the officers and their families is unknown. There is no mention in the plan of feeding and housing the officers involved. There are 41 people on the force. (The County said they could go to a hotel. Where?) If our headquarters is abandoned, there is no provision for any other type of command post. There is no provision for decontaminating department vehicles, other than Valhalla, which is too far removed from the 10-mile radius.

The March 3 drill went very poorly. An imaginary wind direction was used during the drill. It would have been better to use the actual wind direction for that given day.

There was very little coordination between police, fire and emergency departments. The fire department took no part in the arill. Since Ossining has a purely volunteer fire department, it was difficult to get people in the daytime. We had a few extra officers during the drill; but, we were "on our own". Not too many officers were called in for the drill, since overtime pay was required.

Prior to the March 3 drill, there were training sessions for the officers. They were taught to read docimeters, which were of World War II vintage. These docimeters only measure high degrees of radiation; consequently, by the time they register, it is too late. Over-exposure is the result. We were given 2 Geiger counters, but no instructions on now to use them. The officers were given the same booklet Indian Point workers get regarding what to do in case of accident. The officers were instructed to use rain coats, boots, hats and docimeters in the contaminated area. This leaves them totally unprotected, since you can't see radiation.

Indian Point was built in the wrong area -- a too densely populated area. It also stands on the Ramapo Fault. We need extraordinary means to evacuate -- an extra 60 people to implement the plan who could direct traffic and notify the public. We are dealing with the unknown, and people fear the unknown.

A mass evacuation would cause mass panic for the schools and nursing homes using private buses. There are also some new daycare centers not mentioned in the plan.

There would definitely be big problems of the possibility of snow (and even heavy rains on the Saw Mill and Bronx River Parkways).

The magnitude of a mass evacuation is far beyond local control and calls for tremendous coordination. The chain of command is also confusing in such an emergency. Who will make the final determination to evacuate?

There is always the possibility of persons suffering heart attacks, etc., during such an emergency.

To date, there are no evacuation plans for the Ossining Correctional Facility, which holds 2,200 inmates.

There are no instructions concerning the deaf. We don't know the locations of people who sent in the cards from the brochure.

There is no extra funding for a mass evacuation. The equipment available is outdated. We have been waiting for a high

- 3-

band radio frequency system since 1973 (i.e., Mobile District Radio Program). This would help, but we don't have it now.

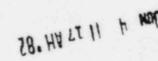
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A major evacuation route would be Rts. 9 and 9A. Since Rt. 9 in Ossining is under construction and will be for some time, traffic control would be virtually impossible under emergency conditions. An alternative would be to see the U.S. military get involved with helicopters, etc. In the extreme, the military might work.

The evacuation plan, as it stands now, is very technical; and, it assumes that the job can be done. Preparations for the March 3 drill were rushed by everyone concerned to meet federal licencing guidelines. We only had a month's notice and very little preparation. In no way did it reassure us. I feel less prepared now because the drill went so badly.

Ronald Goldfarb Chief of Police Village of Ossining

Dele:



MS. POTTERFIELD: The witnesses are available
 for cross-examination.

3 JUDGE GLEASON: Gentlemen? 4 CROSS-EXAMINATION ON BEHALF OF LICENSEE CONSOLIDATED EDISON 5 6 BY MR. BRANDENBURG: 7 Mr. Wishnie, I see that you are the Supervisor 0 8 of the Town of Ossining, and Chief Goldfarb is the chief 9 of the Village of Ossining. Can you put the distinction 10 between the two in some context for us? Which is larger 11 than the other, approximately, square miles, something 12 of that sort? A (WITNESS WISHNIE) Yes. The Town of Ossining 13 14 encompasses three parts: the unincorporated area of the 15 Town of Ossining; the Village of Ossining; and the

16 Village of Briarcliff Manor. The total population is 17 approximately 30,000. About 20,000 of the people live 18 in the Village of Ossining and the balance, about 7,000 19 in Briarcliff and the balance in the unincorporated area 20 of the town.

21 Each, by the way, has its own police22 department.

23 Q Now, does the Town have its own police
24 department, or each of the three villages have their
25 police department?

A (WITNESS WISHNIE) The Town has their own
 2 police department and each village has its own police
 3 department.

Q Now, what is the division of labor, if you will, between the town police and the village police in areas that are both town and village, if you will?

7 A (WITNESS WISHNIE) The responsibilities for 8 the local police departments are confined under most 9 conditions to the boundar lines of their municipality, 10 of their individual municipality.

11 Q So there are areas within the town, then, that 12 are not similarly part of the three villages that 13 comprise it?

A (WITNESS WISHNIE) To make it possibly a
15 little clearer, the Village of Ossining police
16 department takes care of their jurisdictional
17 responsibilities and each of the others do the same. On
18 occasion there is overlap, obviously, during certain
19 types of incidents.

20 Q Now, Mr. Wishnie, your testimony was prepared 21 in June of 1982 and contains some assumptions about what 22 would be required in the way of equipment in the event 23 of a radiological emergency. You make reference to 24 protective equipment and so forth.

25 I would like to ask you if you are familiar

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1 with the regulations of the Nuclear Regulatory

2 Commission relating to radiological emergency planning?

3 A (WITNESS WISHNIE) I am not an expert in that
4 area at all, no, sir.

5 Q Chief Goldfarb, I would like to ask you the 6 same question. That is, are you familiar with the 7 regulations and requirements of the Nuclear Regulatory 8 Commission as they relate to radiological emergency 9 planning?

10 A (WITNESS GOLDFARB) No, I'm not totally
 11 familiar with it, no.

12 Q Now, gentlemen, would your answer be 13 substantially the same if I were to ask you about your 14 familiarity with a document entitled NUREG-0654, which 15 is entitled "Criteria for Preparation and Evaluation of 16 Radiological Emergency Response Plans and Preparedness 17 in Support of Nuclear Power Plants"? And before you 18 answer I would like to show you a copy of that.

19 (Document handed to witnesses.)

20 Q Are either of you gentlemen familiar with that 21 document?

A (WITNESS WISHNIE) I am certainly not.
A (WITNESS GOLDFARE) No, sir.
Q Now, Mr. Wishnie, turning to your testimony at
the first full paragraph, you do make reference to

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1 protective gear and so forth, and I was wondering -- you 2 are obviously assuming that some sort of protective 3 clothing or something would be required for town 4 personnel.

5 Has someone told you that the Nuclear 6 Regulatory Commission guidance suggests protective 7 clothing for emergency response workers, or did you just 8 assume that that would be a prudent thing?

9 A (WITNESS WISHNIE) The response, the statement 10 within my testimony, is based on the educational process 11 that we as local officials have been exposed to. We 12 have attended classes that were run, and during those 13 classes information which suggested that there would be 14 two types of reading devices applied to the body, as 15 well as the potential of wearing rain gear during an 16 emergency was in fact told to us.

17 So I based my statement on what we have, based 18 upon what we were told we were required to have.

19 Q Now, do the Town of Ossining police officers20 have rain gear that they wear?

21 A (WITNESS WISHNIE) They have been issued rain 22 gear. Unfortunately, that is not carried with them at 23 all times.

24 Q But it is stored at the station house or 25 something of that sort, I presume?

A (WITNESS WISHNIE) This is a unique situation and I hope you will understand this, but the Town of Ossining police department does not have a locker room facility. The officers who work for the Town keep their materials like their rain gear at their homes, at their residence.

7 Q Just out of curiosity, what would happen if 8 the officer comes to work on the afternoon shift at noon 9 and the sky is bright and, lo and behold, at 4:00 10 o'clock it is raining cats and dogs? What happens in 11 that situation on a normal day?

A (WITNESS WISHNIE) In that circumstance what would happen is that the officer would either go to his home -- and most, if not all, of our officers live within the confines of the community or nearby -- or they would get wet.

17 Q We have heard a lot of testimony here over the 18 past several days about the importance of, in emergency 19 situations, of uniting parents with the other family 20 members, or at least people who would be called upon to 21 respond in terms of being emergency workers and 22 policemen and the like having some need to see to the 23 safety of their family members before they went about 24 performing their emergency response duties.

25 I think you just stated that most of the Town

of Ossining people live nearby. So may I correctly
presume that on occasion, whether it would be to go home
and get rain gear on a wet day or what have you, that
there are occasions where officers of the Town of
Ossining go to their homes to pick up tarpaulins or
things of that sort, rain gear, if they live nearby,
that you would not expect that that would be a difficult
task?

9 A (WITNESS WISHNIE) Based upon previous 10 experience, talking about rain, I don't think that is a 11 problem at all. We have never had an incident of the 12 type we are discussing today at its worst case. I don't 13 know what the reaction of an individual would be under 14 those circumstances. I honestly don't know.

15 Q You anticipate my next question, which was 16 whether or not the Town of Ossining has ever been called 17 upon to conduct a partial or even an entire evacuation 18 of the town, a substantial number of people, due to 19 let's say any type of circumstance, chemical spill, 20 flood, fire, things of that sort? Does the Town have 21 experience in that regard?

A (WITNESS WISHNIE) Probably the largest experience that we have ever had that I am aware of during my involvement has been more or less of a single residence fire, where you would be evacuating people.

With regard to the type of incident you are discussing,
 to the best of my knowledge we have never had, we have
 never been tested in that role.

Q So to your knowledge there have been no sevacuations of more than a single structure, shall we say, within your town?

7 A (WITNESS WISHNIE) Within the jurisdiction, 8 which includes the other two villages, we did have some 9 flooding a few years ago which required some concern for 10 more than one structure, but certainly not on the scale 11 we're talking about, no.

12 Q Chief Goldfarb, has there been what you would 13 characterize as an evacuation of a substantial number of 14 people from the Village of Ossining to your knowledge? 15 A (WITNESS GOLDFARB) Not to my knowledge, no. 16 Q Now, Mr. Wishnie, with respect to the single 17 structure evacuation or the flooding incident that you 18 referred to a moment ago, did the town's communi ations

19 system function adequately for the purposes of that 20 activity?

21 A (WITNESS WISHNIE) Yes, sir.

22 Q Perhaps you could characterize for us your 23 general level of satisfaction with the communications 24 system for police personnel within the town of 25 Ossining. Are you satisfied with the capability of your

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1 equipment?

A (WITNESS WISHNIE) No, sir, I'm not. We in the Town of Ossining since 1974 or '75 have been attempting to bring into our community the MRD system, the mobile radio district system. Other communities in Westchester County and across the state had taken early opportunity to acquire the funding necessary to put these systems into place.

9 In our particular area, in our district we 10 were not fortunate enough to acquire the funds, although 11 we have persistently and consistently attempted to get 12 those funds. We do not have a method of communicating 13 with our neighbors within the ten-mile range, for 14 instance, of our community.

We certainly do not have a way of talking to the county police or the state police on our regular radio system, so that has been a concerned. It has not been raised just for these NRC hearings, certainly, but it has been a long-term problem with us, and I think it just becomes more important when we talk about moving lots of people and lots of communication.

22 Q Does the absence of the MRD system you refer 23 to hamper in your judgment the day to day operations of 24 the Town of Ossining police personnel?

25 A (WIINESS WISHNIE) I would think in most cases

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that it would not be a factor. It becomes a factor during various police activities where inter-municipal cooperation is not only necessary but required, in a chase or information, police information -- as you know, you are familiar now, I'm sure, with the area and the road system, what occurs in our neighboring municipality could easily enter into our own jurisdiction. So that this communication is extremely important.

9 And like I say, most times it is not a10 problem, but it has been a problem in the past.

11 Q You mentioned a chase. If a policeman from 12 the Town of Ossining were pursuing an armei felon across 13 jurisdictional boundaries that included the Town of 14 Ossining, would that person, that police officer, be 15 hampered because of the quality of the communications 16 equipment available to him.

17 A (WITNESS WISHNIE) I believe the answer should 18 be yes, and I would suggest to you that, depending upon 19 the direction of travel, we are hooked up with Croton, 20 Briarcliff, Ossining Village and Town, use the same 21 communications, North Tarrytown. If the person headed 22 in the direction of Newcastle, we cannot communicate 23 with Newcastle other than by telephone.

24 So this is a serious problem with regard to 25 car to car communication or car to base or base to

1 base.

2 Q Now, what is the current status of your 3 efforts to obtain the MRD system for the Town of 4 Ossining?

5 A (WITNESS WISHNIE) Well, the most recent 6 communication has been with our state officials. We 7 have indicated and written letters to them appealing to 8 them to press for the legislation that would supply the 9 sum, approximately \$800,000 in 1982 dollars. Probably 10 it's more like a million dollars today, for just the 11 Westchester County system, to bring just Westchester 12 County up to date as far as MRD is concerned.

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Q Chief Goldfarb, what can you tell us about the alequacy of your communications equipment to the extent that your situation differs from that of the town of Ossening such as Mr. Wishnie has just referred to? And I am not asking you to repeat what he said, but if you have a different situation than he does.

7 A (WITNESS GOLDFARB) It is basically the same
8 one, and the same rate of frequency.

9 Q Mr. Wishnie: At the second page of your 10 testimony, you state that in your judgment there are not 11 enough disaster workers within a ten-mile area to handle 12 the job in question, and then you go on to say people 13 would be brought in that would come in from outside the 14 area.

15 What underlying assumptions did you make when 16 you wrote that statement about the number of people that 17 were being involved, or was that just saying in a 18 general way that of course people would be coming in 19 from outside the affected area to give support? I was 20 unclear of that.

A (WITNESS WISHNIE) I am sorry. I will try to make it a little bit more understandable. My responsibilities over the past ten years or so have involved other activities other than my supervisor's position. I am the local deputy director for emergency

services in my community. I am the Red Cross disaster
 chairman for my community, and have held that position
 for several years. And I am also involved in the
 everyday operation, as you understand, with the police
 in my community.

I was in that paragraph where I discuss 6 7 bringing in emergency workers being familiar with the Red Cross operation in Westchester County and having 8 experiences in other incidents involving not just my 9 10 community but other communities, and being personally called upon to both Peakskill and the town of Courtland 11 12 in previous incidents, I am familiar with the fact that there aren't that many people around who have been 13 trained to respond to certain types of emergencies. 14

In my paragraph there I am suggesting that in 15 the worst scenario where everyone would have to be 16 17 evacuated rather than being sheltered or partially sheltered, my feeling is, based upon my knowledge of the 18 road system in my community and the number of people we 19 have available to us at a given time, it is my opinion 20 that other people would be involved in the sheltering 21 program as well as if this was a 12 or 18-hour incident, 22 you would be talking about needing relief for the 23 emergency workers within the ten-mile zone. That would 24 25 require bringing people in to relieve them.

1 By concern is that people being available on 2 the most immediate basis would be from Westchester 3 County, and they in fact would then be leaving their own 4 communities where, if there was a mass evacuation, many 5 of the people would be heading in that direction. That 6 is the reason that I raised that concern.

7 0 Now, sir, you mentioned in your testimony, and you just referred to it in your answer, your involvement 8 in the Ossening Red Cross activities. I would like to 9 10 broaden that a little bit and ask if you have any 11 familiarity with the overall role of the Red Cross envisioned in the Indian Point emergency preparedness 12 plan, and I am talking now not just about arrangements 13 for the town of Ossening, but on a larger scale, the 14 15 general extent to which the Red Cross would be offering support in the event of a radiological emergency. 16

A (WITNESS WISHNIE) I have not participated in 17 18 the planning at the headquarters of the Red Cross here in Westchester County. I have not participated in any 19 meetings with Red Cross officials and members of the 20 utility agencies or anyone else involved in the 21 planning. My knowledge is based on my experiences of 22 the past. My strong feeling is that the Red Cross has 23 24 the best intentions in the world. They would do 25 anything they possibly could to respond in a proper

1 fashion.

If there have been any recent changes with regard to the availability of materials to respond to this type of emergency or the planning or bringing in enough trained personnel, I am not familiar with those plans, and I am not aware of where those people might come from.

8 Q Now, Mr. Wishnie, has anyone at the Red Cross 9 headquarters in Westchester expressed to you, or have 10 you heard of any loubts expressed by someone at Red 11 Cross headquarters about the Red Cross's ability to 12 support reception centers following an evacuation at the 13 Indian Point site?

A (WITNESS WISHNIE) I have not had any personal contact or discussion with any of the officials. I have read in the local press the feelings by the Red Cross that they could in fact respond to the emergency. As I indicated to you before, it certainly would be the intention, and I know that they would do the best job possible under the circumstances.

I have to tell you, though, I have to add to my statement that I am still convinced, and I have not seen anything to change my mind, that within Westchester County we have enough Red Cross trained personnel to handle the sheltering with the expertise of handling the

numbers of people in terms of feeding them, having available to them all of the necessary basic materials. JUDGE PARIS: Excuse me, Mr. Wishnie. Did you say you are not convinced you have that, or you are convinced?

WITNESS WISHNIE: I am not convinced, sir.
BY MR. BRANDENBURG: (Resuming)

8 Now, Chief Goldfarb, turning to your testimony 0 9 for the moment, you comment on Page 2 about how you 10 viewed the success of the March 3rd, 1982, emergency planning drill, and concentrating just on that drill, 11 12 that is, the March 3ri, 1982, drill, I would like to ask 13 you if you have at any time reviewed the post-exercise 14 assessment document that was prepared by the Federal Emergency Management Agency that critiqued that drill. 15

A (WITNESS GOLDFARB) No, I did not.

MR. BRANDENBURG: Mr. Chairman, I have no
18 further questions of this panel. I would surrender
19 whatever remaining time I have to the Power Authority.

20 MR. CZAJA: I have a few questions.

21 BY MR. CZAJA:

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22 Q Mr. Wishnie, on the first page of your 23 testimony, the last sentence in the second full 24 paragraph, you discuss the possibility of a "complete 25 backup" on 9A. I take it this is based upon your

1 experience in the past in which a stalled vehicle has 2 caused a backup on 9A. Is that correct?

A (WITNESS WISHNIE) That is correct, sir.
Q And I take it that those stalled vehicles in
the past have been cleared and traffic resumed?
A (WITNESS WISHNIE) That is correct.

7 Q On the average, how long does that process 8 take?

9 A (WITNESS WISHNIE) It would all depend, of 10 course, on what hour of the day was involved. If it happened this morning during the rush hour, as you may 11 12 or may not be aware of, there is construction presently going on on Route 9A. When we have one car break down 13 14 now during the rush hour, there is no way, due to the 15 median barrier on the road, to get to the vehicle that 16 is broken iown, so that, of course, under those circumstances, it would take a lot longer. 17

I guess what I am indicating to you is that depending upon the amount of traffic would certainly play a role in how long it would take to remove the vehicle involvel.

22 Q Supervisor, is it possible for you to put a 23 range on those times, say, from optimal conditions to 24 the rush hour condition?

25 A (WITNESS WISHNIE) The status of the

situation, if I could give you a scenario, would be that
 a vehicle would break down. Someone would have to
 notify the police, or the police would have had to have
 been cruising by and happen to see it. There is a
 police call box at the juncture of Route 134 and 9A.

6 If there was a good citizen who was kind 7 enough to stop and call in, an officer would be notified 8 of the incident, respond to that area, and then call for 9 a tow truck. We in the town of Ossening have only a 10 ten-man police department, including the chief of 11 police. If the officer on duty was involved in some 12 other situation on the other side of town, on another 13 call, that could, of course, increase the amount of 14 time.

15 Under the best circumstances, if the guy was
16 available, within a half-hour the vehicle could be
17 removed.

18 Q Supervisor, just one follow-up question on Mr. 19 Brandenburg's questions about your involvement with the 20 Red Cross. As I understand it, you have generally not 21 been involved in whatever discussions have occurred 22 between the Red Cross officials in overall charge of 23 Westchester County and state and county officials with 24 regard to the radiological plan.

25 A (WITNESS WISHNIE) That is correct.

Q And does that non-participation extend to
 being unaware of whether or not the Red Cross has
 entered into a contract to operate the reception centers
 pursuant to the radiological plan?

5 A (WITNESS WISHNIE) I am not familiar with the 6 contracts, sir, no.

7 Q Chief Goldfarb, if we could turn to your
8 testimony for a moment --

9 A (WITNESS GOLDFARB) Yes.

10 Q -- at the top of Page 3. the runon paragraph, 11 you discuss this problem of protective gear. You state, 12 "The officers were instructed to use raincoats, boots, 13 hats, and iosimeters in the contaminated area. This 14 leaves them totally unprotected, since you can't see 15 radiation."

As I understand Supervisor Wishnie's testimony in response to Mr. Brandenburg's question, the supervisor's impression based upon the courses and training he has received is that rain gear is sufficient protection in the situation of possible radioactive contamination.

22 Do you disagree with that viewpoint? Do you 23 have a separate opinion?

A (WITNESS GOLDFARB) The information that I
25 received from training sessions is that in contamination

areas, that rain gear would not prevent contamination,
 but it would cut down on exposure to radiation.

3 Q Well, do you have an opinion from any source 4 that there is any better type of protective clothing 5 than rain gear?

6 A (WITNESS WISHNIE) There, according to the 7 State Department of Health representatives, there are 8 other types of gear available, but they are cost 9 prohibitive right now for local police departments to 10 obtain.

11 Q Who at the State Health Department has 12 expressed that viewpoint?

A (WITNESS GOLDFARB) I don't know the
gentleman's name. This was at the last training
sessions that the police officers were involved in that
were conducted on basic radiation and radiation
exposure, and in contaminated areas.

18 Q Furning to the second full paragraph on Page
19 3, you state, "A mass evacuation would cause mass panic
20 for the schools and nursing homes using private buses."

In the course of your duties with the village
 police, have you observed situations of mass panic?
 A (WITNESS GOLDFARB) During a mass evacuation

24 or just mass panic?

25 Q Just mass panic situations.

A (WITNESS GOLDFARB) No.

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2 0 Turning to the sentence at the bottom of Page 3 3, "To date, there are no evacuation plans for the 4 Ossening Correction Facility, which holds 2,200 inmates." To your knowledge, does the plan in fact 5 6 provide for sheltering of the inmates at that facility 7 rather than evacuation? A . (WITNESS GOLDFARB) To my knowledge, no. 9 0 In the next paragraph, you state that you do not know the locations of those individuals who sent in 10 the tearoff cards from the emergency planning brochure. 11 12 Have you made any efforts to obtain those cards? 13 A (WITNESS GOLDFARB) No, sir. MR. CZAJA: I have no further questions. 14 JUDGE GLEASON: Any redirect, please? 15 REDIRECT EXAMINATION 16 BY MS. POTTERFIELD: 17 I will direct these questions to both Chief 18 0 19 Goldfarb and Mr. Wishnie. Both of you discussed training programs. I wonder if each of you will tell 20 us, when was the last training session that you had, who 21 conducted it, and what was the subject matter? 22 A (WITNESS GOLDFARB) The last training session 23 was held about five weeks ago, and it was conducted by 24 25 the New York State Health Department for police

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1 officers, and the subject matter was basic knowledge on 2 radiation and radioactivity. 3 Q Chief Goldfarb, you were there at that 4 training session, were you not? 5 A (WITNESS GOLDFARB) That is correct. 6 Did you receive training on the content of the 0 7 Westchester County Radiological Emergency Response Plan? A (WITNESS GOLDFARB) No, we did not. 8 9 Q Have you ever received a copy of the law 10 enforcement section of that plan? 11 A (WITNESS GOLDFARB) Not to my knowledge. 12 Q Here you trained at that time on radiological 13 monitoring? 14 MR. FARRELLY: Your Honor, I am going to 15 object to the question as being beyond the witness's 16 direct testimony, and also beyond the cross 17 examination. If Ms. Potterfield is going to do areas 18 that were not pursued at all on cross --19 JUDGE GLEASON: What was the question? MS. POTTERFIELD: Judge Gleason, both of these 20 21 gentlemen were questioned during cross examination about training and what they knew about the different 22 23 provisions of the plan, and I wanted to go into what 24 training they had in fact had. 25 JUDGE GLEASON: Objection denied.

MS. POTTERFIELD: I am sorry. I have lost my 1 2 place. Could I ask the Court Reporter to read back the 3 last question? 4 (Whereupon, the Reporter read back the last 5 question.) 6 BY MS. POTTERFIELD: (Resuming) 7 Do you inderstand the question? 0 A (WITNESS GOLDFARB) Yes, I understand. We 8 9 were never in that training session. We were not 10 instructed in monitoring radiation. We were just shown 11 dosimeters. We looked at them, and they were taken 12 back. 0 13 When was the training session you had previous 14 to this one? 15 A (WITNESS GOLDFARB) It was just prior to the 16 March of 1982 drill, the year before. Q And at that time were you trained in the areas 17 18 that I just asked you about? A (WITNESS GOLDFARB) No. 19 Q Have you ever been trained in rescue 20 21 evacuation techniques, in medical care? A (WITNESS GOLDFARB) We have been trained in 22 23 not medical care, first aid care. We have been trained 24 in some rescue techniques, and handling mass amounts of 25 people to some extent, as far as crowd control goes, mob

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1 control, not as far as evacuation.

2 Q And did that training occur either in the 3 session that took place five weeks ago or in the session 4 last year?

5 A (WITNESS GOLDFARB) No.

6 Q When iii you get that training?

A (WITNESS GOLDFARB) Our officers -- well,
8 personally, I received that training in 1968. Our
9 officers receive in-service training for that particular
10 purpose, not for the particular purpose of mass
11 evacuation.

12 Q Is this training then on crowd control, does 13 it have to do with the Radiological Emergency Response 14 Plan, or is it generally police training?

15 A (WITNESS GOLDFARB) It is generally police16 training.

17 Q Supervisor Wishnie, you have heard the 18 questions I have asked Chief Goldfarb. Do you have any 19 details to give us about your jurisdiction in answer to 20 those questions?

A (WITNESS WISHNIE) No. The only thing I would state is that the training sessions that I attended last year, I attended one session which was put together rapidly in order to be prepared for the March 2nd irill. That consisted entirely of some basic discussion

about what radioactivity is, how you might want to deal
with it, what equipment you might want to have during an
emergency. It was a short two-hour session. It was
open to emergency officials not only from my community
but from other communities as well.

6 Recent training sessions this year have 7 included all of the members of my police department. 8 All of the members have maie themselves available, and 9 my understanding based upon what has been reported to me 10 by them is that the courses are basically the same. The 11 basic information has been given to them.

12 Q And you mean by that basic information about 13 the nature of radiation or some other type of basic 14 information?

A (WITNESS WISHNIE) The nature of radiation, an explanation of the atom, and what was explained to them was the devices, the TLD's and the dosimeters that they should have on their person, how they can read them, and the card that they should carry to record the information that they read on their dosimeters.

21 Q Does either of you know when the next training 22 session is going to take place?

A (WITNESS WISHNIE) I have no knowledge of that.
A (WITNESS GOLDFARB) I don't, either.
Q Chief Goldfarb, you were questioned on cross

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1 examination about the statement in your direct testimony 2 indicating your belief that there would be panic. Would 3 you tell us the basis for that belief?

A (WITNESS GOLDFARB) Well, the basis has to do with generally handling major -- some major emergencies. The situation when the emergency alerting system went off in the last drill this year, we received many inquiries as to what to do, what the sirens were for, and some inquiries as to should people evacuate.

JUDGE GLEASON: Excuse me. When you say this
11 year, are you referring to the drill just completed?

12 WITNESS GOLDFARB: That is correct. That's 13 right. That is the March 9th of this year drill. The 14 point in this particular testimony submitted before this 15 last drill was that it is my belief that people without 16 the information available would tend to panic rather 17 than to take the necessary steps that they should take.

BY MS. POTTERFIELD: (Resuming)

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Q Is that still your belief today?

20 A (WITNESS GOLDFARB) If -- My belief is that 21 the more uninformed the public is, the more possibility 22 for panic there is.

23 Q The inquiries that you testified you received 24 in response to the sirens, were they inquiries by the 25 telephone, or by mail, or in what way did you receive 1 them?

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A (WITNESS GOLDFARB) By telephone at our
3 switchboard system.

4 A (WITNESS WISHNIE) Excuse me. May I also 5 answer that?

Q Certainly.

7 A (WITNESS WISHNIE) It is also my feeling that 8 although I cannot judge the public's reaction, I 9 certainly can judge the reaction of the emergency 10 personnel that were involved in the March 9 test within 11 the emergency operations and in our own municipality, 12 and one of the things that we were all concerned about 13 was, even though this was a test, there was a tremendous 14 lack of information supplied to us as an emergency 15 operation center, and it would be very difficult for us 16 to give the information to the public that might calm 17 them that we had the situation under control.

We had to call into the White Plains emergency operations center after a period of time wondering why we had not received any information, to find out what the status of the drill was. Was it an on-site emergency at this point? My recommendation to all of those involved with these drills is to please try and keep us informed, even if they have to use the hotline, to let us know what the status is as guickly as

1 possible.

The other problem that we found on the March 9 drill which was similar to the drill the year before was the problem with communicating with the county. The county supplied us with a portable radio last year, as well as this year, and we were unable to communicate with the county over the portable radio. It did not work. It was, I guess, not strong enough to carry the distance that was necessary.

10 Q Have you -- Is there a person within the 11 Federal Emergency Management Agency with whom you 12 communicate about these problems you experience in the 13 drills?

A (WITNESS WISHNIE) The town of Ossening, and I might add, based upon my personal discussion with the supervisors of those communities within the ten-mile radius, we have never been approached by a representative of FEMA. We have never been approached either prior to or right after a inill to ask us what our impressions might be, what our recommendations might be, what our concerns might be.

22 One of the things that we have indicated in 23 our testimony that was submitted to this court was the 24 fact that after the last test, no one contacted our 25 community to find out what our difficulties were, what our concerns were. The only contact that my community
has had, as well as the other communities that I
discussed or mentioned briefly within the ten-mile zone,
the supervisor of the town of Courtland, knowing that
the test or the drill was only going to be two or three
days away, requested a meeting with Harvey Harth, who is
a representative representing the counties, and
representatives from the Power Authority and Con Edison.

9 Those officials did in fact have a meeting two 10 or three days before the drill, and they gave us all the 11 information they possibly could. I think the point that 12 I want to make is that the chief elected officials 13 within Westchester County have not been involved in the 14 planning process at all.

15 The planning that has gone on has consisted of notifying police, basically police personnel within the 16 17 community. There are a lot of other people who, 18 unfortunately, might have to be involved, and the only way to coordinate that would be through the government 19 or through the chief elected official. So, that has 20 been a concern, and it has been raised by both the 21 supervisor of Yorktown as well as the town of Courtland 22 23 and myself.

We would hope that we would be more involved,
25 better informed, and the reason for that is, we would

1 like to be helpful in these circumstances.

2 JUDGE PARIS: Ms. Potterfield, could I 3 interrupt with a question?

MS. POTTERFIELD: Certainly, Judge Paris.
JUDGE PARIS: Mr. Wishnie, the county
executive is involved in the emergency plans for the
exercise, is he not?

8 WITNESS WISHNIE: The county executive of the 9 County of Westchester certainly is involved, sir. The 10 problem is that until there is some type of an emergency 11 whereby the county executive feclares a state of 12 emergency, giving him the authority to take over our 13 local responsibilities, up until that point in time, we 14 are charged with the health and safety, the protection 15 of the public within our jurisdictions, and there is a 16 great deal of confusion as to when we react.

17 Do we react immediately upon receiving 18 notice? Do we take actions to protect the public based 19 upon the information we have? Or do we sit back and 20 wait for the county to take over their 21 responsibilities? So, it is a guestion, it is a matter 22 of coordination.

JUDGE PARIS: Well, if the siren goes off, you don't know whether you are in charge or whether the county executive is in charge. Is that what you are

1 saying?

8 WITNESS WISHNIE: What I am saying is, hopefully, we would be notified prior to hearing the siren, through the notification system. We would know that there was some type of an incident. What I am indicating to you is, at the moment we are notified, I am going to react in a certain fashion. I am going to report to the emergency operations center that we have set up locally, based upon any information I would receive prior to the siren sounding.

11 I, as a local official, have the duty and 12 responsibility to react, and I would react based upon the information I had prior to the sirens sounding. 13 What I am indicating to you, that same scenario would be 14 15 played out in every municipality in Westchester County that might be affected, certainly within the ten-mile 16 zone. All of those local officials are going to react 17 based upon their good judgment and the circumstances at 18 the moment. 19

JUDGE PARIS: When an emergency is declared, whether or not the sirens have sounded, is your EOC in communication with the county EOC?

23 WITNESS WISHNIE: The first alert that we
24 would receive would come over the police hotline. The
25 EOC at the county -- I don't know at what point they

1 woull be put into place. But I assume that the 2 information we would receive, we would respond, I think, 3 faster, because we live within the municipality, or we 4 have our people within the municipality. We do not have 5 to bring in people from around the county into the EOC, 6 the county EOC, so I think we probably would be in place 7 prior to the county being in place.

BUDGE PARIS: But you have an EOC, right?
WITNESS WISHNIE: That is correct.

10 JUDGE PARIS: Is there a line of communication 11 between your EOC and the county EOC?

12 WITNESS WISHNIE: As I indicated to you 13 before, it is my feeling that unfortunately there is not 14 a good amount of communication. We have a telephone 15 number that we can call to get information. There is no 16 direct line radio communication between us and the 17 emergency operations center for a give and take 18 communication.

19 JUDGE PARIS: So it is dependent upon a 20 telephone line, one number?

21 WITNESS WISHNIE: I would ask the chief to
22 clarify whether there was more than one number. We had,
23 I believe, two numbers, one to the county police
24 headquarters and one to the emergency operations center,
25 but the chief can clarify that.

1 WITNESS GOLDFARB: We only have one telephone 2 number that was given to us for the EOC, the county EOC 3 during the drill. We did attempt to call a couple of 4 times and the line was busy. The hotline -- my 5 understanding, the police hotline is not connected to 6 the emergency operations center of the county. That is 7 connected to the county police headquarters in 8 Hawthorne, and it is also connected to every police 9 department in Westchester County and Greenwich, 10 Connecticut.

11 JUDGE PARIS: Excuse me for getting into 12 this.

13 JUDGE PARIS: That is all right, Judge Paris.
14 BY MS. POTTERFIELD: (Resuming)

15 Q I would like to ask Chief Goldfarb to respond 16 to the question that Judge Paris put to Supervisor 17 Wishnie. When the sirens go off, do you know what to 18 do?

A (WITNESS GOLDFARB) Well, the first thing we are to do is to expect a lot of telephone calls and inquiries, because that is what usually happens. We know what to do. We know what the sirens mean when they are set off intentionally. At that particular point, it is to direct the public to turn to their emergency broadcast channels for further information.

1 The problem during the last drill was that 2 before the sirens were set off, the county did notify us 3 that they were going to be set off. If I just could 4 consult with some notes here. Yes, about 9:40 a.m. on 5 that particular date, the sirens were activated. Just 6 prior to that, we were notified they were going to be 7 activated during the drill.

8 We, since it was a drill, had already been set 9 up with our own EOC and everything in place, as far as 10 we were concerned. We were just waiting for word from 11 the county EOC as to what the next step was going to 12 be.

13 Q You just testified, Chief Goldfarb, that you
14 know what to do when the sirens are set off
15 intentionally. How do you know when the sirens go off
16 unintentionally?

17 A (WITNESS GOLDFARB) How to we know what to 18 do?

19 JUDGE GLEASON: What do you mean by 20 unintentionally?

MS. POTTERFIELD: I would ask the witness.
JUDGE GLEASON: You are asking the question.
What do you mean by unintentionally? Oh, you are asking
him to distinguish between what he has said -MS. POTTERFIELD: The witness did make the

1 distinction. He said he knew what to do when the sirens
2 went off intentionally, and my question to him is, how
3 do you know when it is not intentional?

JUDGE GLEASON: All right, go ahead. JUDGE GLEASON: All right, go ahead. JITNESS GOLDFARB: There have, in our experience, there have been times when the sirens were set off accidentally due to a malfunction. Of course, nobody notified us beforehand, nobody knew about it, and our immediate response was to contact the county police to see if they had any information on why the sirens were being set off.

12 BY MS. POTTERFIELD: (Resuming)

Q Do you also, though, get telephone inquiries
when the sirens are sounded, other than intentionally?
A (WITNESS GOLDFARB) Yes. The last time,
unfortunately, they were accidentally sounded. We did
get a lot of inquiries as to what was going on.

18 Q And what are your officers on the switchboard 19 instructed to tell the public at that time?

20 A (WITNESS GOLDFARB) At that time, they were 21 instructed to tell the public that they didn't have any 22 information on what the sirens were about at that time, 23 but they were checking into it.

24 Q So that if a witness testified that she called 25 your police department when she heard the sirens and was 1 informed that they didn't know whether it was a real -2 whether it was intentional or not, she might have been
3 correct?

A (WITNESS GOLDFARB) That is correct.

4

5 Q Now, Supervisor Wishnie, you have talked about 6 your EOC. Would you tell us where it is located and 7 which municipal governments are involved?

8 A (WITNESS WISHNIE) In the March drill of last 9 year, 1982, we set up an emergency operations center on 10 the third floor of the Municipal Building because that 11 was the largest room that we had where we could fit all 12 of the personnel that we thought would be required, but 13 we found that that was not in our best interest, because 14 it was away from the communications center in the 15 building.

This year, at Chief Goldfarb's suggestion, we 16 moved directly into the communications area for the 17 purposes of the drill immediately -- which is on the 18 19 first floor of the Municipal Building in Ossening. 20 Chief Goldfarb's plan, which is an excellent idea as far as we are concerned, is to, during an actual emergency, 21 and the operation of an emergency operations center, we 22 23 would clear out the personnel that are immediately 24 adjacent in another room which is immediately adjacent 25 to the communications room, and we would utilize that

1 room for the emergency personnel that had to be involved 2 in making decisions.

3 Q Is the municipal building in Ossening, is that
4 the police headquarters where I first met with you?

5 A (WITNESS WISHNIE) That is correct.

6 Q Supervisor Wishnie, there has been some 7 question about contact -- I think the question actually 8 was put to Chief Goldfarb -- contact with the Four 9 County Nuclear Safety Committee. I understood you to 10 answer a question indicating that you in fact had had a 11 meeting that included Mr. Harvey Harth of that 12 committee. Would you tell us what your contact with 13 that committee has been?

A (WITNESS WISHNIE) From the onset of the semergency planning and during the course of the county, the county executive, former county executive, Alfred Del Bello's concern that the counties all get together and put together a cooperative plan to try and work out the best possible circumstances.

During the course of all of that activity, we were invited as public officials to one meeting at the county center to review the plan, which was presented by the consultants to, I guess it was the Con Edison, at the time that the plan was put together. Many local officials attended that meeting in the county center.

I have had a meeting at my invitation to the Con Edison representative in our area to meet in my office so that he could explain how the facility operated at Indian Point, and Harvey Harth attended that meeting as well to try and answer our questions. As I think has been indicated by the Judge, the county has certainly had an organized activity as far as their approach to being involved with this emergency planning.

However, the filtering down of the
organization amongst the local municipalities, the
elected officials, appointed officials, emergency
people, has not reached the stage yet that would
satisfy, I think, all of the people in this room as well
as the citizens of our county.

16 Q Now, during your contact with Mr. Harth, were 17 you given any information about the location of people 18 who had sent in the postcards indicating that they 19 needed special help during an emergency?

A (WITNESS WISHNIE) Could you repeat that? Q Chief Goldfarb was asked whether or not he had had any contact from the Four County Nuclear Safety Committee regarding the location of people who had sent in the postcaris that were attached to the public information brochure, and I am asking you the same question, whether or not during your contact with Harvey
 Harth you have been given any information about the
 location of people in your town who may have sent in the
 postcard requesting additional help during an
 emergency.

6 A (WITNESS WISHNIE) No. As I have also 7 indicated earlier, we have never been asked or given 8 information other than what we have asked for.

9 Q Now, Supervisor Wishnie, when you wear your 10 other had for the Red Cross, can I ask -- I will ask you 11 a question about that. Do you know how many people are 12 working for the Red Cross in this area?

13 MR. CZAJA: Objection. This is beyond the
14 scope of redirect, Judge.

15 JUDGE GLEASON: Objection denied.

25

16 WITNESS WISHNIE: During my approximately ten 17 years of activity with the Westchester County Red Cross, 18 and as the disaster chairman for my community, as I 19 mentioned earlier, I have been called on personally 20 during -- any time during the day or night, weekends, to 21 go to other communities because from north of Ossening 22 into the ten-mile zone there are only one or two people 23 who have been involved during the past ten years as 24 regular Rei Cross-trained people.

One of those persons has moved, so right now,

to the best of my knowledge, as of the last few weeks,
when an incident did occur, myself and another person,
only one other person, who lives in Croton, are the only
trained emergency people by the Red Cross and available
to respond to emergencies, any kind of emergency,
whether it be a fire or a displaced person or something
to that effect.

8 BY MS. POTTERFIELD: (Resuming)

9 Q And does your testimony apply to the county of
10 Westchester as you know it, or to a more narrow
11 geographical area?

(WITNESS WISHNIE) The experience that I have 12 A had when we had the Gulliver's fire a few years ago, 13 Ossening was called on to supply emergency Red Cross 14 15 workers. In my community, we had six or eight people respond from Ossening to go to the community where the 16 incident had occurred. During the last half-dozen years, 17 it is common knowledge that fires in the larger cities, 18 particularly in Yonkers, have exhausted the strength of 19 the Red Cross chapter in Westchester County, and we are 20 talking about where you have fires that displace 30 or 21 40 families. That is putting the Red Cross in 22 23 Westchester County to the test, and it has been extremely difficult to meet those responsibilities. 24 25 0 And are the responsibilities of the Red Cross

1 in a situation like a fire similar to their

2 responsibilities identified in the radiological

3 emergency response plan, if you know?

4 A (WITNESS WISHNIE) I am sorry. I would have 5 to ask you to repeat that.

6 Q Are the responsibilities of the Red Cross in a 7 fire such as the one you described similar to the 8 responsibilities of the Red Cross as defined in the 9 radiological emergency response plan?

10 A (WITNESS WISHNIE) The only response I could 11 give to you is that any response, whether it be in the 12 emergency plan or a fire response requires people, 13 trained people. My indication, based upon my best 14 personal knowledge, is that we do not have within 15 Westchester County enough trained emergency Red Cross 16 people to respond to the normal emergencies.

17 They do the best they can. They call upon 18 people throughout the county. But when we are talking 19 about thousands and thousands of people, the answer 20 emphatically is no, we do not have the resources -- the 21 Red Cross in particular does not have the resources to 22 respond without bringing people in from New York City or 23 other states or, as they have done across this country, 24 fly people in when required.

25 Q Chief Goldfarb, you indicated that you

understood your responsibilities upon hearing an
 intentional sounding of the sirens to be to follow the
 instructions that were given you by the county police.
 Did I understand your testimony?

5 A (WITNESS GOLDFARB) No, I believe what I 6 testified to is that we would know what to do if the 7 sirens were set off intentionally, if there were an 8 actual emergency.

9 Q And so that -- do you know that one of your
10 jobs would be to prevent people from re-entering the
11 emergency planning zone during an emergency?

MR. CZAJA: Objection. Beyond the scope.
JUDGE GLEASON: The objection is granted. It
is beyond the scope. Please go on to your next
guestion.

16 BY MS. POTTERFIELD: (Resuming)

17 Q You testified, Chief Goldfarb, during cross
18 examination about problems of traffic control in the
19 area of your jurisdiction. Have you ever had an
20 occasion in your experience as chief of police having to
21 set up barricades or otherwise preventing access to
22 highways or roads?

23 MR. CZAJA: Same objection.
24 JUDGE GLEASON: He can respond to that.
25 WITNESS GOLDFARB: Yes, I have had the

1 experience.

BY MS. POTTERFIELD: (Resuming)
Q And do you have the equipment necessary to do
4 that?

A (WITNESS GOLDFARB) We would have the equipment necessary to block of roadways. However, basically, the emergency response plan that outlines our responsibilities to us is an advisory plan only. My responsibility is to provide for evacuation if it is needed to keep roads open. However, if somebody would want to go back into a particular zone, I cannot force them not to go, and my men have been instructed not to make an arrest for violating an evacuation plan.

14 JUDGE GLEASON: Excuse me. Do you mind if I 15 just add on something to that guestion?

16 MS. POTTERFIELD: No, sir.

17 JUDGE GLEASON: I just want to get a complete18 answer to that last question.

19 MS. POTTERFIELD: Certainly.

20 JUDGE GLEASON: You say your men have been 21 instructed not to prevent people from returning or going 22 into a radiologically contaminated area?

23 WITNESS GOLDFARB: That is correct.

24 JUDGE SHON: I think more subtley, indid not 25 say they were instructed not to prevent them from doing

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1 so, but just not to arrest them if they tried to.
2 Wasn't that it?

WITNESS GOLDFARB: We have no authority to
prevent -- If I could just explain it, we have no
authority to prevent the free movement of the public
even into an area that has been so-called "designated as
contaminated." Nor do we have sufficient manpower to do
that.

JUDGE PARIS: Well, Chief, if a rail car
filled with chlorine or something derailed in Ossening,
and chlorine was releasing, don't you have the authority
to keep people from going near the rail car and
endangering themselves?

14 WITNESS GOLDFARB: Yes, we have the authority 15 to advise them, and we would probably have the authority 16 to make an arrest for it. But if you are talking about 17 a very large area with a minimum amount of people that 18 we have available, with the number of people coming into 19 an area, it would be absolutely impossible for us to 20 prevent everybody from coming into that area.

JUDGE GLEASON: Well, that is a different issue, whether you have got the forces capable of doing it. It is -- The question that has been asked, based upon your response, really, is whether in the terms of protecting the public health and safety you don't have

the authority which was always thought inherent with police power to prevent people going into a dangerous area. I would assume you would. But if you say that you don't --

5 WITNESS GOLDFARB: Well, we have the authority 6 to prohibit people from going into certain areas if we 7 take control over an area, that is correct. However, I 8 would certainly question anybody who says that we have 9 the authority to prevent somebody from going in to get 10 his family out in this particular type of an 11 emergency. My instructions to my personnel is, if 12 somebody wants to go into an area during an evacuation 13 from that particular area, that we are not going to 14 prevent them from going into the area.

15JUDGE GLEASON: Even if that area has been16declared an area that is radiologically contaminated?

17 WITNESS GOLDFARB: Even so. There is no way18 we can prevent it.

19 JUDGE GLEASON: It is your testimony. Go20 ahead.

21 BY MS. POTTERFIELD: (Resuming)

22 Q I want to ask one follow-up question of 23 Supervisor Wishnie about the location of the emergency 24 operations center. You testified that center is located 25 on the ground floor of the Municipal Building, which is

1 also the police department, in Ossening. Is that 2 correct?

3 A (WITNESS WISHNIE) Yes.

Q Do you have a plan for where that emergency 5 operations center would be if you were instructed or 6 given information that a radiological plume were heading 7 south toward Ossening?

8 A (WITNESS WISHNIE) Yes. The final decision 9 has not been made. It would obviously depend upon the 10 scenario. However, Chief Goldfarb and Chief Joynes of 11 the town police have discussed this issue. The 12 Briarcliff Municipal Building is outside of the ten-mile 13 radius, and they are on the same frequency as us. It is 14 our assumption that if we had to get out of our 15 facility, we would go to Briarcliff, unless there were 16 some other instructions.

I also want to add, with regard to the previous discussion about circumstances preventing people from going back into the area, it has been our understanding from the beginning that our police personnel could not prevent people from going to their homes or going back to pick up their children or their families.

It is certainly clear to me, though, that if the county executive or the governor of the state

1 declared a state of emergency, certain other powers
2 would be available to the local police, and we certainly
3 would behave in a different fashion if we were ordered
4 unter the governor's wish to evacuate people from our
5 community. We would not permit people to go back into
6 the area. That would be my decision, based upon a
7 different set of circumstances, but I think, as Chief
8 Goldfarb has indicated, it has been our understanding,
9 and what has been told to us is that under this
10 emergency plan, that we would not be prohibiting people
11 from going back to get their families.

12 Q You both testified on cross examination about 13 the instructions you have been given regarding 14 protective gear. This, I understand, was part of your 15 training. What instructions to the people, the 16 emergency workers under your jurisdiction, have about 17 wearing protective gear if there were a radiological 18 emergency?

19 A (WITNESS WISHNIE) At the present time in my 20 community -- I can speak for my own community -- the 21 only personnel that have received any type of training 22 at all are our police personnel. The problem that we 23 find difficulty dealing with is that in an emergency 24 which will require the placing of barricades, we need 25 our highway department personnel. They have not been

instructed as far a nuclear safety is concerned. They
have been issued no garb. They have been issued no
dosimeters, no TLD's, no nothing. They have received no
training.

5 Our Ossening volunteer ambulance corps within 6 our community, the people who would be expected to 7 respond to incidents requiring emergency services, 8 bringing people to an ambulance, or even possibly 9 helping in the evacuation of handicapped persons, the 10 OVAC personnel have not been trained, to the best of my 11 knowledge, have not received any training, have no 12 equipment, either -- as far as rain gear, I am sure they 13 have rain coats, but they have not been issued 14 dosimeters. They have not been issued TLD's.

We have a nine-company fire department within the town of Ossening, the village of Ossening. None of our fire personnel have received training. None of our personnel, fire department personnel have TLD's or dosimeters.

This is a failure of the system, whether it be the state government or whoever else is responsible. In order for us to be cooperative and respond as you expect us, as the public would expect us to, we need to have the equipment and the tools to do it. The radios and the other protective devices are a basic requirement.

and if the state legislature can find the dollars to
provide the local municipalities and the local
governments with the funds to do that, we would be
better prepared to respond, as is expected.

5 I think the explanation we received about ten 6 days ago was that the funds, the million and a half 7 dollars that had been required to be put forth by the 8 utilities, that million and one-half dollars had been 9 divided two-thirds, one-third, two-thirds to the state 10 of New York, one third to the counties involved.

11 It is my understanding that Westchester County 12 got \$90,000 in its entirety to furnish tools and equipment that we need. I want to make it clear to you 13 today that the \$90,000 for the county is totally 14 inadequate, and I think both the utilities understand 15 that as being an inadequate amount of money, so someone 16 17 has to be good enough to indicate that more money is definitely needed, and recognize that, and make sure 18 that that money is made available, so that we can have 19 the tools and equipment to work with. 20

21 Q Chief Goldfarb, do you have a separate answer22 to my question about protective gear?

A (WITNESS GOLDFARB) No. Specifically, as far
as gear goes, the only gear our personnel would be
equipped with right now would be rain coats, rubber

1 boots, hats, and this would be the type of equipment 2 that they have been instructed to utilize during an 3 emergency. 4 MS. POTTERFIELD: Thank you. I don't have any 5 other questions. 6 BOARD EXAMINATION 7 BY JUDGE PARIS: Chief Goldfarb, would you tell us again what 8 Q your understanding is about the effectiveness of rain 9 10 gear in protecting against radiation? 11 A (WITNESS GOLDFARB) The effectiveness in my 12 understanding is that it would protect the individual to 13 exposure, radiation exposure, but it would not really 14 protect you is a contaminated area or a contaminated 15 particulate or particle if it came in contact with you. 16 That is the understanding that we have. 17 As a matter of fact, at the last training Bession ve had, there was some discussion about the 18 state police purchasing specialized garb, and the man 19 giving the training also indicated that it really 20 21 wouldn't prevent contamination. 22 But this is based upon something you learned 0 in the training session? 23 A (WITNESS GOLDFARB) Correct. 24 JUDGE PARIS: Thank you. 25

BY JUDGE GLEASON:

1

0

2	0	Mr. Wishnie,	, I am a little confused about the
3	political d	or governmen	ental entities in Westchester
4	County. H:	ow many are	there like you up there? I mean,
5	when I say	that, that :	is in the vernacular, and of
6	course I me	ean like your	our jurisdiction within the county.
7	A	WITNESS WIS!	SHNIE) Judge, your problem
8	understandi	ing the gover	ernment of Westchester County is
9			citizens and all of the officials
10			Westchester County.
11			I am a former local government
12	official, s	SO I KNOW SOM	ome of the confusion.
13	λ	WITNESS WISH	SHNIE) I believe there are some 34
14	municipalit	ties in Westo	tchester County, if I am correct
15	about that.	. That consi	sists of both cities, towns, and
16	villages.	Unfortunatel	ely, it does cause a great deal of
17	communicati	ion problem,	, responsibility problem,
18	overlapping	g of services	es, duplication of services. When
19	you try to	put together	er a county program, for instance,
20	if you work	ked in Nassau	au County, you had one police
21	department.	. That is a	a different set 🧭 circumstances.
22		par nere in .	Westchester County, there are more
23	than 20 pol	lice departme	ments, and coordinating all of
24	these folks	s to respond	d to a situation the way you want
25	us to loes	present some	me unique problems here in the

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1 county.

2 Q And are there meetings that are held on a more 3 or less regular basis involving intergovernmental 4 problems of all of those different municipalities and 5 villages?

6 A (WITNESS WISHNIE) Again, sir, I think, in all 7 fairness to your question, there are certainly meetings 8 with intergovernmental cooperation, and exchanges of 9 information occur. The problem is that, for instance, 10 there is an association of towns, and the towns meet 11 together. There is a village municipal association. 12 The villages meet together. There is an association of 13 towns, a state association. All of these individual 14 organizations do attempt to communicate with each other, 15 but there really isn't any method.

16 Q But towns don't talk to the villages, and the 17 villages don't talk to the county?

A (WITNESS WISHNIE) Fortunately, in our community, we have good communication. There are communities where villages are within towns, and there is a problem between the two local governing bodies where they may not be talking during a particular period of time, and that is very unfortunate and very unfair to the people who live there, but it is a fact of life, and I think it is fair to tell you that.

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1 Q This gets way beyond the testimony, but just 2 from a political science viewpoint, whose responsibility 3 from your position would you assume it would be to try 4 to pull together all of those 34 different governmental 5 entities in developing a unified response plan to a 6 radiological emergency?

7 A (WITNESS WISHNIE) In my opinion, sir, it
8 would be clearly within the best interests of
9 Westchester County for the Westchester County government
10 to do that.

11 Q We talked before, and I was a little bit 12 confused about the degree of the status of the education 13 or the training status that was received both on the 14 part of the village people, the town people, and the 15 chief's forces. I thought I had heard you say, and 16 perhaps -- I guess I was wrong, in light of the 17 testimony I have just heard recently, that you had 18 received -- your people had received radiological 19 training, but is that incorrect?

20 And I am talking to Mr. Wishnie, and then I 21 will give you the next opportunity, Chief.

A (WITNESS WISHNIE) Yes, sir. I am quite assured of what I am saying, that other than police personnel within my community, and that is only ten men in the town police department, our highway personnel

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have not been trained. Our Ossening volunteer ambulance
core people have not been trained, and our Ossening fire
department people -- there are some 600 of those folks
-- have not been trained.

5 Q How about you, Chief?

6 A (WITNESS GOLDFARB) Well, there are 43 members 7 of our police department that have received training. 8 Now, Ossening is a unique community anyway, not to confuse you even more, but the village police department 9 dispatches under contract for the town police 10 department. The town also has a contract with the 11 12 village for fire protection, so we are talking about the 13 same fire lepartment, and we are talking about the same 14 volunteer ambulance corps. So, they have not received training. 15

16 Q They have not received training?

17 A (WITNESS GOLDFARB) That is correct.

18 0 My last question deals with the areas of your 19 other hat, so to speak, with the Red Cross, where your testimony indicated that there were not sufficient 20 volunteer workers in Westchester County to provide the 21 22 resources that were necessary to carry out the 23 responsibilities of emergency evacuation. How many are available? What numbers are we talking about? 24 A (WITNESS WISHNIE) I have to tell you, sir, 25

1 that I don't have personal knowledge of the number of 2 emergency people available. That would have to come 3 from an official of the Red Cross. I am sure that there 4 are a list of people who have volunteered themselves 5 over the years who -- the Red Cross has the names on 6 file, and that the Red Cross would intend to contact.

7 There are not regular sessions for Red Cross 8 personnel to meet, to be trained, to be updated. For 9 instance, in my own case, I am a local Red Cross disaster chairman for my community, and as I indicated 10 11 to you before, I spend time in other communities as well, because there isn't anyone around. I have not 12 been contacted by the Red Cross to be brought up to date 13 14 about either a contract to handle the schools that would 15 be set up as reception centers. I have not been contacted by the Red Cross as far as planning for this 16 emergency, and I think that is important. 17

18 Q Is it based upon that fact, then, that you 19 have not personally in your Red Cross responsibilities 20 been contacted with respect to duties that you might be 21 called upon to carry to staff the reception centers? Is 22 it that fact that you base your statement that there are 23 not adequate volunteers available to handle their duties 24 in the event of a radiological emergency?

25 A (WITNESS WISHNIE) No, sir.

Q What is the fact, then? Because I asked you
 about numbers, and you said you didn't know numbers.
 And so what is it based on?

A (WITNESS WISHNIE) It is based upon experience
where incidents have occurred throughout Westchester
County, where I have been called upon to respond because
adequate personnel were not available, and as I
indicated to you before, there was a fire at Gulliver's
-- I believe it is in Port Chester, if that is the
proper community. Ossening people were required to go
to Gulliver's, where an emergency morgue was set up, and
we worked to help with that situation.

13 That is just one indication to you. There14 have been many. There have been dozens.

15 Q I don't know what conclusion you draw from16 that.

17 A (WITNESS WISHNIE) The conclusion I am trying 18 to indicate to you, sir, is that based upon my personal 19 knowledge during former similar emergencies, as I 20 indicated, certainly nothing at the level we are talking 21 about with regard to the number now, a mass evacuation. 22 We haven't had that here in Westchester County. But 23 emergencies involving fires, tragedies where dozens of 24 victims or possibly 100 families might have been 25 involved, in those cases, during the past ten years,

1 there have not been an adequate number of personnel to 2 respond.

3 So, what I am indicating to you based upon 4 that experience, it is my feeling that when you talk 5 about thousands of people and many reception centers, I 6 am telling you that it is my belief that we do not have 7 the personnel to man them.

JUDGE GLEASON: Thank you.

8

9 MS. POTTERFIELD: Judge Gleason, we have here 10 a map that has been provided by the Media Center, and I 11 wonder if it would be helpful for the Board if the 12 witnesses pointed out these locations on the map. I 13 don't know how familiar you are with the area.

JUDGE GLEASON: Well, I gather the only thing that would be helpful, Ms. Potterfield, I gather that the fire that he referred to, that the area -- that Ossening is guite some distance from where the fire was, and it is based upon that that he was telling us, but if you can keep it available, I think we probably could use that in some subsequent testimony.

21 MS. POTTERFIELD: I could leave it up here
22 with the Board if it makes it easier to follow the
23 testimony.

24 JUDGE GLEASON: That would be fine. Thank 25 you.

1	Gentlemen, you are excused. Thank you very
2	much.
3	(Witnesses excused.)
4	JUDGE GLEASON: Let's take a ten-minute break.
5	(Whereupon, a brief recess was taken.)
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JUDGE GLEASON: Could we get started, please?
 Would you call your next witness, please?

Before we proceed, there is an interest on the part of the Board dealing with the testimony of the last two witnesses regarding the nature and degree, I guess, of the training that has been offered to the local officials and fire officials or what training has not been offered, and we were going to call them back if they were here, but they are gone.

But we can do it a different way. We would like to have either the licensees or FEMA to produce that information as to what training these local officials have received and also, in that connection, there was some testimony with respect to protection of fraincoats. We would like to know specifically what the nature of the training was with respect to that.

17 MR. CZAJA: Judge, if I could just comment on 18 that, I think really the party that could best provide 19 that information, although perhaps FEMA could, is 20 perhaps the State of New York. I don't think counsel 21 for the State is here today, but they will be coming 22 on.

JUDGE GLEASON: Well, FEMA I know does provide
some kind of training and makes sure the training has
been carried out.

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MR. GLASS: We don't provide the training,
 Your Honor.

JUDGE GLEASON: I thought the witnesses have
4 testified they received training from FEMA.

5 MR. GLASS: There are certain courses that are 6 given in Washington. The majority of training that has 7 been referred to here has been provided by the State of 8 New York. I have been in touch with Mr. Feinberg. I 9 will get in touch with him again and see if he can 10 include that in his submission. I know that he does 11 have that information.

12 JUDGE GLEASON: If you would do that, it would13 be appreciated.

JUDGE SHON: Mr. Glass, we are very concerned that there seemed to us to be an indication that at the operational level people were not getting accurate and reliable information on the behavior of radiation and measures taken to protect against it. That is our big worry and we want to know where the hangup is and where the information is going awry -- who is responsible for that.

22 MR. GLASS: I will convey that information. 23 JUDGE PARIS: Either they are not getting 24 reliable information or they are not understanding it. 25 and the fact that they are not understanding it.

MS. FLEISHER: Your Honor, if I may - MR. GLASS: I will relay that to Mr.
 Feinberg.

MS. FLEISHER: This is just the kind of information I was complaining about yesterday. We had no opportunity to ask for it in interrogatories, but I would like to point out additionally that we want to know not just what training is being given, we want chapter and werse -- how many classes and when. If you could add that to your request, I would appreciate it. JUDGE GLEASON: Well, let's just say if they come up and the information is found deficient why you will get a chance to cross examine them.

Ms. Potterfield?

14

MS. POTTERFIELD: We would call David Siegel, IS Lynn Doughty and John Iurato. I received a telephone IT call this morning from Mr. Napoli, who indicated that he Nould be in conference all day and would be unable to IN attend, so our panel consists of Mr. Siegel, Miss Doughty and Mr. Iurato.

JUDGE GLEASON: The panel consists of Siegel,
22 Doughty and who else?

23 MS. POTTERFIELD: John Iurato.

24 JUDGE GLEASON: And Mr. Napoli is not with the 25 panel?

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1	MS. POTTERFIELD: That was the message I
2	received this morning.
3	Whereupon,
4	DAVID SIECEL,
5	JOHN IURATO,
6	AND
7	LYNN DOUGHTY
8	were called as witnesses by counsel for NYPIRG and,
9	having been duly sworn by the Chairman, were examined
10	and testified as follows:
11	DIRECT EXAMINATION
12	BY MS. POTTERFIELD:
13	Q Mr. Iurato, will you state your name and
14	address for the record, please?
15	A (WITNESS IURATO) John Iurato, 37 Van Wyk
16	Street, Croton-on-Hudson.
17	Q Mr. Siegel, would you state your name and
18	address for the record?
19	A (WITNESS SIEGEL) David Siegel, 3192 Amelia
20	Drive, Mohican Lake, New York.
21	Q Miss Doughty?
22	A (WIINESS DOUGHTY) Lynn Doughty, East Mount
23	Arie Road, Corton-on-Hudson, New York.
24	Q Mr. Iurato, do you have before you a copy of
25	the testimony that you wish to submit before the Atomic

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1 Safety and Licensing Board? 2 A (WITNESS IURATO) Yes, I do. 3 0 Do you have any additions or corrections to 4 that testimony? 5 A (WITNESS IURATO) Well, I could state that a 6 few of the concerns that I expressed have been 7 addressed, some in part and some in entirety, such as 8 point number one and point number six. 9 Q You are referring to the indented paragraph 10 one on page one of your testinony? A (WITNESS IURATO) Yes. 11 12 Q And you wish to add to your testimony that 13 that is no longer a concern? A (WITNESS IURATO) No. Since the time of the 14 15 statement, this situation has been corrected because our 16 school systems did receive radio sets that were powered 17 by battery and I think it can serve as a backup for our 18 communications system. Q All right. Did you wish to add the date on 19 20 which you received that backup radio? A (WITNESS IURATO) I believe March 3, 1983. 21 22 Q And then, turning to page two of your 23 testimony, you indicated that you wish to make an 24 addition or correction to paragraph six.

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25 A (WITNESS IURATO) In paragraph six, rather,

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1 number one, no training of staff. Since this statement 2 was made, we did receive a communication asking for 3 volunteers for some kind of training -- radiological 4 detection, I believe. It was sometime in late fall of 5 this year. 6 Q So it is now your testimony that since you 7 prepared the written testimony you received a 8 communication requesting volunteers from your school to 9 participate in training? A (WITNESS IURATO) Yes. 10 Q And is it your additional testimony that that 11 12 request came last fall, 1982? A (WITNESS IURATO) I believe so. 13 Q And did you wish to add whether that training 14 15 has taken place? 16 A (WITNESS IURATO) As far as I know, it 17 hasn't. Q It has not? 18 (WITNESS IURATO) It has not. A 19 Any other additions or corrections, Mr. 0 20 21 Iurato? A (WITNESS IURATO) I don't believe so. 22 23 Q with those additions and corrections, is your 24 testimony true and accurate to the best of your 25 knowledge and belief?

A (WITNESS IURATO) I believe so.

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2 MS. POTTERFIELD: I move the admission into 3 evidence of the testimony of John Iurato as if read.

JUDGE GLEASON: Why don't we proceed with your 5 other witnesses and then handle them all together, if 6 you would?

BY MS. POTTERFIELD: (Resuming)
Q Mr. Siegel, do you have before you the
9 testimony that you wish to submit before the Atomic
10 Safety and Licensing Board?

11 A (WITNESS SIEGEL) Yes, I do.

12 Q Do you have any additions or corrections to 13 that testimony?

A (WITNESS SIEGEL) There are a couple of statements. First, I would agree with John Iurato. I had originally indicated that one of the several weaknesses of the earlier plan that we had received related to communications. There have been some corrections and some improvements, probably the most notable one mentioned by John with regard to the addition of radios which are automatic. That is the only change in terms of the original testimony.

23 Iwo other comments. John had mentioned that 24 we had been advised in December -- December 2 is the 25 date of the letter that we received from a gentleman

named Robert Buckley offering to provide or indicating
 that there was a requirement that local districts be
 provided with radiological emergency response training.

4 Q Can you further identify Mr. Buckley? 5 A (WITNESS SIEGEL) He signs his name, but the 6 title on the top of the page simply says Westchester 7 County Office of Disaster and Emergency Services. We 8 assume that he is a person who works in that agency.

9 We had responded also in December indicating 10 that we had several people in our district who were 11 interested in receiving the training, and despite the 12 fact that we have responded in December we have had no 13 word, no follow-up, no further offer of such training.

We also have the problem with regard to something I would call confusion. My testimony was based on a previous plan that we had received which would have involved transporting our youngsters south of R Croton to White Plains. We indicated or I indicated in my earlier testimony what many of the problems with regard to that evacuation plan were.

As of this date, quite frankly, in Croton nobody in our school district knows for certain what the plan is. We read in the newspaper that the County Executive has a better plan.

25 JUDGE GLEASON: Mr. Siegel, we just want to

1 get corrections to your testimony now. 2 WITNESS SIEGEL: Well, I would say my 3 testimony is inadequate since we don't know what the 4 plan is. 5 JUDGE GLEASON: All right, fine. BY MS. POTTERFIELD: (Resuming) 6 7 Q Do you have any other specific additions or 8 corrections, Mr. Siegel? 9 A (WITNESS SIEGEL) No. 10 Q With the additional comments you have made, is 11 your testimony true and correct to the best of your 12 knowledge and belief? 13 A (WITNESS SIEGEL) It is true and correct. MS. POTTERFIELD: I move the admission into 14 15 evidence of the testimony of David Siegel as if read. 16 JUDGE GLEASON: Let's handle your next witness 17 first. BY MS. POTTERFIELD: (Resuming) 18 19 Q Miss Doughty -- am I pronouncing your name 20 correctly? A (WITNESS DOUGHTY) Yes. 21 Q Miss Doughty, to you have before you the 22 23 testimony that you wish to submit before the Atomic 24 Safety and Licensing Board? 25 A (WITNESS DOUGHTY) Yes, I do.

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1 Q Do you have any additions to your testimony? 2 A (WITNESS DOUGHTY) I have an addition and one 3 correction. I am no longer the President of the Board of Education, but I am still a member of the Board. 4 5 So that is in paragraph one. 0 (WITNESS DOUGHTY) In paragraph one. 8 A 7 0 That should read "I am the past President of the Croton-Harmon Board of Education and am still a 8 member of the Board of Education which is responsible 9 10 for the operation of the school district"? A (WIINESS DOUGHTY) That is correct. 11 12 0 And secondly? 13 A (WITNESS DOUGHTY) Secondly, my testimony directs itself primarily to the evacuation plan. I 14 understand that there are proposed changes to the 15 evacuation plan and it is the view of the Croton Board 16 of Education that those proposed changes, as we have 17 read about them in the paper, are still inadequate. 18 Q With those additions and corrections, is your 19 testimony true and correct to the best of your 20 information and belief? 21 A (WITNESS DOUGHTY) Yes, it is. 22 MS. POTTERFIELD: I would move, then, for the 23 24 admission into evidence of all three statements of the 25 panel of witnesses as if read.

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JUDGE GLEASON: Is there objection?

MR. CZAJA: Judge, my only objection is on Mr. Iurato's testimony, page two, paragraph eight, starting on the second line with the word "tow trucks" through the conclusion of that paragraph eight. We believe that is unreliable hearsay, vague, provides no basis. JUDGE GLEASON: Excuse me. What line are you on?

9 MR. CZAJA: Paragraph eight, numbered 10 paragraph eight, page two, "Tow trucks have a major 11 role" and he goes on to describe that he telephoned some 12 local gasoline stations. We believe that is unreliable 13 hearsay and provides no adequate basis for cross 14 examination.

15 JUDGE GLEASON: How about the other 16 witnesses?

17 MR. CZAJA: That's it. That's our only18 objection.

19JUDGE GLEASON: You have withirawn your other20objection? You had one on Doughty. How about Con Ed?21MR. FARRELLY: Your Honor, as we stated in the22motion, we have objections to all three of the witnesses23or at least portions of their testimony.24JUDGE GLEASON: Would you like to respond,

25 Miss Potterfield?

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MS. POTTERFIELD: Well, I will respond first specifically to the objection of PASNY to the testimony of John Iurato in paragraph eight of his testimony on page two. As I understand the objection, that is on the basis of hearsay. I submit that the statement that is made there about the information obtained by Mr. Iurato is a statement of operative fact which is in exception to the hearsay rule.

9 Mr. Iurato doesn't tell us the content of the 10 communication that he has received but simply indicates 11 that he was unable -- that he learned that they had not 12 been contacted and that that is part of the basis for 13 his concern about the plan.

As such, it becomes information on which he is to acting by giving his testimony in this proceeding and may be accepted into evidence not for the truth of it to but as the basis of his testimony.

18 MR. CZAJA: Judge, I'm sorry. I was in error. 19 We did object to Miss Doughty's testimony and we stand 20 by the objections. Do you want me to indicate the 21 specifics?

22 JUDGE GLEASON: No, we know what your 23 objection is.

24 MS. POTTERFIELD: Shall I respond to the 25 objections to Miss Doughty's testimony?

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JUDGE GLEASON: If you would like.

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MS. POTTERFIELD: As I understand it, they are objecting to the testimony of Miss Doughty that she thinks it is totally unrealistic to believe that bus drivers will risk being exposed to radiation or leave their own community which is not far outside the ten-mile evacuation zone. They object to that statement as speculative.

9 I submit that Miss Doughty is testifying on 10 behalf of the Croton-Harmon Board of Education, that it 11 is within her responsibility in terms of her position 12 with the Board of Education to make those kinds of -- to 13 make the kinds of opinion statements that she has made 14 here. She is responsible in part for children who go to 15 school within the jurisdiction of the Croton-Harmon 16 Board of Education and she has made her conclusion about 17 whether or not the assumptions in the plan are realistic 18 as part of her responsibility with the Board of 19 Education.

The second objection, as I understand it, is an objection on the basis of hearsay and speculative to the lines: "School district residents have expressed the same concern to me -- that is, the concern that it is more unrealistic and unnatural for parents to permit their children to be evacuated -- and have stated

1 unconditionally that their first action upon hearing of 2 an emergency would be to go to the school and to get 3 their child."

4 The objection also continues to her statement that "I share these feelings and would do the same." It 5 6 continues, as I understand it, to her statement that "I 7 envision mass chaos, rendering an evacuation impossible when residents in their cars converge upon our 8 9 elementary and middle schools, which are located on narrow streets with limited access and turning area, 10 especially for buses." 11

I have to take those statements separately
since they are quite different and the objections simply
don't apply to the whole group of sentences.

15 The first sentence that says that many school district residents have expressed their concern to her 16 17 is undoubtedly hearsay. However, it is hearsay in the 18 same nature that has been testified to by the witnesses that the Board has called, expert witnesses. Miss 19 20 Doughty is an expert in terms of her position with the Croton-Harmon Board of Education and I submit that she 21 should also be allowed to testify as to what she 22 understands the emergency response would be of the 23 residents of the EPZ for whom she is partially 24 25 responsible.

When Miss Doughty says "I share those feelings and would do the same", that clearly is not hearsay nor is it speculative. It is her anticipated response to the emergency and a statement that we submit is most material to this case.

6 Miss Doughty goes on to say "I envision mass 7 chaos, reniering an evacuation impossible." We are 8 talking about road conditions. I am reminded about 9 Judge Paris' question of Mr. Morris yesterday when he 10 isked him how can you be sure that the roads would be 11 jammed, when Mr. Morris testified that in his 12 professional opinion you had to plan on the basis of 13 traffic jams in the road.

I submit that Miss Doughty is giving you specific information about specific roads within the EPZ. It is the contention of intervenors that the planners, the experts, have failed to take into account the specifics of the road system within the EPZ, and I submit that we should be permitted to present testimony about those specifics which the planners have unrealistically failed to take into account.

I heard no objections to Mr. Siegel'stestimony.

24 MR. FARRELLY: Con Edison does have an 25 objection.

MS. POTTERFIELD: I understand part of Con Edison's objection is that this testimony is cumulative and it strikes me as very strange, given their complaint about our presenting these witnesses in panels. Their practice has been to present witnesses in panels that share the same testimony. That is what we are doing here.

8 We have tried to group these witnesses in 9 panels of people who are concerned about the same 10 institutions. In that way their testimony is cumulative 11 in the same way that the licensees' experts shared 12 testimony. These witnesses share opinions about the 13 institutions for which they are jointly responsible.

I remember that Con Edison also objected to the testimony of John Iurato on the basis that he had already given a limited appearance statement. They neglected to inform the Board that Mr. Iurato's limited sppearance statement was in January of 1982, months before or two months before the first drill and five months before any of the testimony was submitted.

I certainly do not think that Mr. Iurato's participation in public hearings about these emergency plans before the time that he became a witness for the intervenor and certainly before the time of the first severcise at Indian Point in March of 1982, that

certainly can't preclude him from testifying here,
 particularly since his testimony involves, so much of
 it, events that have taken place since January of 1982.

4 MR. FARRELLY: Your Honor, on the last point 5 on Mr. Iurato's testimony, section 2.75(1)(a) of the 6 Commission's regulations seems to be very clear and 7 allows no exceptions. A person who has made a limited 8 appearance statement may not otherwise participate in a 9 proceeding.

10 MS. POTTERFIELD: Your Honor, I submit that 11 that section goes to limited appearance sessions that 12 occur during the course of hearings. Now in this 13 situation the hearings on the emergency plans were 14 scheduled to begin in June and did in fact begin last 15 summer. They have been postponed because of serious 16 deficiencies in the plan recognized by FEMA.

17 It is our position that that section does not 18 prevent the presentation of testimony by witnesses who 19 also gave a limited appearance statement where their 20 limited appearance statement predated these hearings by 21 16 months.

22 JUDGE GLEASON: Are you finished, Miss 23 Potterfield?

24 MS. POTTERFIELD: If I may say that as I look 25 at 2.75(1)(a), it indicates that a person who is not a

1 party may be permitted to make a limited appearance
2 statement, but he may not otherwise participate in the
3 proceeding. I understand that to mean that a person who
4 gives a limited appearance statement may not participate
5 as a party in the proceeding.

(Board conferring.)

6

7 JUDGE GLEASON: Are you finished, Miss 8 Potterfield?

9 MS. POTTERFIELD: I have other information 10 about that, if the Board is considering striking Mr. 11 Iurato's testimony because of his limited appearance 12 statement. I can point to another situation, that of 13 County Executive DelBello who testified at a limited 14 appearance session in July after the hearings had begun 15 and then was permitted to testify on behalf of 16 Westchester County.

I understand that this issue came up last summer during the days that the hearing took place in Rockland County and that the Board at that time made a uling that a witness could testify who had testified at a limited appearance session, but I don't have a citation for that.

23 MR. CZAJA: Judge, just for the record, that's
24 not my recollection. My recollection is the Board
25 reserved decision

JUDGE GLEASON: All I'm trying to find out is 1 2 if Miss Potterfield is finished. 3 MS. POTTERFIELD: Yes, thank you. 4 JUDGE GLEASON: Thank you. 5 Mr. Iurato, I don't find what your affiliation 6 is with the school district. It is not listed here. 7 WITNESS IURATO: I am Assistant Principal of 8 the high school. 9 JUDGE GLEASON: Thank you. 10 WITNESS IURATO: And I might add, as an 11 Assistant Principal you get many jobs and one of them is 12 to --JUDGE GLEASON: I know what the job of an 13 14 assistant principal is. 15 WITNESS IURATO: Well, I was made director of 16 a study to come up with a response to the radiological 17 emergency response plan. JUDGE GLEASON: All right, thank you. If you 18 19 will bear with us a minute here --(Board conferring.) 20 JUDGE GLEASON: The Board finds that the 21 22 points made by the attorney for the intervenors are well 23 taken. The witnesses here represent in one degree or 24 another schoolchildren and parents coming to schools. 25 Their testimony is the kind of testimony, even though in

1 a couple of respect it is hearsay, we think it is
2 acceptable and we would like to have it in the record.
3 So the motions are denied.
A MS. POTTERFIELD: The testirony is in?
JUDGE GLEASON: Yes, the testimony will be
6 admitted into the record and bound into the record as if
7 read.
8 (The prepated testimony of Mr. Siegel, Mr.
9 Jurato, and Miss Doughty follows:)
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My name is David Siegel. I have served as the Superintendent of Schools in the Croton-Harmon School district since 1976. The Croton-Harmon School district is within a ten (10) mile radius of the Indian Point Nuclear facility. As a matter of fact, with the exception of the Hendrick Hudson School district, we are the closest school district to Indian Point.

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We have been aware of the concerns with regard to the safety of our student population in the event of a nuclear accident at Indian Point for several years. About two (2) years ago we became more aware of the planning that was being undertaken by the Parsons Brinckerhoff Consulting firm on behalf of Con Edison and the New York Power Authority related to "Evacuation of the Ten Mile Zone."

I will not dwell on all of the concerns we have expressed as the planning has occurred. Certainly some efforts were made to gain input and information from those school districts in the immediate region.

I would, however, like to go on record in expressing some very specific concerns that I have with regard to the nature of the plan, its development, and its adequacy or lack of adequacy. I do not believe that it is taking a defeatist's point of view to suggest that, under any circumstances, a mass evacuation, as suggested by the plan, can result in anything short of chaotic conditions. As we saw the plan being developed and those people responsible for its organization, we saw more and more and more evidence of "lack of follow-through and communication". In essence, what I am saying is that people have roles to perform but the people who have important roles to perform have not all been advised of their responsibility nor are there, to my knowledge, any laws which require these people to perform the acts which the plan calls on them to perform. There is no enforcement.

In simple terms, the Croton Schools would be advised of a nuclear emergency by a telephone callfrom an official in a near by district. There is no backup to the telephone communication system. If any back-up has been suggested, there are no monies to provide such back-up. We believe the phone lines would be very strained should an emergency occur and in our case (our phone systems are antiquated) we believe our phones would be unreliable. Sirens are sometimes heard and sometimes not heard. Radios may not be reliable as a means of communication if the electrical system goes out. Portable radios may be owned by the local schools but are certainly not provided by the emergency planners. If communications become a problem, it will be difficult for the person in Croton, who is first advised of the emergency, to pass that message along to each of the building principals as well as to the other schools on the phone chain. In summary, the communication system is a weak one.

If we are told to evacuate, Croton can provide enough buses, and hope that our drivers will be responsible enough to use them to evacuate all of our elementary school children. The location for the evacuation is White Plains. There are many in Croton who have suggested that sending our children into a highly populated area is unwise. There are others in Croton who feel that the route our buses are asked to take would result in very lengthy delays. An outside bus company (the Chappaqua Bus Company) has been designated as the bus company who will evacuate our high school and middle school children. To the best of my knowledge there has been no contract between the agency that the Chappaqua Bus Company would be responsible to which would assure us that the company could be relied upon to provide emergency evacuation for our secondary children.

We have communicated with the administrators of the host schools in White Plains who, presumably, would take care of our children once they were delivered to them. We have been advised by those administrators that they have received little or no direction concerning how long they would take care of our youngsters, who would supervise our youngsters and for how long, how our youngsters would be turned over to their parents or guardians and other concerns related to the safety of our children.

Members of our professional staff, as well as parents, feel very uncomfortable with the many, many unanswered questions related to safe and efficient evacuation. We are unable to answer all of the questions that have been raised. Many of these questions have been forwarded to the consulting agency and the county officials and have continued to remain unanswered. While we would make every reasonable effort should there be a real emergency to cooperative in the evacuation plan as it currently exists, I must say that I have little confidence in its reality and will continue to have little confidence in its reality until those who are responsible for its development have provided more assurances in terms of the unanswered questions raised by parents, teachers and others regarding the safety of our children before, during and after the evacuation procedure.

David Sa egel

Superintendent of Schools

DSS:hhr

John Iurato Croton-Harmon High School Old Post Road, S. Croton-on-Hudson, NY

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The Croton-Harmon School District has been involved in planning for an emergency at Indian Point since November 13, 1980, when I represented the district at the meeting held at BOCES, Yorktown, N.Y. We were one of seven districts who responded out of 19 invited.

We were informed that other review meetings would be held as the plan was developed, but no further meetings were held.

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We expected to receive a copy of the completed plan and were surprised to learn in late April, 1981, that the plan was complete. We managed to borrow a copy for 2 hours on May 1 in order to copy the pages pertaining to schools. As a result, of an informational meeting sponsored by our own PTO on May 6, a Croton parent who is a PASNY employee provided us with our own copy of the plan.

Our school district has taken its responsibilities in emergency planning very seriously and has taken steps beyond those called for in the official plan. Even so, many problems remain. We have raised several connerns which have not, as yet, been adequately addressed,

- We pointed out the need for a back up communication system to the phone relay and suggested crystal radio sets. We have heard nothing further about a back up communication system.
- (2) We requested that all children from Croton schools be assigned to one reception center, to minimize panic, confusion, and traffic problems in reuniting families. To date, children from CET elementary school are assigned to the Ridgeway School, while students in our middle and high schools will be taken to the SolomonSchecter School.
- (3) We have not been reassured that the County and State are prepared with personnel and equipment if the school districts cannot muster needed volunteers in case of evacuation.
- (4) The Chappaqua Bus Co., is assigned to our district, but was not contacted by the planners. Our District Superintendent contacted the company in May and alerted the President of the bus line that his firm was committed to transport our secondary school age students.

We also made recommendation, at a meeting sponsored by the Town of Cortlandt Supervisor, that the Chaqqaqua Bus Co. be encouraged to send a few buses to our middle school and high school as a drill to become familiar with our access roads. This recommendation was never acted upon.

(5) The police resources of the Village of Croton will no doubt be taxed to the limit during an evacuation, hence we are not confident that there will be adequate traffic control at and leading away from the schools.

- (6) Schools have been designated as reception centers, but none have not been given any direction as to their responsibilities during an emergency. We noted the following problems when we visited our designated reception centers:
 - No training of staff to handle problems connected with panic.
 - 2. No emergency supplies on hand to care for our children who may not be quickly reunited with their families.
- (7) It should be noted that as part of our planning responsibilities we contacted the school reception centers in August of 1981. We were frustrated to learn that the reception centers knew little or nothing about the evacuation plans and their specific roles. Furthermore, the "Rosedale School" designated as a reception center for our middle and high school students was no longer owned by the White Plains School District. We made contact with the new owners, which is the Solomon Schecter Religious Schools. We visited and designated holding areas for our students in case of an evacuation.

This experience illustrated the difficulty of keeping emergency lists accurate and up to date as well as indicating that the planners of the evacuation plan did not plan as well as they could and should have.

(8) We are very concerned about the possibility of massive traffic jams during an evacuation. Tow trucks have a major role in keeping the flow of traffic heading away from the emergency area, therefore I contacted the local gas stations that operate tow trucks and was astounded to find that they have never been contacted about their participation in the emergency evacuation plans.

We were very disappointed in the quality of the drill conducted on March 3, 1982. We had one substitute driver on stand by and that driver was used for an hour to simulate a bus run.

Allow me to echo my plea for the officials who are responsible for formulating an evacuation plan to recognize the fact that the present plan is inadequate. We need an evacuation plan that is developed by people who will stay in close contact with Village, Town, School and Countyofficials, so that they will follow up suggestions made to improve initial plans and to correct mistakes as is evidenced in the present evacuation plan. As Administrators, we are responsible for the safety and welfare of our students and are obligated to draw your attention to the lack of so many finishing touches in the proposed evacuation plan, and to the fact that they have yet to be addressed.

John Jurato

(2)

My name is Lynn Doughty. I live at East Mt. Airy Road, Croton on Hudson. I am the president of the Croton Harmon Board of Education which is responsible for the operation of the school district.

I think that the primary defect in the evacuation plan as it currently stands is that bus drivers from Chappaqua are expected to come into a fractionactive zone and take Croton students to White Plains. I think it is totally unrealistic to believe that these bus drivers will risk being exposed to radiation, or leave their own community which is not far outside of the 10 mile evacuation zone. Our middle school comprises grades 6-8. The plan currently calls for cur own Croton buses to evacuate grades K-6. Imagine the scene when our buses pull up to the Middle School, take out only the 6th grade and tell the 7th and 8th grades to wait!

I feel that it is even more unrealistic and unnatural for parents to permit their children to be evacuated under such circumstances when they have no idea what the outcome might be. Many school district residents have expressed the same concern to me and have stated unconditionally that their first action upon hearing of an emergency would be to go to the school and get their child. I share these feelings and would do the same. I envision mass chaos rendering an evacuation impossible when residents in their cars converge upon our elementary and middle schools which are located on narrow streets with limited access and turning area especially for buses.

The Croton-Harmon Board of Education has taken the position that the evacuation plan is unworkable and cannot possibly meet its objectives.

Lynn Doughty, President

INSERT# 5 110

Lynn Doughty

MS. POTTERFIELD: The witnesses are then
 available for cross examination.

CROSS EXAMINATION

BY MR. CZAJA:

3

4

5 Q Mr. Iurato, you testified telling us about 6 some of the additions to your testimony, you mentioned 7 about the radio sets that you have received. Could you 8 describe your understanding as to how those radio sets 9 would operate in the event of an emergency?

10 A (WITNESS IURATO) Each of the three radios 11 that we received in our district were placed in the 12 building, principal's office. They are plugged into an 13 electric supply. If in the event that the electrical 14 supply was to fail, they would automatically go on a 15 four-hour battery. That is our unierstanding. And if 16 there were any kind of emergency broadcast from the 17 country it would come over that particular radio.

18 Q And do you have any knowledge as to who19 supplied those radios to the schools?

A (WITNESS IURATO) There were two young ladies.
21 Dawe would have to help me on who they represented. I
22 thought they were from the Power Authority.

23 A (WITNESS SIEGEL) Con Ed.

24 MS. POTTERFIELD: If you will speak up, Mr.
25 Iurato, we are having trouble hearing you.

WITNESS IURATO: I have been informed that Con
 2 Ed supplied the radios.

BY MR. CZAJA: (Resuming)

3

4 Q In the first paragraph of your testimony, Mr. 5 Iurato, you refer to a meeting regarding emergency plans 6 held on November 13, 1980. What, to your knowledge, led 7 to that meeting being held? How was it organized?

8 A (WITNESS IURATO) Well, we were invited 9 through our local BOCES communications. The people who 10 chaired the meeting represented the Con Ed facility 11 through Parsons-Brinkerhoff consulting firm and somebody 12 from the County, I don't remember his name, was there, 13 and someone from the Power Authority, I believe.

14 Q And generally what was the substance of the 15 discussion at that meeting? What was the nature of the 16 meeting?

17 A (WIINESS IURATO) They informed us that there 18 was in the working a plan to be devised some time in the 19 future to address an emergency at the Indian Point plant 20 and we were there to offer information that could be 21 helpful.

Q Did you offer information on that occasion?
A (WITNESS IURATO) Yes, we did.
Q Turning to page two of your testimony, Mr.
Iurato, unler paragraph seven, the second full paragraph

under that number, you discuss the difficulty in keeping
 your emergency list accurate and up to date.

3 Do you have any knowledge of the provisions
4 that the State of New York has adopted for updating the
5 plan?

6 A (WITNESS IURATO) No, I don't. And if you 7 would like to know how we first obtained the plan, I 8 would be glad to offer that information.

9 Q No. The "no" answer is responsive to my 10 question. We will move more quickly if you just respond 11 to my question. I'm sure Miss Potterfield will have 12 redirect.

13 A (WITNESS IURATO) Would you repeat the 14 question?

15 Q You have no knowledge, is that correct, of the16 State procedures for updating?

17 A (WITNESS IURATO) No.

18 Q Now with regard to your comment on tow trucks 19 in paragraph eight, do you have any knowledge regarding 20 the provisions in the plan for removal of stalled 21 vehicles from roads?

A (WITNESS IURATO) I had the privilege of reading through the proposed emergency plan back in April of 1981, I believe, and my recollection is that there were statements to the effect that tow trucks

would be placed or available every mile or mile and a
 half along escape routes. Living in a small village
 such as Croton, thore are only four service stations and
 three of them have tow trucks.

5 Being interested in our evacuation plan, I 6 spoke to the onwers of those three tow trucks and none 7 of those parties had ever been contacted or knew about 8 the evacuation plan or their part to play in it.

9 Q So when you say you contacted local gas
10 stations, you telephoned three people, is that correct?

11 A (WITNESS IURATO) I spoke to one in person and
12 two on the phone.

Q And since April of 1981 have you seen any
revised portions of the plan dealing with tow trucks?
A (WITNESS IURATO) No, I have not. Can I -Q No, that is responsive to the question.
Mr. Siegel, turning to your testimony,

18 paragraph three, the last sentence of that paragraph, 19 you state: "Certainly some efforts were made to gain 20 input and information from those school districts in the 21 immediate region." Could you briefly describe the 22 nature of those efforts?

23 A (WITNESS SIEGEL) Yes. The nature of those
24 efforts are repeats basically of what Mr. Iurato has
25 just reported and that was that the agency that had been

employed to develop a plan did contact our BOCES or
 Board of Cooperative Educational Services, did schedule
 a meeting and did at that time indicate the kinds of
 things that they were concerned with, asked us, for
 example, for information concerning the number of school
 buses that we had, the capacity of our school buses, our
 drivers, et cetera.

8 That is what I refer to in that paragraph. 9 Q Ms. Doughty, as I understand the third 10 paragraph of your testimony, you have a concern with the 11 situation in which parents would be evacuated separately 12 from their children. And, as I understand your 13 testimony, in your case you would go to the school to 14 pick up your child. Is that correct?

A (WITNESS DOUGHTY) My three children in three
separate school buildings, that is right.

17 Q And you are dissatisfied with that aspect of18 that plan, is that correct?

19 A (WITNESS DOUGHTY) Very much so.

20 Q And as I understand your testimony with regard 21 to the changes in your direct testimony, the Westchester 22 County Executive has now made some proposals to deal 23 with that situation, is that correct?

A (WITNESS DOUGHTY) Yes. It is my
 understanding that Mr. O'Rourke has suggested that the

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1 school districts send children home. 2 Q But you remain dissatisfied with %r. 3 O'Rourke's proposals? 4 A (WITNESS DOUGHTY) I think it is impractical, 5 yes. 6 MR. CZAJA: I have no further questions of 7 this witness. JUDGE GLEASON: Con Ed? 8 CROSS EXAMINATION 9 BY MR. FARRELLY: 10 11 Q Mr. Siegel, have you taken part in any mass 12 evacuations? A (WITNESS SIEGEL) No. 13 14 Q Have you conducted any studies of how people 15 behave during mass evacuations? A (WITNESS SIEGEL) I have not personally 16 17 conducted such studies, no. Q Have you reviewed any plans for mass 18 19 evacuations other than the Indian Point plans? A (WITNESS SIEGEL) The Indian Point plan or the 20 21 Brinkerhoff plan is the only plan that I have ever read 22 in any detail. 23 Q At the bottom of page one of your testimony 24 you state that you hope that bus drivers will be 25 responsible in case of a radiological emergency.

A (WITNESS SIEGEL) Yes.

1

2 Q What has your experience been with the bus 3 drivers in the past? Do you consider them on the whole 4 responsible or irresponsible?

5 A (WITNESS SIEGEL) I consider them on the 6 whole, under normal circumstances, responsible. I'm 7 sure you would not want me to add to that statement, but 8 I do think that people under extraordinary circumstances 9 sometimes do not act as they do under ordinary 10 circumstances.

11 Q You are right. I didn't want the last part of 12 the answer.

13 Referring to the paragraph above that, in the 14 middle of the paragraph you state sirens are sometimes 15 heard and sometimes not heard. What sirens are you 16 speaking of in that sentence?

17 A (WITNESS SIEGEL) Well, the statement was 18 written probably about a year ago. I'm not sure of the 19 date. And at that time there were a series of tests or 20 attempted tests of the siren system, the warning 21 system. There were times when we heard them when we 22 evidently were not supposed to because they had gone off 23 without plan. There were other times when we understand 24 that they were being tested and we did not hear them. 25 That is what I had in mind.

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1 Q Mr. Iurato, referring to the second item in 2 your testimony, did you ask anyone the basis that was 3 used in selecting school reception centers?

4 A (WITNESS IURATO) Could you repeat that, 5 please?

Q I'm sorry. Beferring to the second numbered
7 paragraph in your testimony, did you ask anyone what the
8 basis was for selecting certain reception centers for
9 different schools?

10 A (WITNESS IURATO) No, we were not given an 11 opportunity to ask about the selection of reception 12 centers.

Q I'm sorry. You stated that you requested that
14 all children from Croton schools be assigned to one
15 reception center.

A (WITNESS IURATO) Yes. At that informational neeting held at our northern BOCES center when we were discussing any kind of an evacuation. I think the other seven people there were representing seven other districts. I think we were unanimous in asking that the one particular site be arrived at and we brought up some problems that were not encountered by the people who drew up the plan such that all the kids from our district.

Some of our kids are sent out of the district

25

to private schools and the technical center, which is
 north of our district.

3 Q At that meeting or subsequently were you able 4 to learn what the basis was for the selection of school 5 reception centers?

A (WITNESS IURATO) I inferred that it was
7 beyond the ten-mile limit and, therefore, was considered
8 to be safe.

9 Q In the third paragraph of your testimony you
10 referred to volunteers. Can you just tell me what
11 volunteers you are speaking of there?

A (WITNESS IURATO) The bus drivers. It is my unierstanding that the County buses were in the original plan, proposed plan, supposed to enter the danger zone, pick up people who did not have transportation out of the danger zone. Also, volunteers for the Chappaqua bus company, which is located out of our district, they would be called upon to enter our district and to pick up our secondary school kids and transport them to the reception centers.

Also, we have people that live outside of our district that are also part-time bus drivers that would have to be called in.

24 MR. FARRELLY: I have no further questions.
25 JUDGE GLEASON: Any redirect?

1	MS. POTTERFIELD: Just a few guestions,
2	그는 그녀면 사람들은 것이 같아요. 정말 것 같아요. 이 가지 않는 것이 가지 않는 것이 없는 것 같아?
	Judge.
3	REDIRECT EXAMINATION
4	BY MS. POTTERFIELD:
5	Q Mr. Iurato, I understood you to answer on
6	cross examination that three radios such as the one you
7	described have been given in your district. Will you
8	tell us which schools, if you know, and where they are,
9	have been given radios?
10	A (WITNESS IURATO) Mr. Siegel just corrected
11	me. Four radios were given to our school district. I
12	assume one is in the District Superintendent's office.
13	Each of the remaining three are in the building
14	principal's office that is, Carrie E. Tompkins
15	Elementary School, Pierre van Courtland Middle School,
16	and Croton-Harmon High School.
17	Q And are there other schools in your district,
18	then, that io not have radios?
19	A (WITNESS IURATO) There are no other public
20	schools in our district.
21	JUDGE PARIS: Could I ask a quick question
22	about the radios? Did you testify earlier that the
23	radios are turned automatically when the Emergency
24	Broadcast System goes on?
25	WITNESS IURATO: They did operate that way.

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1 JUDGE PARIS: What do you mean, they did? WITNESS IURATO: They did. We have had the 2 3 radios for a little over a week. There was a test on 4 the Friday the fourth. 5 JUDGE PARIS: Thank you. 6 MS. POTTERFIELD: Have you finished, Judge 7 Paris? 8 JUDGE PARIS: Yes, thank you, Miss 9 Potterfield. BY MS. POTTERFIELD: (Resuming) 10 11 0 You were asked about your possession or review 12 of the radiological emergency response plan for 13 Westchester County. How did you first receive that 14 plan? 15 A (WITNESS IURATO) David Siegel, our District 16 Superintendent, heard of the plan and obtained a copy 17 from the Village office for approximately two or three 18 hours and we read through it at that time. MR. FARRELLY: Your Honor, I am going to 19 20 object to the question and the answer. There was no 21 cross on that point at all. JUDGE GLEASON: Excuse me. I was conferring 22 23 with my colleague. MS. POTTERFIELD: Judge Gleason, my question 24 25 was based upon an answer that Mr. Iurato was trying to

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give when he was cross examined about his review of the
 Westchester plan and whether or not he had seen any
 revisions. He answered that he had not seen any
 revisions and offered to explain how he had first been
 able to review the plan.

6 Mr. Czaja assured him that I would ask the 7 question on redirect and I didn't want to disappoint 8 him.

JUDGE GLEASON: I would have been surprised if
10 you had not asked that question. The motion is denied.

BY MS. POTTERFIELD: (Resuming)

11

12 Q Mr. Siegel, since that answer involved your
13 participation, io you have any separate answer or
14 clarification to give just so the record is clear?

A (WITNESS SIEGEL) No. I think John answered the question beautifully. We were able to borrow the single copy that at that time seemed to be extant in the district which, by my best estimate, had to be at least four inches in terms of thickness. We had a brief time to study it and to extract from that plan or at least Xerox from that plan those pages which seemed to apply to the local schools in terms of what our responsibility might be.

24 Q So you have not received yourself any plan 25 revisions or been able to borrow the new Westchester

1 plan revisions, an I correct?

A (WITNESS SIEGEL) I don't think that is true. I think since that date we did receive a copy of an abridged plan as it affected the local schools, and basically that plan was -- I'm not sure whether it was any different than the original plan, but I think it was -- it came to us several months later and I think probably was sent to other schools in the area.

9 But I am not sure that it is a corrected plan
10 or whether it was simply a repetition of the earlier
11 one.

12 Q My question was in reference to the recent
13 publicized February revision of the plan.

A (WITNESS SIEGEL) All we know about the local plan or the most recent plan is what we read in the local newspapers. We have not received any official notice from County, State or any other agency concerning the new plan.

19 Q And that is true in terms of whatever
20 participation you may have had in the drill of March 9,
21 1983?

A (WITNESS SIEGEL) When that drill was in existence, the phone conversation that we had from the district that calls us under the plan was if this were the real thing you would send your children home, so

1 that is the simulation. It is the go-home drill.

2 Q Do I understand your testimony, Mr. Siegel, to 3 mean that you did practice the revision, the proposed 4 revision of the plan? In other words, you did practice 5 sending the children home?

6 A (WITNESS SIEGEL) No, we did not. The drill 7 that we had last Wednesday, as we understood it, was 8 simply a test of communications. The communication to 9 us, the message to us, was, as I said before, if this 10 were the real thing you would send your children home. 11 There was no direction to go through any simulation in 12 terms of sending our children home.

13 We did not practice that, nor were we14 instructed to do so.

MR. BRANDENBURG: Mr. Chairman, I would like 15 16 to object to this question on the same grounds that we male yesterday and were sustained by the Board, namely 17 18 that these witnesses' testimony speak as of June 1982 and that the questions asked materials that are 19 therefore not contained within the witness' direct 20 testimony -- that is, events occurring just last week. 21 JUDGE GLEASON: The Board has looked over that 22 23 comments, the interchanges that were made yesterday, Mr. 24 Brandenburg, and it finds itself in a very, very 25 difficult sitation, as I am sure the parties do, and I

believe which they affirmed, and although we would not permit simply because it would be unfair to the parties who have not had time to be apprised of substantially new testimony, I don't think in the context of where we are we can ignore the fact that there was a drill that occurred here a week ago and many of these people participated or did not participate in it.

8 And so, therefore, if testimony comes in on 9 this kind of a basis, we are going to permit it to come 10 in and this should not be construed as being an 11 invitation to put in substantially new testimony. So 12 the objection is ienied on that grounds.

13 MS. POTTERFIELD: I've lost my place again.
14 Could the court reporter refresh my recollection?

15 THE REPORTER: Juestion: Do I understand your 16 testimony, Mr. Siegel, to mean that you did practice the 17 revision, the proposed revision of the plan? In other 18 words, you did practice sending the children home?

19 Answer: (WIINESS SIEGEL) No, we did not. The 20 drill that we had last Wednesday, as we understood it, 21 was simply a test of communications. The communication 22 to us, the message to us, was, as I said before, if this 23 were the real thing you would send your children home. 24 There was no direction to go through any simulation in 25 terms of sending our children home. We did not practice

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1 that, nor were we instructed to do so.

2 BY MS. POTTERFIELD: (Resuming)

3 Q Then, Mr. Siegel, have you -- are you the 4 person who would normally receive instructions about 5 evacuating children in your school district, or is there 6 another official that might be more up-to-date about the 7 new revision than yourself?

8 A (WITNESS SIEGEL) I don't think there is 9 anyone in our school district who would be any more 10 up-to-date, better informed. There might be some who 11 would be equally informed with regard to the 12 responsibilities.

13 Up until the news reports indicating that our 14 County Executive has been considering an early dismissal as an alterate plan to the previous plan, if there had 15 16 been a disaster at Indian Point, we would have attempted 17 to follow the earlier plan as it had been proposed. We to not know that the new plan is official, if it is. If 18 it were going to be implemented under the current system 19 that exists, we would be informed in one of two ways, 20 21 possibly two of two ways.

I would receive a phone call from the school district that is located directly at the site of the plant -- the Hendrick Hudson School District. In that phone call I would receive instructions regarding what

1 the superintendent of schools in that district had been 2 told by the emergency center at Hawthorne. And if the 3 decision were to send children home we would follow the 4 procedures that we to follow in snow emergencies, and 5 those procedures certainly have several problems 6 attached to them.

7 They are not any simpler or without
8 difficulties as would the earlier plan have been, but
9 that is the procedure we would follow if we were so
10 directed.

11 Q And first, Mr. Siegel, will you describe for 12 the Board the location of Hawthorne, since we have just 13 given them a map and they may not be familiar with the 14 area?

15 A (WIINESS SIEGEL) Hawthorne is located in 16 southern Westchester. It is at the end of, what, at the 17 end of Taconak Parkway. I'm not sure.

18 Q That is on the east side of the River, is it?
19 A (WITNESS SIEGEL) Yes.

20 JUDGE PARIS: Miss Potterfield, could I 21 interrupt to ask a question about the sending the 22 children home procedure?

23 MS. POTTERFIELD: Yes, sir.

JUDGE PARIS: Mr. Siegel, when you enact your25 sending the children home procedure, do you summon buses

1 to come and take home the children that can't walk?

WITNESS SIEGEL: We use the system very sparingly. It is a system that exists in most local schools basically for emergency weather situations. If we had to close our schools in the middle of the day, we would have to make that decision in terms of bringing bus drivers in about an hour earlier than the actual dismissal time because many of our bus drivers are part-time employees and have other jobs.

10 So we would initially have to contact all of 11 our bus drivers. We do not transport all of our 12 children. Children who live closer to school are not 13 transported to and from school. They are walkers. It 14 would take approximately one hour to bring our buses in 15 and our buses would make more than one trip and so it 16 would take probably another 45 minutes to one hour to 17 send home all of the children who we bus.

18 Those children who normally walk would walk 19 home. One of the major problems involved in that 20 procedure is that many, many of our parents work and for 21 older children who would go home, who have keys to their 22 own house and who probably or possibly would know how to 23 handle themselves in that situation, we might feel a 24 little -- again in a snow situation -- relieved or, in 25 another type of situation for very young children who

1 might go home to empty houses or who might not have 2 access to their homes, we would be very concerned. 3 In a snow situation a lot of those youngsters 4 would probably be kept in school until such time as 5 their parents could be notified that we had to send them 6 home. Under this situation, we are not sure about the 7 options that we have. 8 JUDGE PARIS: Thank you. Thank you, Ms. 9 Potterfiel1. BY MS. POTTERFIELD: (Resuming) 10 Q I would like to ask each of the other two 11 12 witnesses if they have anything to add to Mr. Seigel's 13 comment about the proposed plan revision. A (WITNESS DOUGHTY) I do. 14 Q Miss Doughty. 15 MR. CZAJA: I am going to object to the 16 17 guestion as beyond the scope of redirect. MS. POTTERFIELD: I am simply following up on 18 19 Judge Paris' question to Mr. Siegel. JUDGE GLEASON. Your question was if they had 20 any comment about the plan revisions? 21 MS. POTTERFIELD: Judge Paris asked a guestion 22 23 of Mr. Siegel, and since we have a panel I asked if the 24 other members of the panel had any additional, separate, 25 non-cumulative comments to make in response to Judge

1 Paris' guestion.

2 JUDGE GLEASON: About bus transportation? 3 MS. POTTERFIELD: About the -- Judge Paris' 4 guestion, as I understood it, went to the new proposed 5 go-home scenario for schools. JUDGE GLEASON: About Mr. O'Rourke's 6 7 proposal? 8 MS. POTTERFIELD: I guess that's his 9 proposal. 10 MR. CZAJA: Judge, that's my problem. I don't 11 think we have any evidence. I honestly don't know any 12 more about it than reading in the newspapers. 13 JUDGE GLEASON: I don't think your question was directed,)r was it directed, toward Mr. O'Rourke's 14 15 proposal? JUDGE PARIS: It was directed toward the 16 17 send-the-children home procedure that the schools carry 18 out in an emergency such as a weather emergency. I'm 19 satisfied with what Mr. Siegel told me. I thought he 20 gave us a very thorough explanation. If either of the others has something 21 22 important to add, I would be happy to hear it. JUDGE GLEASON: I thought I recalled, Miss 23 24 Doughty, you being asked in cross examination whether 25 you were dissatisfied with Mr. O'Rourke's proposal.

1 Were you?

2

WITNESS DOUGHTY: Yes, sir.

JUDGE GLEASON: Then you can respond to the
4 question.

5 WITNESS DOUGHTY: A major problem, as Mr. 6 Siegel stated, is the question of adult supervision, 7 especially of very young children. The few parents who 8 are available during the day are backup parents, if you 9 will, listed on emergency sheets for many, many 10 children. We do have a telephone chain that we try to 11 implement in the case of early dismissal, but frequently 12 the information is not updated by the parents, despite 13 requests from the school district to io so, and 14 frequently it is not possible to contact either a parent 15 or a "backup" adult for the children to be sent home to. 16 In my own case -- and I really don't -- I know for a fact that my case is not atypical -- I am the 17 18 backup parent for nine children in addition to my own three. Some of them live in the village and would walk 19 20 from school. They are spread among all three of our school buildings and so that they arrive on different 21 buses. 22

23 One of them attends a special education
24 program over in Yorktown. If we had an ordinary early
25 dismissal procedure, it would be difficult enough to get

1 all twelve of these children under my supervision, but
2 it would be something that I seriously don't know how I
3 would handle if I were responsible for evacuating these
4 children, and this is a situation that I an certain
5 would arise in multiple numbers of cases in our village.
6 The guestion, too, of traffic congestion would
7 apply in this new proposed plan, as well as the old
8 one. I doubt that parents would wait for their children
9 to be bused home.

BY MS. POTTERFIELD: (Resuming)

10

11 Q I wonier if I might be permitted to ask two 12 quick follow-up questions that might give us an idea of 13 the range of the problem, Judge Gleason. I wondered if 14 the witnesses knew either the percentage of working 15 mothers or empty houses or the percentage of children 16 bused. That might just give us an idea of the scale of 17 the problems they have just discussed.

18 A (WITNESS DOUGHTY) I am not aware that we keep 19 any kinds of figures on numbers of working mothers or 20 numbers of empty households. I wouldn't be able to 21 respond to that. We bus approximately half of our 22 students.

23 Q And when you say "our students", how many 24 students are there?

25 A (WITNESS DOUGETY) What io we have, 1,300 and

1 change. In addition to that, we provide bus service to 2 many of the students in the parochial schools -- Holy 3 Name of Mary -- and many of the students to whom we 4 provide bus service are sent outside the district to 5 special education classes as far as 50 miles away in 6 some cases.

Buses are also frequently out of the district
8 during the day on field trips and would not be available
9 for evacuation.

10 Q I didn't hear the figure that you gave us for 11 the numbers of children.

A (WITNESS DOUGHTY) We bus fewer, or approximately -- I don't have a hard figure -- but approximately half or fewer than half, Mr. Siegel tells me, approximately 40 percent of our own students, and we bus those in two runs, so that our bus capacity is for nowhere near the total number of students that we have.

18 Q It was -- the number that I didn't hear.
19 A (WITNESS DOUGHTY) The total enrollment is
20 somewhere around 1,300 students. We bus approximately
21 40 percent of them and that is done in two runs.

22 Q And that is in addition to the other busing 23 that you do to the parochial schools?

24 A (WITNESS DOUGHTY) Well, the students that we 25 send to special education are included in that 1,300

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1 figure.

2 Q Mr. Siegel, you were asked on cross 3 examination about your testimony expressing concern 4 about the response of bus drivers in the event of an 5 emergency at Indian Point. Is your testimony based upon 6 your personal opinion or have you made any inquiries or 7 obtained any information about the possible or probable 8 response of bus drivers in that event?

(WITNESS SIEGEL) There was one point when we 9 A were initially talking about how we could implement the 10 plan that our transportation supervisor asked bus 11 drivers whether or not they were willing to volunteer 12 for duty during such a situation. And my best 13 recollection was that of the 18 or 19 drivers he had 14 15 only two or three who indicated any interest in volunteering. 16

Our reaction was that, of course, if we had an emergency we should not be asking for volunteers. We should be expecting that people would do their duty in all cases. But, as I indicated earlier, while we might expect the best behavior of all employees under extraordinary circumstances, we could only hope that that type of behavior would be forthcoming.

Q I understand from your testimony, then, that these bus irivers are in the employ of the school

1 district.

A (WITNESS SIEGEL) Most of our bus drivers are part-time employees. There are only two people in our bus garage who are full-time employees. All of our other drivers work in the morning, morning shift, fafternoon shift, and have generally other jobs that they attend to during the day, so they are employees but they are not full-time employees.

9 Q Are they employees under contract, though, to10 the school district?

11 A (WITNESS SIEGEL) We have a contract with them 12 that provides for salaries and working conditions. Under those circumstances, yes. But as part-time 13 employees, while some of them have been with us for 14 years we have a number of part-time employees who work 15 for us for perhaps a few months and then leave and are 16 replaced, so it is not -- we are talking about 18 or 19 17 employees, some of whom have been with us for a long 18 time, some of whom are with us for only short periods of 19 time. 20

21 Q My question went to any provision in the 22 school district's contract with the bus drivers 23 requiring them to come to work when it was not their 24 normal shift in the event of an emergency like a snow 25 day. MR. BRANDENBURG: I would object to this
 testimony as beyond the scope. It says nothing about
 bus drivers in here.

4 JUDGE GLEASON: Well, I think we would like to 5 hear an answer to it.

6 WITNESS SIEGEL: The language of the contract 7 is not specific with regard to the hours that they would 8 work or the shifts that they will drive. Our

9 expectation under the contract is that when we require 10 their service for normal bus runs they will be there and 11 for emergency bus runs they will be there. That is our 12 expectation.

13 BY MS. POTTERFIELD: (Resuming)

14 Q Can you give us an idea how many emergency bus 15 runs there have been since you have been superintendent 16 of schools?

17 A (WITNESS SIEGEL) In seven years I think we 18 perhaps have had only one early dismissal. I can recall 19 one. Again, we attempt to avoid that situation because 20 it is not a palatable way. We almost would rather wait 21 until the end of the school day than to send children 22 home in the middle of the day. It is done only under 23 dire circumstances.

24 MS. POTTERFIELD: If I might just have a few
25 minutes, other intervenor groups are asking me to ask

1 questions. It will just take me a minute.

2 (Counsel for Intervenors conferring.)

MS. POTTERFIELD: I just have three or four
4 more guestion.

BY MS. POTTERFIELD: (Resuming)

5

6 Q Mr. Siegel, following up on your testimony 7 about the bus irivers responding in emergencies, how do 8 you contact -- the one time that you had to do it, how 9 did you contact the bus drivers to respond?

A (WITNESS SIEGEL) The transportation director calls each of the drivers and asks them to come in at a particular time. As I indicated before, we generally need 45 minutes to an hour to get the buses ready, which means that he is bringing people in who work elsewhere and before we can get that first run the number of phone calls, the people coming back to our bus garage and getting the buses ready to take out, requires about anywhere between 45 minutes and an hour and then the contacts are made by phone.

20 Q So that there is no radio contact with the bus 21 drivers?

22 A (WITNESS SIEGEL) No.

Q Either in their buses or at their home?
A (WITNESS SIEGEL) Well, there is radio contact
with the drivers when the drivers are driving the

¹ buses. Each bus is equipped with an FM radio -- that ² is, a two-way radio -- but that would only be helpful if ³ the drivers were in the buses at the time that we needed ⁴ them. If they are at work or at home, we would have to ⁵ call them to bring them back.

G JUDGE PARIS: Miss Potterfield, could I get7 something cleared up here?

MS. POTTERFIELD: Surely.

8

JUDGE PARIS: It takes 45 minutes for the bus
drivers to get from their places of work to the garage
and then it takes some time for them to get their buses
revved up and to the schools?

WITNESS SIEGEL: I would say that if we are going to have an emergency closing we would need at least a 45-minute notice from the time we made the least a until the first bus started to pick kids up at school to take them home.

18 JUDGE PARIS: Thank you.

19 WITNESS SIEGEL: And that would be tight.

20 JUDGE PARIS: You said an hour earlier.

WITNESS SIEGEL: Well, I am suggesting between
45 minutes and an hour. I thik 45 minutes would be
tight.

24 BY MS. POTTERFIELD: (Resuming)
25 Q And do you have an estimate based upon your

1 one previous experience with an early dismissal of how 2 long it takes to call the parents of the younger 3 children?

A (WITNESS SIEGEL) We have a phone chain worked 5 out through the PTSA, but, as Mrs. Doughty had 6 indicated, that is not always reliable because phone 7 numbers change. Sometimes the parents are -- if they're 8 not working they are out shopping. And, again, our 9 experience there is that it takes -- I would have to --10 any answer I gave you would have to be very, very 11 guesstimate -- probably that same period of time.

Again, we are not making all the calls. It is a chain process so that other parents are calling and other parents are calling.

15 Q But what is the procedure for a parent in this 16 phone chain to let you know that they have been unable 17 to contact the parents that they are responsible for 18 contacting?

A (WITNESS SIEGEL) Mrs. Doughty might be able
to answer that question as a former PTSA member. I
think she can give you a more authoritative answer than
I would.

A (WITNESS DOUGHTY) Yes. I am still a PTSA
member but I am a former Vice President of the PTSA.
Class mothers -- there is a mother from each class

assigned to implement the telephone chain for that
class. Essentially, if you are not able to reach a
particular mother or group of mothers, the chain is
supposed to work backwards. The individuals who are the
last link of the chain are supposed to let the previous
link know which people they have not been able to
contact.

8 That information would work its way back up 9 the chain to the building principals, and then the 10 building principals would be left with the otions of 11 either retaining the children in school, which would be 12 an option in the case of the elementary children. We 13 wouldn't feel as uncomfortable about letting the older 14 children go home by themselves as we would about the 15 elementary school children.

So the other option would be to either send them home along or to retain them in school.

18 Q Maybe we could get an idea of the time, if you 19 can let us know, how many of your 1,300 students you 20 feel are younger and would be necessary to call home 21 first?

A (WITNESS DOUGHTY) The current enrollment in
the elementary school, which is kindergarten through
fifth grade, is, what, Mr. Siegel?

25 A (WITNESS SIEGEL) A little under 500.

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1 A (WITNESS DOUGHTY) The current enrollment in 2 the elementary school, which is kindergarten through 3 fifth grade, is what, Mr. Siegel?

A (WITNESS SIEGEL) A little under 500.
A (WITNESS DOUGHTY) A little under 50, K
6 through 5.

7 Q And would that be the group that you would 8 feel you would have to call home first?

9 A (WITNESS DOUGHTY) Yes, I would. It is my 10 opinion that children that age, especially under 11 emergency circumstances, should not be simply let out 12 the doors of the school to go home to an empty house and 13 have to fend for themselves.

14 Q And the remaining 800 students that are in the 15 middle and high schools?

A (WITNESS DOUGHTY) Again, it is a situation that I am not comfortable with, but we are talking about an age range. Some of those children are only 11 years old, and I would not feel very comfortable about them. Others are 18 years old and registered voters, and feel that hopefully they could make decisions and not have the emotional reaction that I would expect from younger children.

24 Q Well, let me ask you this, though. Is there a 25 school policy on how many of the school children that

1 you have, on how many of those children you would not 2 send home on early dismissal without calling their 3 parents?

A (WITNESS DOUGHTY) No. The only school policy 5 I'm aware of that even touches on that is that under no 6 circumstances would we send an ill child home unless we 7 were sure that there was an adult in the household. We 8 don't have a policy dealing with that. It is a question 9 of judgment, that the younger children would have to be 10 -- each situation would have to be assessed as it came 11 up as far as sending the younger children home.

12 Q And whose judgment would it be, then, in the 13 event of an early dismissal?

A (WITNESS DOUGHTY) I imagine the building
principals would confer with Mr. Siegel.

16 Q Is that your understanding also, Mr. Siegel?
17 A (WITNESS SIEGEL) Yes.

18 Q Mr. Iurato, let me just follow up finally on19 the questions that you were asked during

20 cross-examination about your testimony regarding your 21 unierstanding of the tow truck situation. I understood 22 that when you were asked a guestion on cross-examination 23 that you asked if you could explain further, and I would 24 like to give you an opportunity to do that, but I can't 25 remember the question.

(Counsel for Intervenors conferring.)

2 Q I think I remember the question. The question 3 was whether or not you were aware of revisions in the 4 plan regarding -- new revisions, new information in the 5 plan regarding tow trucks.

A (WITNESS IURATO) And I'm not aware of any
7 revisions affecting tow trucks.

8 Q And do you have anything, is there anything 9 you wanted to clarify about that answer?

10 A (WITNESS IURATO) Well, in the light of the 11 constructive criticism of the plan, I don't see how 12 anybody in a responsible position who has anything to do 13 with an evacuation of so many vehicles would not be in 14 contact with the tow truck operators and have signed 15 some kind of plan that would communicate with the 16 operators and designate how they would be used in an 17 emergency.

18 Q And you're still talking about the four or the 19 three tow trucks that are available to your school 20 district, in your school district?

21 A (WITNESS IURATO) Yes.

1

22 Q And so your testimony relates to your original 23 testimony about your understanding of their avareness of 24 the plan?

25 A (WITNESS IURATO) Yes. Since we only have one

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road leading south and that is the direction they would
 be sending our buses and our families, I was very much
 concerned about it.

Q Now, when you say you have three tow trucks 5 within the area, would you describe the geographical 6 area?

7 A (WITNESS IURATO) On Riverside Drive there are 8 four gas stations. Three of those gas stations operate 9 tow trucks. That is a mile or a distance of less than a 10 mile, probably three-quarters of a mile strip in our 11 village.

12 Q But my question went to the geographical area
13 served by those tow trucks.

14 A (WITNESS IURATO) From --

JUDGE GLEASON: I really think this is getting 16 way behind where his testimony on tow trucks is being 17 helpful at all.

18 MS. POTTERFIELD: In that event I have no 19 further questions.

20 JUDGE GLEASON: All right, fine.

21 Thank you very much. You are excused. We22 appreciate your testimony.

23 (Witnesses excused.)
24 JUDGE GLEASON: We will stand in recess until
25 1:30.

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1	(Whereupon, at 12:30 p.m., the hearing in the
2	above-entitled matter was recessed, to reconvene at 1:30
3	p.m. the same day.)
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AFTERNOON SESSION

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2 (1:40 p.m.) 3 JUDGE GLEASON: If we could commence, please. I understand there has been some discussion 4 5 with, I gather, most of the parties, I hope most of the 6 parties, about a change in the schedule, and that the parties are in agreement, and I will announce -- I will 7 8 read this schedule change and then ask if there is any 9 objection to it, and if not we will put it into effect. 10 We are talking about next week. Is Mrs. Fleisher here? 11 12 MR. THORSEN: Mrs. Fleisher will not be 13 returning today. 14 JUDGE GLEASON: In March 22nd in the afternoon, where we currently have Westchester County 15 scheduled, we would replace Westchester County with 16 Rockland County. I might say that we decided to hold 17 the hearings in Westchester County and not move out of 18 the County just because it is more convenient for 19 everybody -- for most everybody, I should say. 20 21 But in any event, on March 22nd Rockland County would replace Westchester County in the 22 23 afternoon. MS. POTTERFIELD: Is that the 22nd? 24 JUDGE GLEASON: The 22nd, Tuesday the 22nd. 25

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MS. POTTERFIELD: I understood that the
 Intervenors had five days, four days this week and - JUDGE GLEASON: Intervenors have the morning
 of the 22nd. That is according to the thing that was
 sent to you.

6 MS. POTTERFIELD: Yes, but I understood that 7 we had five full days allotted to us. Is that no longer 8 true?

JUDGE SHON: Counting the evening sessiontonight, that will make it five full days.

MS. POTTERFIELD: I'm sorry, I did
misunderstand.

JUDGE GLEASON: On March 23rd, Rockland witnesses will continue in the morning and consume that time. So this gives another half day to the witnesses on the schedule for Rockland County. On the afternoon of the 23rd, the schedule will stay the same, with New Nork State witnesses.

19 Then in the eventuality that it requires it, 20 which I think it will require but we will wait and see, 21 we will then continue that evening on March 23rd to 22 hopefully finish up the New York State witnesses, either 23 recessing and having the County back in the evening or 24 going on until 6:30 or 7:00, depending upon where we 25 are.

In the eventuality that that does not conclude the cross-examination of the New York State witnesses, we will carry that over until the morning of March 24th, when this courtroom is not available, but we will find another room somewhere here that is available. I believe that has been done on one other occasion, some other room that is in a close-by building under the jurisdiction of the County, the County authorities.

9 And then the afternoon of March 24th
10 Westchester will replace those currently scheduled for
11 New York State and that will get our schedule back
12 beginning on the 25th with the Licensees.

13 If there is no problems with that, why, we
14 will announce that as a change. You're not going to say
15 that's a problem, are you, Mr. Czaja?

16 MR. CZAJA: I wouldn't say it rises to the 17 level of a problem, Judge.

18 JUDGE GLEASON: It is a very slight19 modification, really.

20 MR. CZAJA: In our discussions with Rockland 21 and Westchester, the notion arose that once their 22 schedule was set and they knew when they were going on, 23 if the parties could agree we might swap half a day on 24 the 25th with Rockland or Westchester, because one of 25 our witnesses on the onsite panel has now become very

1 difficult to be available on the 25th.

If we can't work it out, we will go on the 3 25th. I don't intend to bring it to the Board's 4 attention --

5 JUDGE GLEASON: Well, see what you can do. 6 MR. KAPLAN: Judge Gleason, still left open is 7 the question by Judge Laurenson, and that is the 8 scheduling of Dr. Seamoss, the remaining New York City 9 Council witness.

10 MR. CZAJA: Judge, I'm happy to report that I
11 have just heard that the 25th is now skay.

12 JUDGE GLEASON: Fine. Then we can ignore13 those comments.

14 We have not decided on that, Mr. Kaplan. We
15 will make some decision with respect to that request and
16 advise you.

MS. POTTERFIELD: Judge Gleason, I am looking
at a mailgram that we received on March 11th that
indicates that -- excuse me. I beg your pardon.

20 MR. THORSEN: Your Honor, yesterlay Rockland 21 County, we brought up the subject, or the subject was 22 brought up, of testimony regarding the March 9th drill. 23 Yesterday you asked me to put a motion in writing 24 regarding that testimony. If you want the written 25 motion I will be glad to supply it, probably tomorrow.

I need to determine what the order my witnesses will be going in and what witnesses I would be putting on. Since we have substantially less time if the Board would rule, if you are telling me now -- if you would tell me now that my witnesses will not be testifying or not be permitted to testify on the March 9th drill at this time, but will be permitted to testify at a later time, it would make my schedule much easier.

9 JUDGE GLEASON: We have not made a decision 10 with respect to scheduling additional time for direct 11 testimony on the March drill for anybody except the FEMA 12 witnesses. I indicated yesterday we had not foreclosed 13 that possibility, but we were not ready to rule on it.

In the eventuality that you wanted to put on witnesses from Rockland County with respect to that drill, there is a problem of providing time for them to take depositions, and we obviously don't have this kind s of time available.

MR. THORSEN: When we requested three days, I
was anticipating we were going to be testifying on those
issues. That is why I requested three days.

JUDGE GLEASON: Well, that is the answer as 23 far as I can give it.

24 IR. THORSEN: All right, fine. Thank you.
25 MS. POTTERFIELD: Judge Gleason, I do have

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some relevant comment, finally. We have requested that
 the hearing day on Friday, that is this Friday the 18th,
 commence at 8:30 because of the unavailability of Dr.
 Solnit beyond 10:30 that morning. And I wonder, I have
 asked for --

6 JUDGE GLEASON: I'm glad you brought that up, 7 because I have been given a note to that effect and I 8 had overlooked it.

9 The Board has no objection, but do any of the
10 parties have an objection for that purpose?

11 MR. CZAJA: There are some rumors down here,
12 Judge, about it being the day after St. Patrick's Day.
13 But we have no objection.

14 JUDGE GLEASON: Well, I hadn't forgotten 15 that.

16 (Laughter.)

JUDGE GLEASON: I will have to say that, being
away from my home turf, I don't think I will have a
problem with that.

20 MR. BRANDENBURG: Con Edison has no problem 21 with the proposal, Mr. Chairman. I do recall, however, 22 that the person who has expressed the most difficulty 23 with getting here early is Mrs. Fleisher, who keeps 24 reminding us of the difficulty of getting back and forth 25 across the Hudson River.

1 JUDGE GLEASON: That is a point which Judge 2 Shon just brought up. Do you want to see if you can 3 clear that up with her if she has any problem? MR. THORSEN: I would be happy to. 4 5 JUDGE PARIS: Can you get here by 8:30, Mr. Thorsen? 6 7 MR. THORSEN: Yes, I can. JUDGE GLEASON: So we will put that in the 8 9 order, then, to start at 8:30 on Friday. 10 All right. Without any further objection to 11 that schedule, then we will put that change into 12 effect. And if you would now call your next witness. 13 MS. POTTERFIELD: Thank you, Judge. Dr. 14 Murray Melbin. 15 16 Whereupon, MURRAY MELBIN, 17 18 called as a witness by counsel for Intervenor NYPIRG, 19 having first been duly sworn by the Chairman, was 20 examined and testified as follows: DIRECT EXAMINATION 21 BY MS. POTTERFIELD: 22 Q Dr. Melbin, would you state your name and 23 24 address for the record? A (WITNESS MELBIN) I am Murray Melbin, 1137 25

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1 Massachusetts Avenue, Cambridge, Massachusetts.

2 Q Do you have before you, Dr. Melbin, the 3 testimony that you wish to present to the Atomic Safety 4 and Licensing Board?

5 A (WITNESS MELBIN) Yes.

6 Q Do you have any additions to that testimony? 7 A (WITNESS MELBIN) Only to say that I have 8 continued the research that I have been doing and it 9 included, since I submitted this, a study of the Kemeny 10 report on the Three Mile Island accident, and I judge 11 that the comments I make here are applicable to that 12 case, too.

13 Q Apart from that addition, then, Dr. Melbin, is
14 the testimony true and correct to the best of your
15 knowledge and belief?

16 A (WITNESS MELBIN) Yes.

17 MS. POTTERFIELD: I move the admission into
18 evidence of Dr. Murray Melbin's testimony as if read.

19 JUDGE GLEASON: Is there objection?

20 MR. CZAJA: Yes, Judge. We have objected to 21 Dr. Melbin's testimony in its entirety. We think it is 22 a paradigm of the type of evidence that is irrelevant to 23 the type of questions before this Board.

24 Dr. Meltio offers some very general comments 25 about human behavior at night. We don't think it

relates to questions 3 and 4. We don't think it relates to any of the contentions under that question, and we think it is the type of testimony which the Commission clearly intended would not be before the Board in an expedited hearing designed to focus on very specific problems arising from the population density around Indian Point.

8 Dr. Melbin's testimony is very generic in 9 nature and could apply to any emergency plan at any 10 nuclear power plant in the country.

MR. BRANDENBURG: Con Edison similarly moves,
Mr. Chairman, for the striking of this witness'
testimony. There is no reference at all to compliance
or noncompliance with NRC or FEMA guidelines in the
testimony. There are no proposals for improving the
offsite emergency procedures.

I would even go further than my fistinguished brother from the Power Authority and say this testimony would be no more relevant to any proceeding which engaged in or which was concerned with any type of human activity occurring in the nighttime hours, I think it is that general.

23 So Con Edison similarly requests that the
24 Board strike this testimony.

25 JUDGE GLEASON: Ms. Potterfield?

MS. POTTERFIELD: Well, Judge Gleason, we have a question relating to human response. Dr. Melbin's testimony is as relevant to that as is the very general testimony offered by the Licensees by Dr. Dynes and Dr. Lecker.

6 I have to say I think their objection is7 frivolous.

(Board conferring.)

9 JUDGE GLEASON: The Board denies the objection 10 and believes that the request made by the attorney for 11 Intervenor is well taken. We construe the testimony as 12 an allegation, if you will, of an expert about activity 13 in the evening that is not provided for adequately in 14 the emergency plans, and with that kind of an 15 understanding the testimony is accepted.

16 And without further objection, the testimony 17 will be received into evidence and bound into the record 18 as if read.

19 (The document referred to, the prepared20 testimony of Dr. Melbin, follows:)

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TESTIMONY OF MURRAY MELBIN, PH.D. COMMENT ON EMERGENCY PLAN FOR INDIAN POINT POWER PLANT

INSERT#6 /68

I. Credentials

I am Murray Nelbin, Professor of Sociology at Boston University. For the past ten years I have been studying aspects of human life around the clock, including its social, psychological, biological, and economic dimensions. My work might be called a 'temporal ecology of society.' It deals with rhythms of emergencies as well as with normal behavior and the functioning of organizations.

II. Capability and performance of individuals at night.

Humans have distinct 24-hour cycles for many of their physiological functions, including heart rate, breathing, body temperature, production of various hermones and decision speed in the brain.

These bodily conditions are related to performance, and almost everyone is more sluggish at night and has less mental acuity. On the job, where such aspects could be measured, there are more errors of judgment than are made in the daytime. Impaired performance shows itself in decreased visual sharpness (1), slower responses to telephone calls (2), more accidents involving the operation of machinery (3), slower work on precise tasks and more of it defective. (4) In general the efficiency and grade of workmanship at night is inferior to that of daytime. (5)

One conclusion from this is that any set of plans will be carried out less effectively at night, and additional precautions have to be taken to compensate for the risks of errors in judgment and behavior.

The risks are compounded if the personnel are subjected to erratic shift work schedules, for these interfere with short-term memory as well as performance. (6)

Furthermore, there is fairly widespread evidence that at night "monitoring personnel," that is, those whose work entails surveillance in situations in which most of the time 'nothing' happens, sleep on their jobs. (7) Even if only some of the utility employees do so, it still raises the likelihood of delay in detecting a malfunction then.

Many organizations are continually active but their primary administrators--directors, heads of departments, mayors--are asleep at night and a decentralization of power is in effect. To some extent this is the result of authority explicitly delegated to lower echelon personnel. But it also happens that lower echelon personnel are reluctant to waken their superiors, and lesser officials make decisions that in the daytime would be deferred to higher-ranking staff. There is a strong disposition on the part of those awake to imagine that matters can wait until the following morning. Both have happened when national security was at stake. (8)

The implications for coping with an emergency in a nuclear power plant is that at night there will be an increase in the normal tendency to delay. There may be postponement 1-of imperative actions and 2-of notifying responsible authorities who are sleeping; and, given the lower level of alertness and acuity at that time, the report is more likely to be inaccurate.

III. Vulnerability of suddenly wakened people.

Sleep has a typical sequence of four stages, and this cycle is repeated several times during the night. Stages 3 and 4 are ones in which the person does not dream, is least responsive to the environment, and very difficult to rouse. When wakened from stage 3 or 4 sleep, a person is muddled and disorganized and may not remember what is said even though attempting to be coherent. (9)

The implication of this is that people wakened at night will be less effective. When told what to do in an emergency they may misunderstand or misinterpret instructions and do the wrong thing. Top officials roused then will not be able to function with clarity right away.

IV. Dispersal of people and activities around the clock.

I have seen estimates of evacuation times for daytime and nighttime conditions prepared by Parsons, Brinckerhoff, Quade & Douglas, Inc., which indicate that evacuation is assumed to be quicker and easier at night. Such a conclusion may ignore several important factors, as follows:

Evening and night shift work is common and large numbers of people are so employed. Ten million people are on the job at ten o'clock in the evening, seven million are working at midnight, and during the night the figure does not go much lower than four million. (10) Most of these individuals come from separate households. In families having more than one adult in the work force it is common for the members to work on different shifts.

The implications of this are that one cannot assume that

all members of a family are together after dark and throughout the night. In great numbers of households one member is away on the job during that period. In case of an emergency, night workers would probably want to telephone home (which would burden the phone lines more than anticipated), and then would attempt to travel home to reunite with their families before undertaking evacuation. Those families may delay departures while waiting for the workers to return. Indeed, shift workers are more likely to use their own cars rather than public transportation in order to get to work, which means that the family car will not be at home at night in those families; they would not have ready transportation then.

The night is usually a time of rejuvenation for the community itself. Maintenance activity is carried out. Cleaning and repairing takes place, and "down time" for many machines are scheduled then for such purposes. Vehicles and transit system tracks undergo repair during the night, bridges are closed to traffic while roadbed and cable maintenance are performed, and turnpike entrance and exit ramps are closed for reconstruction and new construction. Most of these activities have irregular schedules.

The implications are that traffic system capacity during the day may be sharply curtailed at night and create bottlenecks or unfamiliar detours. It may not be possible to activate them quickly. To get bridges open, to get vehicles out of repair, to get tracks cleared, may require hours of work before the system is as usable as during the day.

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Notes

1) Bjerner, B., Holm, A., and Swensson, A. "Diurnal variation in mental performance" <u>British Journal of Industrial Medicine</u> v.12, 1955:103-110.

2) Brown, cited in Luce, Gay Gaer BIOLOGICAL RHYTHMS IN PSYCHIATRY AND MEDICINE Washington, D.C.:National Institute of Mental Health, PHS Publication #2088, 1970.

3) von Hentig, Hans THE CRIMINAL AND HIS VICTIM Archon Books, 1967; also Fishwick, Frank and Harling, C.J. SHIFTWORKING IN THE MOTOR INDUSTRY London: National Economic Development Office, 1974.

4) Fishwick, Frank THE INTRODUCTION AND EXTENSION OF SHIFTWORKING London: National Economic Development Office, 1980:24.

An example of the difference in performance by time of day, in a situation involving human lives, is that ten times as many airplane accidents occur at night as in the daytime. (NOVA program, WCBH-TV, Boston, January 1975.)

5) Smith, Robert S. MILL ON THE DAN: A history of Dan River Mills, 1882-1950. Durham, North Carolina: Duke University Press, 1960:220.

6) Tapp, W.N. and Holloway, F.A. "Phase shifting circadian rhythms produces retrograde amnesia." <u>Science</u> v.211, 6 March 1981:1056-1058. This is based on an experiment with rats, an animal whose physiology closely resembles that of humans.

There are further indirect harmful effects of erratic schedules, which make sleep inadequate. People awake at night who have not slept well have an additional handicap to competence. Czeisler, C., Weitzman, E., Moore-Ede, M.,. Zimmerman, J., and Knauer, R., "Human sleep: Its duration and organization depends on its circadian phase," in <u>Science</u> 12 Dec 1980:1264-1267.

7) Some police officers on duty make themselves unavailable by sleeping in their cars, an old custom in New York City where it is called "cooping." <u>New York Times</u> "'Cooping': an old custom under fire" 15 Dec 1968:Sec.4,6E. Hospital personnel have been found sleeping at their posts. <u>New York Times</u> "Auditor raids at 3 state hospitals find 22 night employees asleep" 26 June 1977:14.

B) The penalty fol postponing a matter of vital interest from night to morning was dramatized harshly by the sequence of events that ended with the bombing attack on Pearl Harbor on December 7, 1941. (a) Having intercepted and decoded messages from Japan to its envoys is the ten days preceding December seventh, the leaders of the united States knew that trouble was brewing fast and that a rupture in relations with Japan, and war, was imminent. (b) Yet in spite of the fact that the War and Navy Departments had been alerted and lights in those offices burned all night (c), the Secretary of the Navy called a meeting of the heads of state for the <u>next morning</u>, Sunday, at 10 a.m.. <u>Nighttime</u> then was perceived to be a phase during which even urgent business could be suspended. A message alerting the garrison was sent, but arrived four hours too late. Assuming that all other mistakes and delays had occurred (d), if the vital meeting had not been postponed because of nighttime the message would have arrived far enough in advance of the attack to disperse the fleet clustered in the harbor. a) This account is drawn from the following documents and the page references in the succeeding three notes refer to them:

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i. "Attack upon Pearl Harbor by Japanese armed forces" Washington, D.C.: U.S. Senate Document 159 (microfiche serial set 10676) 1942.

ii. "Investigation of Pearl Harbor attack" Washington D.C.: U.S. Senate Document 244 (microfiche serial set 11033) 1946.

iii. Morris, Richard B. and Irwin, Graham W. (eds) HARPER ENCYCLOPEDIA OF THE MODERN WORLD New York: Harper & Row, 1970. b) Ibid., ii:564,566-567.

c) Ibid., i1:557.

d) There were other factors contributing to the outcome and to the amount of damage wrought. (See ii:553, i:11-12, iii:502, ii:569,530.) But there would not have been such severe consequences if the meeting in Washington had been held Saturday night.

The attack on Pearl Harbor occurred forty years ago but it was not the only incident of its kind. On August 19, 1981, while the President of the United States was vacationing in California, a dogfight took place in the Mediterranean off the coast of Libya and two of that country's fighter planes were shot down by U.S. naval aircraft. News of the clash reached military headquarters in Washington, D.C. six minutes after the incident. It was after 11 p.m. in California. Presidential aides notified other top officials but did not inform the President until nearly six hours later. (e) It is fair to surmise that if it were earlier in the day the President would have been told immediately.

e) <u>Newsweek</u> "To the shores of Tripoli" 31 Aug 1981:14-18; also <u>Eacts On Eile</u> "U.S. Navy F-14s down two Libyan jet fighters" 21 Aug 1981:589-590. Such delays also occur in hospitals and factories.

9) Broughton, Roger J. "Sleep disorders: Disorders of arousal?" <u>Science</u> v.159, 8 Mar 1968:1070-1077.

10) U.S. Bureau of Labor Statistics data for 1980, gathered via the Current Population Survey. These are conservative estimates because some categories of workers are omitted.

These are figures for the entire nation. It is realistic to estimate the numbers for the greater New York metropolitan area as paralleling the proportion of the country's population living in the region.

1 MS. POTTERFIELD: The witness is available for 2 cross-examination. 3 CROSS-EXAMINATION ON BEHALF 4 OF LICENSEE CONSOLIDATED EDISON BY MR. BRANDENBURG: 5 6 Q Professor Melbin, have you testified on any 7 prior occasions in connection with a proceeding 8 involving a nuclear power plant? A (WITNESS MELBIN) Involving? 9 10 0 Nuclear power plants. 11 A (WITNESS MELBIN) No. 12 MS. POTTERFIELD: Dr. Melbin, if you will 13 speak up. We can't hear you on this side. 14 WITNESS MELBIN: No, I haven't. BY MR. BRANDENBURG: (Resuming) 15 Q Dr. Melbin, would you describe for us your 16 17 familiarity with the emergency planning regulations of 18 the Nuclear Regulatory Commission? 19 A (WITNESS MELBIN) Are you talking of them as 20 applied to the Indian Point plant? 21 Q No. For the moment I'm just talking about 22 your familiarity with the regulations themselves. A (WITNESS MELBIN) I'm not familiar with the 23 24 regulations. 25 Q Would your answer be the same, sir, for a

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1 document entitled "Criteria for Preparation and

2 Evaluation of Radiological Emergency Response Plans and 3 Preparedness in Support of Nuclear Power Plants," which 4 is also known as NUREG-0654? And I would like to show 5 you a copy of that.

A (WITNESS MELBIN) You don't have to. The
7 answer would be the same.

8 Q Now, would your answer also be the same, Dr. 9 Melbin, with respect to the Indian Point radiological 10 emergency preparedness plan?

11 A (WITNESS MELBIN) Are you referring to this 12 booklet?

13 Q Well, no. For the moment I'm referring to the
 14 plan --

MS. POTTERFIELD: The record should reflect
that the witness is holding up a public information
pamphlet.

18 WITNESS MELBIN: I don't believe I have looked
19 at the plan that you are referring to.

20 BY MR. BRANDENBURG: (Resuming)

21 Q But you do have before you, and I presume that 22 you have reviewed, the Indian Point emergency planning 23 brochure entitled "Indian Point Emergency Planning and 24 You"; is that correct?

25 A (WITNESS MELBIN) Yes.

1 Q Now, Dr. Melbin, in your testimony you posit 2 that there will be a period of time after an individual 3 is awakened from sleep in the evening, for whatever 4 reason, during which their functioning is impaired, 5 while they are waking up, things of that sort. And if I 6 can ask you to turn to page 2 of your testimony, the 7 last sentence in the second paragraph under caption III, 8 where you are referring to officials, decisionmakers, if 9 you will, "Top officials roused then will not be able to 10 function with clarity right away."

Now, my question is, what is a period of time that you re comfortable with for "right away"? That is to say, what period of time will transpire in your expert opinion after a person is aroused from a deep sleep before they are functioning in an acceptable nanner? Are we talking seconds, minutes, what have you?

18 A (WITNESS MELBIN) About 20 minutes as an upper
 19 bound.

20 MS. POTTERFIELD: Excuse me. Would you tell 21 me again where you're referring? I can't seem to find 22 it in the testimony.

JUDGE GLEASON: It's the middle of page 2.
 MR. BRANDENBURG: The last sentence under the
 caption III.

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MS. POTTERFIELD: Thank you.

BY MR. BRANDENBURG: (Resuming)

3 Q Now, Dr. Melbin, have you made a study of the 4 responses to emergency situations that involve 5 evacuation in a generic sense?

6 A (WITNESS MELBIN) No.

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7 Q Do you have any information for us, based upon 8 your own research or your review of the literature, that 9 would contrast the success, using whatever standards of 10 excellence you wish, between an evacuation that was 11 conducted in the laytime om the one hand and an 12 evacuation that was conducted in the evening on the 13 other, with emphasis upon the susceptibility of evening 14 evacuation to the sleepiness type issues, if you will, 15 that you refer to in your testimony?

16 A (WITNESS MELBIN) No. I have reviewed the
17 literature looking for those kinds of things. They are
18 rarely documented in the literature.

19 Q Are there any occasions that you can share 20 with us in which there has been an attempt made to 21 assess the effects of the sleepiness, if you will, 22 concerns that you have upon the success of a mass 23 evacuation?

A (WITNESS MELBIN) Not of a mass evacuation.
MR. BRANDENBURG: Mr. Chairman, I have no

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1 further guestions.

2 MR. CZAJA: I have a few guestions. 3 CROSS EXAMINATION ON BEHALF OF LICENSEE PASNY 4 5 BY MR. CZAJA: 6 0 Dr. Melbin, do you know or to you know of a 7 gentleman named Dr. Kai Erikson? 8 A (WITNESS MELBIN) Yes. 9 And do you know that Dr. Kai Erikson is a 0 fellow sociologist? 10 11 A (WITNESS MELBIN) Yes, he is a sociologist. Yes, we heard Dr. Erikson testify here 12 0 13 yesterday. One of the topics covered in Dr. Erikson's testimony was an evacuation at Mississagua on Ontario, 14 15 Canada. Are you familiar at all with that evacuation? A (WITNESS MELBIN) No. 16 Q Well, Dr. Erikson told us that that evacuation 17 18 took place under what he described as ideal conditions, and as one of the conditions which he testified 19 contributed to the ideal state in which that evacuation 20 took place was that it took place at night. Would you 21 disagree with Dr. Erikson's characterization that one of 22 the conditions contributing to an ideal evacuation is 23 24 the fact that it takes place at night? (WITNESS MELBIN) If that were the entire 25 A

1 statement, I would disagree. I would feel that there 2 was not sufficient basis to say that. 3 May I clarify something? No, I think you responded to the question. Q 5 Are you aware of any emergency response plan 6 for any nuclear plant in the United States which 7 incorporates the suggestions contained in your testimony with regard to behavior at night? 8 A (WITNESS MELBIN) No. 9 MR. CZAJA: I have no further questions. 10 JUDGE GLEASON: Mr. Kaplan? 11 CROSS EXAMINATION ON BEHALF OF 12 NEW YORK CITY COUNCIL MEMBERS 13 14 BY MR. KAPLAN: Dr. Melbin, my name is Craig Kaplan. I 15 0 represent the members of the New York City Council. I'm 16 joing to ask you a couple of questions. 17 Does the differential you hypothesize between 18 daytime and nighttime behavior, does that differential 19 20 change or joes the density of the population at issue have an impact on the nature of the differential you 21 22 posit? A (WIINESS MELBIN) The differential I posited 23 24 was, first, based on different times of day and night. 25 People do behave differently depending upon the density

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1	of people involved, so that it would be a relevant
2	connection between the two.
3	Q Well, could you amplify how the impact how
4	density impacts upon the nature of the behavior that you
5	posited?
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1 (WITNESS MELBIN) In general, when the number 2 of people involved are pretty few and sparse, then tend 3 to act independently of one another, and this sometimes 4 leads to accidental clashes because they aren't taking 5 the behavior of others into consideration.

As the number of people increases, they are more aware that others are behaving in relevant ways to their own behavior, and that tends to accumulate a certain coordinated pattern to the behavior at the upper end of the scale. That is where you start reaching the ceiling of high density.

12 Congestion begins to interfere with the 13 ability of the people to behave in their ordinary ways, 14 and various kinds of breakdowns of cooperation occur, 15 clashes among people and such matters.

16 Q Then would it be fair to say --

17 MR. BRANDENBURG: Mr. Chairman, I'm reluctant 18 to intervene, but it seems that this line of questioning 19 pursues not the daytime-nighttime differential which is 20 the subject of the witness' testimony, but a high 21 population-low population density differential. And to 22 the extent that this question relates to the latter I 23 submit that it is clearly beyond the scope of this 24 witness' testimony.

25 JUDGE GLEASON: Well, I'm trying to see where

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1 he's going with it.

BY MR. KAPLAN: (Resuming) 2 3 O Given the density situation -- or let's be --4 have you been, have you ever been to New York City? 5 A (WITNESS MELBIN) Yes, I was born and raised 6 there. 7 O Are you familiar with the Borough of 8 Manhattan? A (WITNESS MELBIN) Yes. 9 Using a rough and ready definition, would you 10 0 11 characterize Manhattan north of Fourteenth Street as a 12 densely populated area? 13 A (WITNESS MELBIN) There are certainly -- much 14 of it is, yes. 15 0 And we can use that as a model. Using 16 Manhattan, then, would you expect different kinds of 17 events to occur in the event of an emergency in an area 18 such as Manhattan, like Manhattan, based on the 19 daytime-nighttime differential? 20 In other words, starting with a densely 21 populated area, what I am looking for is your opinion as 22 to whether or not the planning process should 23 contemplate different kinds of behavior in the daytime 24 and the nighttime. 25 A (WITNESS MELBIN) Well, I think in part it

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should, because the densities of those areas change
according to time of day, and certain areas which have
certain densities in the daytime accumulate many more
people who have returned to their homes at night.
Consequently, a plan for that area which is based upon a
daytime density is not going to be fulfilled the same
way as a plan for that area based on the larger number
of people that are present at night.

9 0 So that I therefore would be fair to say that 10 -- the density aside, would it be fair to say from what 11 you've just stated that a planning process would have to 12 basically go on two tracks, one for daytime and one for 13 nighttime, that density -- irrespective of density --14 I'm sorry, irrespective of density, yes.

A (WITNESS MELBIN) You said two tracks?
Q One for daytime, one for nighttime,
contemplating as a consistent basis the population
differential.

(WITNESS MELBIN) That is one of the 19 A assumptions. Only, there are others as well. 20 21 0 Do you know who Russell Dynes is? 22 A (WITNESS MELBIN) Yes. Are you aware that Dr. Dynes has submitted 0 23 testimony in this proceeding? 24 A (WITNESS MELBIN) Yes. 25

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1	Q Do you know who Sydney Lecker is?
2	A (WITNESS MELBIN) Only from the deposition
3	that I real.
4	Q Are you aware that Dr. Lecker has also
5	submitted testimony in these proceedings?
6	A (WITNESS MELBIN) Yes.
7	Q You are familiar with that testimony?
8	A (WITNESS MELBIN) Yes.
9	Q To your knowledge, in the testimony that you
10	read did Dr. Lecker or Dr. Dynes consider the
11	differential between daytime and nighttime behavior in
12	their prescriptions for planning?
13	MR. CZAJA: Objection. This is in violation
14	of the Board's order.
15	JUDGE GLEASON: Objection sustained.
16	(Pause.)
17	BY MR. KAPLAN: (Resuming)
18	Q Do you believe that any prescriptions that an
19	approach to planning I'm sorry that projections of
20	human response in an accident in order to be adequate
21	need necessarily consider the differential between
22	daytime and nighttime behavior?
23	A (WITNESS MELBIN) Yes, very much so.
24	Q Did Dr. Lecker or Dr. Dynes do that?
25	MR. CZAJA: Same objection.

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MR. BRANDENBURG: Same objection.

JUDGE GLEASON: Objection sustained.

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3 MR. KAPLAN: Could I get a sense of the basis 4 for the objections and a basis for the rulings, in order 5 not to engage in frivolous questioning? I would like to 6 understand.

7 JUDGE GLEASON: Well, the testimony is not in 8 front of us.

9 MR. KAPLAN: But it will be. It has been 10 filed.

JUDGE GLEASON: I don't know whether it will be or not. It isn't to the Board until it is introduced. You're talking about things the Board has ho knowledge of, and that testimony is just not relevant this point.

16 MR. KAPLAN: Well, let me just state for the 17 record the following response to that and ask the Board 18 to reconsider. The hearing order in a proceeding such 19 as this is fortuitous in some sense. I never objected, 20 nor do I think it would be useful to object, to the 21 order that the Intervenors were to put their case on or 22 the fact that the Licensees were going to go 23 afterwards.

24 Given the fact that this Board is not a jury 25 in terms of lay people, I would ask the Board to allow

my questions to go in subject to connection, the
 introduction of Dr. Lecker's and Dr. Dynes' testimony.
 I would have no objection to the Board striking this
 testimony at a later date if the Licensees fail to offer
 Lecker and Dynes.

6 MR. CZAJA: Judge, so the record is clear, 7 there is an additional basis for my objection, that it 8 violates the Board's directive against non-adversarial 9 cross-examination, which this clearly is.

10 MR. BRANDENBURG: My objection is based upon a 11 third ground, Mr. Chairman. Whether this is adversarial 12 cross-examination or not and whether Dr. Lecker or Dr. 13 Dynes have preceded this witness to the stand, 14 irrespective of those situations, this witness did not 15 address the subject of Dr. Lecker's and Dr. Dynes' 16 testimony in his own direct testimony.

Now, it is clearly -- the questioning is beyond the scope of this witness' direct testimony and it is beyond the scope of the cross-examination that was conducted by the Licensees.

21 MR. KAPLAN: Do you want me to respond to 22 that?

JUDGE GLEASON: Go ahead. If you would liketo respond, please respond.

25 MR. KAPLAN: As to the latter point, when a

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1 witness testifies as an expert and there are other 2 witnesses who will be testifying as experts and the 3 testimony deals with the same issue, human response, it 4 is perfectly appropriate to ask one expert his opinion 5 of the testimony that another expert will be offering. 6 Expedition would argue that you do that when the expert 7 is on the stani, rather than have to bring Dr. Melbin 8 back after the formalities of the introduction of the 9 Lecker-Dynes testimony have been gone through.

I thought that we put to rest the question of adversarial before. I don't know that the obligation falls to each party to have to produce a witness to say everything that he wants the party to say or she wants the party to say, when cross-examination is available to belicit points that are within the scope of the direct.

16 There was no reason for us to consider putting 17 on a witness to testify to what Dr. Melbin would say, 18 having read his prefiled testimony and looking forward 19 to the opportunity, from an expedition point of view, of 20 having it ione through the direct or by cross-examining 21 the direct.

JUDGE GLEASON: Mr. Kaplan, there are ways, if you want to get his opinion -- he is appearing here as an expert witness -- there are ways to refer to testimony, putting it in forms of hypothetical questions

1 where you get his opinion on something.

2 MR. KAPLAN: If you want me to do that --3 JUDGE GLEASON: I don't want you to go any 4 which way. I want you to go whichever way you want to 5 30. 6 I will say this, that you are getting a little 7 far afield from adversarial type questioning. MR. KAPLAN: I'm going to ask him a 8 9 hypothetical now, and whether it's adversarial or not 10 will be determined by his answer. JUDGE GLEASON: Well, let's wait and see. 11 12 MR. KAPLAN: It's going to take me a few 13 minutes. I apologize. I thought expedition would be 14 served by asking this question directly, so it will take 15 me a few minutes to conjure up a hypothetical. (Pause.) 16 17 BY MR. KAPLAN: (Resuming) Dr. Melbin --0 18 (Pause.) 19 JUDGE GLEASON: Go ahead, Mr. Kaplan. 20 MR. KAPLAN: I would ask the Board whether 21 22 it's reconsidering the necessity that I go through the 23 hypothetical. JUDGE GLEASON: No, the Board is not 24 25 reconsidering at all. The Board is just talking to each

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1 other waiting for you to proceed. MR. KAPLAN: I'm sorry, I didn't want to 2 3 interrupt the Board. JUDGE GLEASON: Interrupt us at any time, 4 please. 5 (Laughter.) 6 7 BY MR. KAPLAN: (Resuming) 8 Q Let me give you a hypothetical, Dr. Melbin. 9 There is a radiological emergency at Indian Point and there are individuals --10 11 JUDGE PARIS: What time of day? 12 MR. KAPLAN: That was my next statement. 13 BY MR. KAPLAN: (Resuming) 14 0 And this is happening at 3:00 o'clock in the 15 morning, when we can assume or when you could assume 18 that the majority of the population within the 10-mile 17 EPZ and the 50-mile ingestion EPZ, and in fact those 18 people living on Eastern Standard Time, are probably in 19 bed. JUDGE GLEASON: I presume that is a given fact 20 21 in the hypothesis? MR. KAPLAN: Yes. 22 JUDGE GLEASON: I'm just trying to get the 23 24 record straight. BY MR. KAPLAN: (Resuming) 25

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1 0 Some of them are asleep and others of them are 2 engaged in other activity. 3 (Laughter.) 4 Now, the sirens go off, intentionally. 0 5 (Laughter.) Now, would you anticipate, based on your 6 0 7 experience, in the hypothetical -- withdrawn. Leave the 8 hypothetical, but withdraw the narrow question. In the situation in which all of these people 9 10 are asleep --11 MR. BRANDENBURG: I think you only said some 12 were sleeping. 13 (Laughter.) BY MR. KAPLAN: (Resuming) 14 Q We are dealing with people who are asleep, and 15 16 they are now aroused by the sounding of the sirens. In this hypothetical, would you be able to characterize 17 18 their psychological and physiological state when they 19 are awakened? MR. CZAJA: Objection. That is beyond the 20 21 scope of direct, it is improper cross-examination, and 22 it is not adversarial cross-examination. JUDGE GLEASON: Well, you're right on both 23 24 counts, but he took so long doing it, I am waiting for 25 the answer. Please respond.

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1 (Laughter.) 2 WITNESS MELBIN: I may have to ask for the 3 latter part of that question again. 4 JUDGE GLEASON: Are you serious? 5 WITNESS MELBIN: I would like to clarify. 6 You're asking whether in this posed situation 7 -- what I would expect to be the behavior of the people who were aroused by the siren? 8 9 BY MR. KAPLAN: (Resuming) 10 0 That's right. How would you characterize 11 their behavior, based upon your testimony? 12 A (WITNESS MELBIN) A certain portion of them,

13 and I will say roughly 50 percent of those sleeping, 14 will have been aroused from certain stages of sleep in 15 which they're very deeply removed from the surroundings 16 that they are in, and upon being aroused they will be 17 confused and not certain just what it was that aroused 18 them, nor will they even, though they go through the 19 motions of behavior that looks as if it is coherent and 20 focused, actually know what they are doing.

During that period of time, any information they receive from whomever they ask has a chance of being vulnerable to greater misunderstanding than about vulnerable to greater misunderstanding than about minutes later. That would be the first thing I would say about those people that were aroused.

1 Q In projecting human responses in emergency 2 situations, do you have an opinion as to whether or not 3 those projections which fail to consider the factors you just mentioned would be adequate? MR. CZAJA: Objection. That's not adversarial 5 6 cross-examination. 7 JUDGE GLEASON: Let him respond. Go ahead. 8 WITNESS MELBIN: Please ask again. 9 BY MR. KAPLAN: (Resuming) 10 Do you have an opinion, in light of what you 0 11 just told us about those individuals aroused from sleep, 12 that projections of human responses in the event of an 13 emergency that failed to consider the point you just 14 made are adequate or not? A (WITNESS MELBIN) They are definitely not 15 16 adequate. JUDGE GLEASON: This is really the whole 17 18 essence of his testimony, Mr. Kaplan, of course. MR. KAPLAN: What I wanted to do was have him 19 20 comment directly on Dr. Lecker and Dr. Dynes' testimony, but you've precluded that. 21 JUDGE GLEASON: Yes, I did. 22 (Pause.) 23 BY MR. KAPLAN: (Resuming) 24 Q Do you believe -- suppose we change the 25

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1 hypothetical and this wasn't just an average person, but 2 rather an emergency worker who was trained in 3 responding, in how to respond to emergencies and had 4 gone through training to deal with general emergencies 5 or radiological emergencies. Would you anticipate, 6 based upon your analysis in your testimony, a different 7 kind of response? 8 MR. CZAJA: Same objection. 9 JUDGE GLEASON: Objection is granted. You are '10 getting into an area that is redirect. 11 (Pause.) 12 MR. KAPLAN: I have no further questions. JUDGE GLEASON: Any redirect? 13 MS. POTTERFIELD: Yes, Judge. 14 REDIRECT EXAMINATION ON BEHALF 15 OF INTERVENOR NYPIRG 16 BY MS. POTTERFIELD: 17 You were asked on cross-examination, Dr. 18 0 Melbin, about whether or not you were aware of anything 19 20 in the literature regarding nighttime responses in a 21 mass evacuation. By guestion is whether or not you are aware of anything in the literature regarding nighttime 22 23 responses in a crisis situation? A (WITNESS MELBIN) Yes, I am. There are 24 25 various crisis situations which were dramatic and

important enough to be provided in some detail, and a
 number of them are nighttime situations.

Will you give us an idea of what crises you A have read about in the literature and what literature there is about the response of individuals to a crisis at night?

7 A (WITNESS MELBIN) The three instances which I 8 know most about do not have to do with mass evacuation 9 or nuclear power plants. One of them is the Pearl 10 Harbor situation. The other one is what happened at the 11 time two Libyan planes were shot down in the 12 Meliterranean, and the United States was in a period of 13 night at the moment. And the third is a situation in 14 which an intruder made his way into Buckingham Palace at 15 night and tripped certain alarms, and how people 16 reacted.

17 Those are the three situations which I studied
18 in most detail. The other which I've studied in detail
19 is the Three Mile Island crisis.

20 Q And what about the Three Mile Island crisis, 21 if anything, have you read that relates to your 22 testimony here today?

A (WITNESS MELBIN) The Three Mile Island
24 situation, as I'm sure most of you know in great detail,
25 was an accident and a crisis that developed after the

1 alarms went off. It was not something that was
2 originally a problem. The original problem was an
3 equipment malfunction. It was the behavior of the
4 people on the night shift which in the next few hours
5 resulted in omissions and -- errors of omission and
6 other actions, including errors of commission, which
7 multiplied the danger of the situation and resulted in
8 the risk of a meltiown.

9 Those particular events in the Kemeny Commission's report are attributed to the lack of 10 11 training of the individuals. The reason I paid a lot of 12 attention to the report was I was interested in whether 13 the other kinds of knowledge we have about performance deficits of people at night were at all addressed by the 14 Kemeny investigation, and I saw no evidence that it 15 was. I saw no evidence that any question was raised in 16 that investigation about patterns of erratic scheduling 17 which results in physiological upset of shift workers, 18 nor was there in the glossary of the report the presence 19 of a number of key words that I would have looked for to 20 show that the Commission was aware of the large body of 21 literature which does exist about the performance 22 deficits at night, such as physiological upsets, 23 24 circadian rhythms, shift work schedules.

25 Q

Now, do I understand your testimony that your

study of Three Mile Island is a study not of the
 residents around there, but the people working in the

3 nuclear power plant facility?

4 A (WITNESS MELBIN) Yes.

5 Q So you haven't done any study of the residents 6 and their response?

A (WITNESS MELBIN) Correct, I have not.
Q And I also understand your testimony, then,
9 that you don't disagree with the Kemeny Commission
10 report on the errors committed, but that it simply does
11 not address the area of your concern?

A (WITNESS MELBIN) That leads me to disagree, since the conclusions of the Kemeny Commission report indicated the strategy that would be followed to prevent certain situations like that occurring in the future, and apparently it is going to be addressed mostly to training and not to other kinds of risks that the personnel on the night shift are exposed to.

19 Q So is it your testimony that training won't --20 does not help overcome the disruption of physiological 21 functions that you believe might be responsible for 22 errors committed at night?

A (WITNESS MELBIN) I would like to answer that
in this way. Training would raise the level of
competence at a person at any time of day or night.

Training does not have anything to do with improving
 one's competence based upon the deficits that would
 occur because of physiological upsets which occur at
 night.

5 Q Well, do you have any suggestion for being 6 able to improve that performance deficit that you have 7 testified about?

8 A (WITNESS MELBIN) Yes, there are suggestions 9 that could be made. I have them and other people do, 10 too. There has been a lot of work done on it and 11 experimental work, including my own, including what sort 12 of shift work schedules are most troubling to 13 individuals and which are the least troubling.

And presumably what I would suggest is the nost constructive kind of shift work schedule vis a vis the effects on the biology of the individual should be followed.

18 Q Dr. Melbin, you were asked on
19 cross-examination about the testimony of Kai Erikson and
20 allowed to answer that and there was no objection.

MS. POTTERFIELD: And I assume that the Board's ruling on being asked about Dr. Lecker and Dr. Dynes doesn't apply to the cross-examination that was done about Dr. Melbin's awareness of Dr. Erikson's testimony. Am I right?

JUDGE GLEASON: Dr. Erikson's testimony is
 referred to.

3 MS. POTTERFIELD: He was cross-examined about
4 that and he was not permitted to be cross-examined about
5 Dr. Lecker and Dr. Dynes' testimony. So I am at a
6 loss.

JUDGE GLEASON: No. If it has been opened up
8 you can cross-examine on it.

9 MS. POTTERFIELD: Thank you.

10 BY MS. POTTERFIELD: (Resuming)

Q Specifically, you were asked about Dr.
 Erikson's conclusion about the Mississagua evacuation,
 and you wished to clarify your answer, and I will now
 ask you if you will do so.

A (WITNESS MELBIN) I am trying to remember the exact question that was asked of me. The question was rasked in a way I did not know whether the evacuation was planned at a certain hour, but that people were aware of it a long time before, for example two hours before, or whether everything erupted at the time and occurred.

Since I don't know about the Mississagua incident at all, I could only answer the question asked of me earlier the way I did. But I don't have full information for deciding that that is really ideal conditions or not, and I wouldn't know whether it was

comparable to the kinds of situations I'm talking
 about.

3 Q And the factors that would make a difference 4 to you before making that opinion would be the advance 5 warning time for the avacuation?

6 A (WITNESS MELBIN) Yes, that would be one of 7 the things.

8 Q And what would be the others, if there are any 9 others?

10 A (WITNESS MELBIN) It is hard for me to 11 speculate what they would be, because I don't know the 12 circumstances of the event. But one thing certainly 13 would apply, because it has to do with how people react 14 when they are aroused from sleep and how long it takes 15 for them to become adjusted.

16 Q You were asked on cross-examination also, Dr.
17 Melbin, whether or not you are familiar with the
18 radiological emergency response plans for Indian Point.
19 I ask you whether you are aware of that section of those
20 plans that has to io with the evacuation time
21 estimates?

22 A (WITNESS MELBIN) Yes.

23 Q I understand that you have reviewed some 24 information about the evacuation time estimates; am I 25 correct?

1 A (WITNESS MELBIN) Yes. I read the deposition 2 from Parsons Brinkerhof.

Q You were asked on cross-examination about the need to plan for a larger number of people to evacuate during the night than might be at home during the day. G Will you tell us whether or not your opinion about that is reflected in the evacuation time estimates that you reviewed?

9 MR. CZAJA: I object, Judge. As I understand 10 the witness' testimony, he was asked if he had read the 11 evacuation time estimates portion of the emergency 12 plan. His response was he has read the deposition of 13 Parsons Brinkerhof. So I don't think there's any 14 foundation.

15 The Parsons Brinkerhof deposition is a
16 deposition in this proceeding. It is not part of the
17 emergency plan.

JUDGE GLEASON: I think he is right.
MS. POTTERFIELD: That is not an accurate
characterization of the response that I heard, Judge
Gleason. I heard him say that he had reviewed that
portion of the emergency plans that had to do with the
evacuation time estimates.

24JUDGE GLEASON: Yes, he did say that.25MR. CZAJA: Could we get a better definition,

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1 Judge, of exactly what he has reviewed? As of present, 2 I don't think there's a foundation. 3 JUDGE GLEASON: Well, that's up to the 4 cross-examiner as to how much of an opening she wants to 5 create. I don't want to suggest that. 6 MR. CZAJA: Well, at present I would object to 7 the question for no foundation as to what he has read. 8 JUDGE GLEASON: Why don't you rephrase your question for me and see what comes out? 9 BY MS. POTTERFIELD: (Resuming) 10 11 Q My guestion was that you have been asked on 12 cross-examination about your opinion of the need to plan 13 for a larger number of people in an evacuation or other emergency response at night rather than the day, and my 14 15 question was whether your review of the evacuation time 16 estimates in the Indian Point emergency plans 17 incorporated, whether in your review of those evacuation 18 time estimates you found that that planning necessity 19 had been incorporated? A (WITNESS MELBIN) My answer is that in the 20 tables of the estimates of the evacuation times, it 21 22 seems to me that they are completely left out. Q Would you identify more carefully, more 23 24 clearly, which table you are talking about?

25 A (WITNESS MELBIN) I'm looking at Table A-4,

A-5, and A-6 of the Westchester County radiological
 emergency response plan, and particularly the estimates
 for the night scenario.

4 Q And what is it about those estimates that you 5 wish to comment on?

6 A (WITNESS MELBIN) In all three tables, the 7 estimates for the night scenario are for briefer periods 8 of time than the other times of day, and the ranges from 9 the upper -- from the lower to the upper bound are 10 shorter than for other times of day.

It seems to me that both those aspects of the night estimate would be or should be exactly opposite. The range between upper and lower bounds should be wider, and the amount of time for evacuation, since a larger number of people are in the area, should be longer, too.

17 Q Well, do you have an understanding, Dr.
18 Melbin, whether or not the evacuation time estimates do
19 indeed assume a larger number of residents within the
20 zone to be evacuated at night, rather than during the
21 day?

A (WITNESS MELBIN) My judgment is that they do anot, and that is why I looked at the Parsons Brinkerhof deposition to see what the basis of this estimate was, and I learned from that what they based the estimate

on. They fid not base it on the numbers of people to be
 evacuated, nor did they base it, incidentally, on the
 capacity of the road systems, that might differ at
 different times of day and night.

5 Q Is it your testimony, then, that the 6 evacuation time estimates are not based upon numbers of 7 people within the community?

8 A (WITNESS MELBIN) Correct. They are based on 9 the information about the capacity of the road, which 10 was gathered by people from Parsons and Brinkerhof 11 driving around and finding out what road widths were and 12 number of lanes, plus information about ordinary traffic 13 patterns from the New York State Department of 14 Transportation.

15 MS. POTTERFIELD: I request we be able to mark 16 for identification page A-72 of the Westchester County 17 radiological emergency response plan. This will be 18 marked UCS/NYPIRG 12.

19 JUDGE GLEASON: All right, that will be so 20 marked.

21 (The document referred to 22 was marked JCS/NYPIRG 23 Exhibit No. 12 for 24 identification.) 25 (Pause.)

BY MS. POTTERFIELD: (Resuming)

1

2 Q Dr. Melbin, I show you the exhibit that has 3 been marked UCS/NYPIRG 12 and ask you whether or not 4 that is one of the tables that you reviewed in your 5 review of the evacuation time estimates?

A (WITNESS MELBIN) Yes, I looked at this, too.
Q And having looked at that, is it your
8 testimony that the evacuation time estimates are not
9 based on the population that would have to evacuate from
10 Indian Point?

A (WITNESS MELBIN) Correct. It doesn't seem so, since the estimates for the daytime number of automobiles is the same as the estimate for the nighttime, whereas in this residential area many of the people are dispersed during the day in their automobiles to other parts of the state and the south of here, to New York City, for working. And they drive back home.

18 There should be many more automobiles present 19 at night and a somewhat larger number of autos on the 20 road for evacuation at night than at other times of the 21 day, simply because they are more available.

MR. BRANDENBURG: Mr. Chairman, I really have to object and ask that this line of questioning be stricken and not continued. Ms. Potterfield had every poportunity to put in supplemental testimony from this

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1 witness. She did not do so.

I asked him absolutely no questions about the 2 3 evacuation time estimates in the course of my 4 cross-examination, nor did Mr. Czaja. And this is just 5 clearly impromptu supplemental cross-examination from 6 this examination. 7 JUDGE GLEASON: Mr. Brandenburg, questions 8 were asked in cross-examination as to the witness' 9 familiarity with the emergency plan, and he is 10 testifying with respect to part of that plan. So the 11 testimony is admissible. 12 MS. POTTERFIELD: In any event, I just have 13 one clarifying question. BY MS. POTTERFIELD: (Resuming) 14 Q So that if I understand your testimony, it is 15 that the plans are not based upon a difference of 16 17 numbers of population between night and day? A (WITNESS MELBIN) Correct. 18 MS. POTTERFIELD: I at first misunderstood. 19 20 MR. CZAJA: I have a few questions on recross, 21 Judge. And could you keep A-72 in front of the 22 Witness. MS. POTTERFIELD: I thought I would move for 23 24 its admission into evidence. We have stipulated among

25 the parties that the entire Indian Point radiological

1 emergency response plan as it has been revised as of 2 March 15th be stipulated into evidence. We have as yet 3 to present that stipulation to the Board for its 4 approval. 5 However, as I understand it, at least as to 6 that stipulation there is no objection. So I would move 7 that UCS/NYPIRG 12 be admitted into evidence. 8 JUDGE GLEASON: Is there objection? 9 MR. CZAJA: No objection. 10 JUDGE GLEASON: Hearing none, the Exhibit No. 11 12 will be admitted into evidence. 12 (The document referred 13 to, previously marked for 14 identification as 15 UCS/NYPIRG Exhibit No. 12, was received in 16 evidence.) 17 18 MS. POTTERFIELD: No further redirect. 19 JUDGE GLEASON: You're going to have to get 20 copies of that for the reporter. And I believe I'm 21 going to allow a little additional cross-examination on 22 your redirect, so I think Mr. Czaja wants to utilize 23 that. 24 MS. POTTERFIELD: I'm sorry, I thought Mr. 25

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1 Czaja had his own.

2 MR. CZAJA: I have my own, but I thought if we 3 had two copies in the courtroom it might be more efficient. If you could give him that copy, I think it 4 will save time. 5 6 RECROSS EXAMINATION ON 7 BEHALF OF LICENSEE PASNY 8 BY MR. CZAJA: 9 0 Dr. Melbin, am I to understand that you draw 10 the conclusion from page A-72 that Parsons Brinkerhoff 11 assumed that there were the same number of automobiles 12 available in the emergency planning zone during the day 13 as at night? A (WITNESS MELBIN) I drew a different 14 15 conclusion. 16 0 Would you tell me what your conclusion was? A (WITNESS MELBIN) My conclusion was, they paid 17 18 no attention in the material that I read and in making 19 estimates of the times, including that on A-72, of the 20 number of autos available to whether there would be a 21 difference of day and night, therefore not raising the 22 possibility that more people with their autos would be 23 back at home. Q You tell me where on page A-72 there is a

Q You tell me where on page A-72 there is a
reference to the number of automobiles available at any

1 time?

A (WITNESS MELBIN) The reference is indirect, in the column labeled "Auto." It says "Percent of the population evacuating by" and then it says "Auto" and then there are numbers that give their percentages, and I find 86 for the first two weekends and so on, and then 89 when school is not in session, and then 86 in the nighttime.

9 Q And you understand that to be somehow, as you 10 describe it, an indirect reference to the number of 11 automobiles that Parsons Brinkerhoff assumed was present 12 in the emergency planning zone?

A (WITNESS MELBIN) Please ask that again.
Q You understand that column 1, the numbers 86
ami 83. tp be somehow an indirect reference to the
number of automobiles that Parsons Brinkerhof assumed
was present in the emergency planning zone?

18 A (WITNESS MELBIN) No, I believe that that 19 column is a direct reference to the number of autos that 20 would be used by the people to evacuate.

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1 Well, why don't you look at the heading of the 0 2 column? What does that say? 3 A (WITNESS MELBIN) It says auto. And then above that? 4 0 (WITNESS MELBIN) Percent of population 5 A 6 evacuating by --7 Q Well, then, do you understand that column to 8 indicate the percentage of the population that is evacuating by auto? 9 A (WITNESS MELBIN) Yes. 10 O And that is different from the number of 11 12 automobiles in the emergency planning zone, is it not? (WITNESS MELBIN) It certainly is. 13 A Other than Tables A4, A5, A6, and Page A7, 14 0 15 A72, what other knowledge do you have of Parsons, 16 Brinkerhoff's methodclogy? A (WITNESS MELBIN) What was present in the 17 18 deposition. Q Other than that, what knowledge do you have? 19 (WITNESS MELBIN) That is the extent of it. A 20 O Do you have any expertise in transportation 21 22 planning or evacuation time estimating? (WITNESS MELBIN) I have studied it. A 23 Q And what did that study consist of? 24 A (WITNESS MELBIN) Reading up on the literature 25

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of traffic flow and changes in traffic flow at different
 times of day and night.

3 Q And as a result of that study of the 4 literature, you have reached a conclusion which I 5 believe you have testified to today that roads have 6 different capacities at night and day? 7 A (WITNESS MELBIN) Not as a result of that 8 study. That has to do with other knowledge that I have. 9 Q Your understanding is that a road has a 10 different capacity at night than it does during the 11 day? (WITNESS MELBIN) Yes, it does. 12 A 0 Have you read the Highway Capacity Manual? 13 A (WITNESS MELBIN) No, I haven't read the 14 15 manual. MR. CZAJA: I have no further questions. 16 MS. POTTERFIELD: Could I follow up on that? 17 JUDGE GLEASON: Go ahead, Mr. Brandenburg. 18 MR. BRANDENBURG: I have some questions on 19 20 recross, too. JUDGE GLEASON: I hope they are very brief. 21 MR. BRANDENBURG: I won't disappoint the 22 23 Board. BY MR. BRANDENBURG: 24

25 Q Dr. Melbin, in your study of transportation

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1 engineering, have you run across the term "forced flow?" 2 (WITNESS MELBIN) I believe I have. A 3 0 Would you describe for us what that is? (WITNESS MELBIN) If I am going to describe it A 5 informally, because I believe I understand it under a 6 different concept, but I believe that forced flow has to 7 do with the rate at which traffic moves, depending on 8 the number of automobiles on the road and the rate at which automobiles are added and subtracted from that, 9 10 whatever road that is that automobiles are moving on. 11 Q Now, you indicated you were not familiar with 12 the Highway Capacity Manual per se. You haven't 13 reviewed it, I guess, but you were aware of it. 14 Something to that effect. Could you tell us whether the 15 highway capacity manual posits a difference in capacity 16 of roadways as a general rule from daytime versus

17 nighttime?

A (WITNESS MELBIN) I said I wasn't familiar 18 with the manual, so I couldn't answer what it says. 19 Can you refer us to any scholarly sources in 20 0 the literature dealing with traffic engineering and 21 traffic flow calculations that posit a difference in 22 roadway capacity between the daytime and the nighttime? 23 (WITNESS MELBIN) Yes. As long as you allow A 24 25 me to refer to them in general. I cannot cite

immediately the specific one, but I can tell you the kind of reports that refer to that. For example, there is a lot of information on the need to keep roads and bridges maintained, and the need for doing that when the load on those arteries are at the lowest.

6 Consequently, in the literature, there are 7 many reports of relying on the nighttime as the time to 8 close down ramps, exit ramps, entry ramps, bridges, 9 intersections which are heavily used during the day, to 10 close them down at night and to perform road work and 11 other kinds of repairs at those hours.

12 Q Now, returning again to Page A72, and I am 13 reluctant to get into questioning on that, but as I look 14 at the column for Evacuation by Auto, I see the first 15 two entries being weekend, summer, at cetera. That is 16 presumably a daytime number. Is that the way you 17 interpret it?

18 A (WITNESS MELBIN) Well, it says weekend, so it
19 would refer to day and night over the weekend. The
20 entire period.

21 Q Well, is there any entry in the columns, any 22 of the five scenarios that you are satisfied relate 23 solely to laytime?

24 A (WITNESS MELBIN) I would say that school in 25 session is the only one that refers solely to daytime.

1 Q Now, in light of your thesis that different 2 proportions of the population would be evacuating by 3 automobile depending upon the time of day, can you 4 explain to us why the percentage listed in this chart 5 for evacuating by auto is the same for both evening and 6 nighttime?

7 A (WITNESS MELBIN) I can't explain what the
8 people who made this table had in mind in doing that.
9 Q Do you infer from that that Parsons analysis

10 posited the same number of automobiles being available 11 for evacuation in both the evening and the nighttime, 12 since the percentage is the same?

A (WITNESS MELBIN) I didn't make that inference, because that percentage is also applied to weekends and holiday winter and holiday summer. The fact that the four of the six percentages are the same made me conclude that distinctions of time of day which would differentiate was not as major a factor as some other considerations.

20MR. BRANDENBURG: That is all I have.21JUDGE GLEASON: Any redirect?22MS. POTTERFIELD: No redirect.23JUDGE GLEASON: Thank you, Dr. Melbin. We24appreciate your testimony.

25

(Witness excused.)

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1 (Pause.) 2 JUDGE GLEASON: Go ahead. 3 MS. POTTERFIELD: We call our panel of Helen 4 Burnham, Linda Co, Judy Kesselman, and Shareane Baff. Is Joan Fine in the audience? 5 (No response.) 6 7 JUDGE GLEASON: I believe that there are 8 objections to the testimony of Burnham and Co, so if you could get their testimony raised, we could handle that, 9 10 and then get on with the rest of it. 11 MS. POTTERFIELD: Before we begin with this 12 panel, I have a special request from a sign language 13 interpreter in the audience who is interpreting for some deaf people in the audience that she be allowed to stand 14 15 up front so that they can see her. JUDGE GLEASON: We would be very happy to have 16 17 her. 18 (Whereupon, a discussion was held off the 19 record.) 20 Whereupon, HELEN BURNHAM, 21 LINDA CO, 22 SHAREANE BAFF, 23 and JUDY KESSELMAN 24 25 were called as witnesses, and having been first duly

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1 sworn, took the stand, and were examined and testified 2 as follows: 3 DIRECT EXAMINATION 4 BY MS. POTTERFIELD: 5 Q Mrs. Burnham, would you state your name and 6 address for the record, please? 7 And you will have to speak into the 8 microphone. 9 A (WITNESS BURNHAM) Helen Burnham, 38 Devon 10 Avenue, Croton-on-Hudson. 11 Q Mrs. Burnham, do you have before you the 12 testimony that you wish to submit before the Atomic 13 Safety and Licensing Board? 14 A (WITNESS BURNHAM) Yes, I do. 15 Q Do you have any additions or corrections to 16 that testimony? 17 A (WITNESS BURNHAM) I have a few corrections. 18 In the third paragraph, I stated that the senior 19 citizens from Springvale visit our library on Friday 20 afternoons, and they no longer do so. 21 Q So that the first sentence of Paragraph 3 is 22 no longer relevant? Is that correct? A 23 (WITNESS BURNHAM) Correct. Q But the second sentence is still relevant? 24 25 A (WITNESS BURNHAM) Yes. And the staff has

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changed somewhat. If you want me to list the names of
 the staff, I will do so.

3 Q Have you still the same number of employees?
4 A (WITNESS BURNHAM) Yes.

5 Q What is your next addition or correction, Mrs.6 Burnham?

7 A (WITNESS BURNHAM) I have no further 8 corrections. I might like to state, though, that I am 9 uncertain as to what my legal right or responsibility is 10 to the people who might be in the library in an 11 evacuation situation. Some children may wish to leave. 12 JUDGE GLEASON: Ms. Burnham, right now we are 13 not asking you to give your testimony. So let's wait 14 until that period of time.

15 BY MS. POTTERFIELD: (Resuming)

16 Q With the corrections you have made, Mrs.
17 Burnham, and your comment, is the testimony true and
18 correct to the best of your knowledge and belief?

19 A (WITNESS BURNHAM) It is.

MS. POTTERFIELD: I move the admission of the
testimony of Heler. Burnham into the record as if read.
JUDGE GLEASON: Why don't you go ahead with
respect to Mrs. Co?
BY MS. POTTERFIELD: (Resuming)

25 Q Ms. Co, would you state your name and address

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1 for the record, please?

A (WITNESS CO) My name is Linda Co. I reside
3 at 254 Congress Road, New City, Rockland County, New
4 York.

5 Q Do you have before you the testimony that you 6 wish to submit before the Atomic Safety and Licensing 7 Board?

8 A (WITNESS CO) I do.

9 Q Do you have any additions or corrections to 10 that testimony?

11 A (WITNESS CO) I have corrections.

12 Q If you will address your corrections to13 particular paragraphs, please.

A (WITNESS CO) Where it says Testimony of Linda So, strike "Board of Directors." Also on Page 1, Lines And 4, the words "three" change to "two" and strike The word "cadet."

18 Q So that sentence should read, "I currently 19 have outdoor leadership responsibilities in two Girl 20 Scout troops at two different age levels, (junior and 21 senior, ages ranging from grade 4 through grade 12)?"

22 A (WITNESS CO) Correct.

23 Q Any additional corrections?

A (WITNESS CO) Yes. On Page 7, Lines 16 and 25 17, right under the underlined portion, "The sirens were

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1 heard in the office and in camp during the latest 2 drill," and in Line 19, the word "would" should be 3 changed to "might." Q So when you say the latest drill, which drill 4 5 are you referring to, Ms. Co? (WITNESS CO) The one of last Wednesday. A 6 7 Wednesday, March the 9th? 0 (WITNESS CO) True. A 8 0 Any additional corrections? 9 (WITNESS CO) On Page 8, Lines 9 and 10 --10 A 11 excuse me, Lines 10 and 11, change the words "teachers" 12 to "leaders." Anything further? 0 13 A (WITNESS CO) That is all. 14 0 With those additions and corrections, Ms. Co. 15 16 is this testimony true and correct to the best of your 17 information and belief? A (WITNESS CO) Yes. 18 MS. POTTERFIELD: I move the admission into 19 20 evidence of the testimony of Linda Co as if read. JUDGE GLEASON: Is there objection? 21 MR. CZAJA: Yes, I have objections to portions 22 23 of Ms. Co's testimony. JUDGE GLEASON: All right. 24 MR. FARRELLY: And we also have an objection 25

1 to Ms. Burnham's testimony that is stated. JUDGE GLEASON: Do you have those objections, 2 3 Ms. Potterfield? MS. POTTERFIELD: It would help me if Con 5 Edison would refer me to the page. MR. FARRELLY: The bottom of Page 12 onto 13. 6 MS. POTTERFIELD: Shall we take the objection 7 8 to Ms. Burnham's testimony first? 9 JUDGE GLEASON: Yes, please. 10 MS. POTTERFIELD: I understand this to be the 11 same objection that has been posed before because Ms. 12 Burnham -- the objection is that Mrs. Burnham has given 13 a limited appearance statement. My argument about that 14 would be the same as it was with regard to Mr. Iurato. JUDGE GLEASON: How about Ms. Co? 15 MR. CZAJA: Do you want me to proceed, Judge? 16 JUDGE GLEASON: Do you want to comment on the 17 18 objections to Mrs. Co's testimony? MS. POTTERFIELD: Yes. I understood there 19 were only objections from the Power Authority with 20 21 regard to Ms. Co. Am I correct? JUDGE GLEASON: That is correct. 22 MS. POTTERFIELD: Then we will take them one 23 24 at a time. The first one is an objection to Lines 8 and 25 9 on Page 3. It is actually the first paragraph, the

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first numbered paragraph of her testimony, that "We have no confidence in the nuclear facility operator's ability or willingness to comply."

The Power Authority thinks that that is not relevant. It seems to me obvious that -- and something that has often come up, the response of people to an emergency and to the information that they receive about that emergency, and indeed to the public notification and communication in general depends on their feeling about being able to rely on the licensees.

11 It relates to our Contention 3.4, and it is12 certainly relevant.

The second objection begins Lines 5 and 6 on 13 14 Page 5, which consists of Mrs. Co's rhetorical questions, "Will the buses assigned sit idle waiting, or 15 cone back? Maybe." Apparently the Power Authority 16 17 finds that speculative. We submit that it simply 18 expresses her doubt about the workability and the 19 response to the emergency plan of the emergency workers. The next objection is similar. It relates to 20 the question -- to the sentence, "First, it is 21 legitimate to speculate on whether bus drivers and other 22 emergency workers will actually enter and re-enter the 23 24 ERPA."

Our argument is the same as to these

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comments. They are comments of Mrs. Co in her capacity
 as an official of the Rockland County Girl Scout
 Council. She will be one of the people responsible for
 the Girl Scouts under the supervision of all of the
 different girl scout troops in Rockland County should an
 accident happen while there are meetings or other
 activities going on.

8 She should be permitted as part of her
9 responsible position to express her doubt about the
10 workability of the emergency plan.

So that my argument also goes to the next objection on Page 5 to the statement, "It is also possible that buses might be contracted out of the locality during the day and not be available when needed." Again, these are very common sensical observations that are far from speculative.

17 On Page 6, beginning at the bottom of the 18 page, the bottom paragraph, the Power Authority objects 19 as to relevance to Ms. Co's statement that, "On the 20 first day of our recent Clarkstown school strike, I 21 happened to be, to my greater edification and dismay, 22 outside Festa Junior High School C Wing at 10:00 23 o'clock, having heard via the parental grapevine that 24 things were out of control."

25 The objection continues onto Page 7, and

1 includes Ms. Co's description of the response to the 2 children. "In a group situation, they did not 3 comprehend the gravity of the situation and the 4 potential for tragedy, nor were they particularly 5 cooperative." She talks there about her experience of 6 trying to gather large numbers of people, many of them 7 youngsters, in a potentially crisis situation.

8 It is based upon her previous experience, and 9 has to do with her ability to respond in the event of 10 another crisis situation such as an accident at Indian 11 Point, and as such is entirely relevant to her response 12 to the emergency response plans.

13 The Power Authority objects as to foundation 14 and hearsay to Mrs. Co's testimony that there is no 15 listed telephone number for the Girl Scouts on the alert 16 list in the Rockland County -- in the plan. I think we 17 can argue about it, and I will be glad, very happy to 18 lay the foundation for Mrs. Co's statement.

19 Since if the Power Authority had bothered to 20 check, they would see that that was true, and since the 21 plan will be, we expect, admitted into evidence, there 22 should be no problem with Mrs. Co testifying as to her 23 unierstanding of what is included and what isn't 24 included in the plan that is relevant to her.

25 JUDGE GLEASON: I am not sure I understand

1 either the objection or the response to that. Would you 2 mind elucidating for me?

3 MR. CZAJA: Juige, on reflection, it is not
4 worth arguing about. Let me withdraw the objection to
5 those two lines. Whatever the plan says, the plan says.
6 JUDGE GLEASON: All right, that is withdrawn.
7 MS. POTTERFIELD: On Page 8, the objection is
8 to foundation, relevance, and what does "C" stand for?
9 MR. CZAJA: I believe it is cumulative. Yes,
10 cumulative.

MS. POTTERFIELD: The testimony goes to the response of the leaders who are in charge of the children. I don't understand why Mrs. Co has to lay a fondation for that. I certainly submit that it is relevant, and as the Board knows, our position is that it is most material. The fact that it is cumulative, I have to say cumulative to whom? I have yet to hear from another Girl Scout leader about their response to this situation.

20 JUDGE GLEASON: Is this the phrase that starts 21 with "not within our area of difficulty, but noted in 22 passing the question of teachers who have children 23 staying until other teachers?" Is that the statement? 24 MR. CZAJA: Yes, but I think the first part of 25 the passage expresses our problem with it, "not within

1 our area of difficulty."

MS. POTTERFIELD: The paragraph has been amended, corrected on her direct testimony to read, "The question of leaders who have children staying until other leaders who have children can pick them up." I understand the reference to be to Girl Scout leaders, and well within her competence to testify about.

3 JUDGE GLEASON: Well, what about the opening
9 phrase of that, that that is "not within our area of
10 difficulty?"

MS. POTTERFIELD: Well, I suppose at best that one could say that it becomes inconsistent, that her stimony is inconsistent at that point, but that is not a ground for objecting to its admissibility in sevidence.

16 JUDGE GLEASON: Do you want to leave her 17 testimony as being inconsistent? Go ahead.

18 MS. POTTERFIELD: Finally, the Power Authority 19 objects to the middle of the bottom paragraph of Page 20 8. "We recognize, however, that the time frame imposed 21 by our pxoximity to Indian Point may make attempting to 22 plan for a worst case accident an exercise in 23 futility."

24 The Power Authority finds that irrelevant. I
25 submit that the distance from the institutions, the

institutions where Mrs. Co works and the Indian Point
 plant is certainly relevant.

JUDGE GLEASON: All right. Thank you, Ms.
4 Potterfield.

(Whereupon, the Board conferred.)

5

JUDGE GLEASON: All right. First of all, with respect to Mrs. Burnham, the objection of the licensee is denied. The fact that she testified before doesn't prohibit her from testifying as a witness here today. The fact that she appeared in a limited appearance is not a prohibition against her testifying. That is a matter certainly within the discretion of the Board in any event.

14 With respect to Mrs. Burnham, the licensee's 15 objections are denied. The fact that she appeared and 16 gave a limited appearance in another capacity is not a 17 prohibition of appearing here as a witness for a party 18 intervenor.

19 With respect to Mrs. Co's testimony, on Page
20 5, the objection is sustained. That paragraph about no
21 confidence in a nuclear facility is speculative. It is
22 not material, and has to come out. The same --

23 MR. CZAJA: Judge, I am sorry. That is on
24 Page 5. I think you may have said Page 3.

25 JUDGE GLEASON: I am sorry. I meant the top

of Page 3. The same ruling applies to the objections
 made by licensee on the top of Page 5 about speculating
 on bus drivers. The same thing applies at the bottom
 about buses might be contracted out of the locality.

5 On Page 6 and 7, the objection is denied. We 6 believe that she is giving an example of the 7 psychologist's view of children in an emergency 8 situation, and that is certainly relevant testimony.

9 On Page 8, the question of leaders having 10 children once again is a matter, I think, within, 11 although it is on the borderline, it is -- the objection 12 is denied, and we will let it in because it goes to her 13 general area of testifying or competence. The objection 14 at the bottom of the page about the time frame imposed 15 by proximity, the objection is granted as speculation.

16 And without further objection, the testimony 17 of those two witnesses with the deletions referred to 18 will be admitted into evidence and bound into the record 19 as if read.

20 (The testimony of Helen Burnham and Linda Co 21 follows.)

- 22
- 23
- 24

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Helen Burnham Croton Free Library 171 Clevcland Drive Croton-on-Hudson, NY 10520

I am the Director of the Croton Free Library, a position I have held since 1968. My experience includes being a children's librarian in the Brooklyn and Seattle Public Libraries. My husband and I live in Croton.

INSERT#-

There could be anywhere from one to fifty children under my supervision on a given day. Children attend the library during school hours and after school as well as two evenings a week and on Saturdays. They come for class visits, story hour, reading, reference work, study, the selection of books, movies and special programs. We don't know how many have special problems, learning disabilities and physical and mental handicaps. We don't know how many use the library as a place to come after school while their parents are working, though we do know that some of the parents work as far away as White Plains and New York City.

Senior citizens from Springvale visit our library on Friday afternoons every other week. Other older people in the community come to the library at various times during the week.

Besides myself, our staff consists of Nancy Rolnick, librarian; Elizabeth Clarke, librarian; Eleanor Cooper, senior clerk; and Mary St. Leger, clerk. The staff is experienced and responsible, but there is no guarantee that under duress any one of us would not fall apart. We do not have disaster training nor are we privy to the special needs of the children and seniors who visit the library randomly in the way that the schools, for example, are cognizant of the particular needs of their pupils.

We have received no instructions from Con Ed, PASNY, the NRC or the firm hired to develope the evacuation plan as to how to handle whatever dependent persons might be in the library when a nuclear emergency struck. Were an alert condition called, we have no larder from which to feed people nor any provision for bedding people down. Should the disaster be of such proportions that evacuation were demanded, no provision has been made for transporting the indeterminate number of children and seniors in the library at the time, nor has a reception center been designated as their destination.

Thin Burnham



UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

INSERT#8

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	Docket Nos.
CONSOLIDATED EDISON COMPANY OF NEW YORK (Indian Point Unit 2)	50-247 SP 50-286 SP
POWER AUTHORITY OF THE STATE OF NEW YORK) (Indian Point Unit 3)	June 7, 1982

TESTIMONY OF:	LINDA CO
	MEMBER, BOARD OF DIRECTORS, ROCKLAND COUNTY
	GIRL SCOUT COUNCIL, INC.
ON BEHALF OF:	RCSE
RELATING TO CO	NTENTIONS: 3.1. 3.2. 3.4. 3.7. 4.2

My name is Linda Co. I reside in New City, New York and am a Registered Occupational Therapist. I currently have cutdoor leadership responsibilities in three Girl Scout Troops at three different age levels, (Jr. Cadette and Senior ages ranging from grade 4 through grade 12) have worked on our campsite as a summer staff member, and have spent a good deal of time "troop camping" over the past ten years. Rockland County Girl Scout Council's office is located at 211 Red Hill Road, New City, N.Y. (zone 35F). Our campsite, Camp Addison Boyce, is located on Mott Farm Road in Tompkins Cove (zone 30A). Communication is by public telephone.

Our campsite is used in four very different ways:

1. <u>Hiking and pichicking</u> occurs weekdays and weekends year round. Individual troops and their leaders spend part or all of a day in camp or use camp as a base point for hikes into the park system. Leaders are responsible for advising our Ranger of their projected RCSE witness Linda Co - 2

whereabouts, but troops can and do get temporarily lost. There is no system of communication with groups out on the trails. The average number in such groups is from ten to thirty. There could conciderably be no cars for them in camp.

- 2. <u>Troop Camping</u> begins in late August and runs through May. Individual troops and their leaders spend two to three days and nights, usually weekends (sometimes mid-week holidays) in rustic cabins and/or tents. The maximum number of people in camp is about one hundred. There would be about ten cars.
- 3. Use of camp by outside groups (schools) occurs on a contract basis week-days during the school year. The maximum number of children and adults present at one time is approximately two hundred. They are transported by their local school buses, which normally do not remain in camp.
- 4. <u>Day Camp</u> is in session in July and August. One hundred-fifty to one hundred seventy-five girls and adults are bused in and out daily. They may remain in camp or hike into the Park system or to points of interest in the surrounding area. An average of four to six cars is in camp.

Girl Scouting's Health and Safety Standards are published in "Safety Wise", from which I quote, a "positive attitude toward accident prevention...involves a logical, natural way

RCSE witness Linda Co - 3

of <u>anticipating risks</u> and <u>responding appropriately</u>." With this in mind, we have reviewed the Rockland County Radiological Emergency Response Plan (RCRERP) Procedure for our "Special Facility", and the booklet, "<u>Indian Point, Emergency Planning,</u> <u>and You</u>," and wish to advise you that we have the following difficulties;

Re The RCRERP:

- (2.0) we have <u>no confidence</u> in the Nuclear Facility Operators' <u>ability</u> or <u>willingness</u> to comply.
- 2. (4.1, 5.1, 6.1,) Our council office is regularly staffed only during business hours, and the telephone at camp is not always covered. Communication between office and camp in an emergency of this nature by public phone lines is precarious at best.
- 3. (4.1.1.2, 5.1.1.2, 6.1.1.2) Groups out on the trails are frequently out of communication for six to eight hours. Even a runner who knew where to look might have difficulty finding them in half that time.
- 4. (4.1.2.1, 5.1.2.1, 6.1.2.1) Depending on the timing, Troop Campers and School groups might have as much
 as two days' worth of food. Hikers and day campers routinely have a sandwich and drink only.
- 5. (5.2.1.1, 6.2.1.1) Our cabins and lodge building are very rustic. There are fireplaces with huge chimneys, knot holes, doors and windows that do not

RCSE witness Linda Co - 4

fit closely. The lodge has only plastic sheeting and shutters over screening for winter protection. In short, "indoors" for these purposes is little better than outdoors. Sanitary facilities are all outdoors.

- 6. (5.2.1.2, 6.2.1.2, 6.3.1.3) "ad hoc respiratory protection"! Six year olds! For how long? How consistently? While they sleep?!
- 7. (5.2.1.3, 5.3.1.2, 6.2.1.3, 6.3.1.2) We have <u>no</u> basement, large room without windows, hallways or individual rooms.
- 8. (6.3.2.1) As previously stated, groups for which we are responsible are frequently unreachable. Furthermore, our standard evacuation procedure involves gathering <u>outside</u>. Also, as previously stated, none of our buildings provide much protection.

With regard to the General Evacuation Procedure (Attachment 1, SF 1 - 1)

- We do not have, nor have we been educated about "Tone alert radio receivers"
- 2. (C. 1 a.) If the park trails are to be cleared independently, it will be impossible for the Ranger, Camp Administrator or School Coordinator to determine that everyone for whom he or she is responsible is accounted for, before leaving the site. If the park trails are not cleared (fully, successfully and reliably--including persons lost and not on trails) then I point a gain to

the problem of communicating with these people. It takes <u>time</u> to walk out--even if they hear and recognize the sirens--(not guaranteed in the mountains). Will the evacuation of the entire camp wait for them? Will the buses assigned sit idle waiting? Or come back--maybe?

3. (C.1.c.) (egress) We believe that here a major breakdown occurs. First it is legitimate to speculate on whether bus drivers (and other emergency workers) will actually enter and reenter the ERPA.

Second, <u>no</u> provision has been made for hikers and picnickers. School groups are presumably to be fetched by their own buses, but nowhere do we see this in print. Haverstraw Transit which regularly serves the Day Camp, and the Clarkstown School Buses, which are assigned to evacuate troop campers, make multiple runs daily. We are dubious about the buses' ability to <u>return</u> from a reception center "against the tide", particularly when we are so far north of our designated center and so close to Indian Point. It is also possible that buses might be contracted out of the locality during the day, and not be available when needed.

Furthermore, as a National Girl Scout standard, to which we are committed by charter, and for insurance purposes, we

Maintain certain adult-to-girl ratios:

1	adult	to	6	Brownies	(grades	1-3)
"		*	8	Juniors	(grades	4-6)
			12	Cadettes	(grades	7-9)
			24	Seniors	(grades	10-12)

Therefore, if the average auto can transport five girls, we would have left over, dependent upon buses, one Brownie, three Juniors, seven Cadettes and nineteen Seniors, for every adult driver.

In addition, our standards require that:

- 1. an adult be with girls at all times
- an adult be in charge of the group (in addition to the bus driver) on buses.

Effectively then, our adults would have to accompany on the buses the children for whom they are responsible, rendering their cars useless and the plan's figure of ten cars in camp, meaningless.

Finally, Camp Addison Boyce is populated by children from all over the county--and occas, ionally groups from out-of-state and even from Canada. Unless some of these children are to be delivered to their homes outside the ERPA, their parents, who are not affected by this plan and presumably have not received mailings, would not know where to find them.

4. (III) On the first day of our recent Clarkstown School strike I happened to be, to my greater edification and dismay, outside Festa Junior High School - C wing, at 10:00, having heard via the parental grapevine that things were out of control.

Things were unpleasant there that day, <u>but the children</u> <u>thought it was a lark</u>. They did not comprehend the gravity of the situation, the potential for tragedy; nor were they particularly cooperative. Living as I do, across the street from North High School, I will testify that the situation there was even more out of control. The notion of gathering large numbers of people,--many of them youngsters, into an obviously short-term, anonymous situation, with unenforceable limits, in the care of adults, not necessarily our own people, whose minds may be elsewhere, and who may have had little sleep for some days, does not seem sensible. Little children will be fr ightened, lost, and possibly abused.

- 5. (<u>Alert list</u>) There is no listed telephone number for us.
- Re "Indian Point, Emergency Planning and You"
 - (1) The sirens have never been heard in the office and only very faintly in camp. Noise of children's activity or interference from mountains would render this mode of warning unreliable.
 - (2) (pg. 5) As stated before, our buildings cannot be made airtight.

 - (4) (pg. 5) By camp policy radios are not brought to camp. Leaders in some types of emergencies use car radios, but that requires going outside.

- (5) (pg. 5) Some of our kids come from inside the ERPA, some from outside.
- (6) (pg. 6) Troop campers and School groups would be well prepared vis-a-vis: "Leaving Home" with the exception of medicines and radio as noted above. Hikers, Picnickers, and Day Campers would be totally unprepared.

A most serious problem would be lack of medication.

- (7) (pg. 7) Not within our area of difficulty but noted in passing: the question of teachers who have children staying until other teachers who have children can pick them up is a circular one.
- (8) (pg. 15) Nowhere is potassium iodide mentioned.
 Girl Scout adults would not be allowed to administer it to girls in any event.

In conclusion, we <u>hope</u> that our efforts are producing the kinds of girls and adults who would respond generously and quickly to an emergency of this nature. Please understand that from the very beginning Girl Scouting has endorsed the principle of preparation and planning. (We affirm that a workable plan is needed. We recognize, however, that the timeframe imposed by our proximity to Indian Point may make attempting to plan for a worst-case accident an exercise in futility.) With the best will in the world and unlimited resources, we would find <u>this</u> plan very difficult to implement. As it stands the plan is sufficiently unrealistic as to be almost as great a peril as the one it attempts to address.

1 JUDGE GLEASON: Do you want to proceed now 2 with respect to your other two witnesses? 3 MS. POTTERFIELD: Thank you, Judge Gleason. 4 BY MS. POTTERFIELD: (Resuming) 5 0 Ms. Baff, will you give your name and address 6 for the record, please? 7 A (WITNESS BAFF) Shareane Baff, 108 Timberlane 8 Court, Yorktown Heights. 9 Do you have before you the testimony that you 0 10 wish to submit before the Atomic Safety and Licensing 11 Board? 12 A (WITNESS 3AFF) Yes, I do. Q Do you have any additions or corrections to 13 14 it? A (WITNESS BAFF) Yes. Just that my children 15 16 are now five and eight, and that we have 300 students 17 enrolled. Q Wait just a minute. If you will tell us which 18 19 line you are on. A (WIINESS BAFF) The second line says "children 20 21 aged four and seven." It should read "five and eight." 22 On the third line, it says there are 250 children. It 23 is now over 300 children. 24 Further down, more than halfway down, it says, 25 "I have no food, water, or special medical supplies in

1 the school." We now have some medical supplies in the 2 school, with blankets and pillows and things like that. 3 And our staff has also taken emergency training since this was written. 5 Q Any other additions or corrections, Ms. Baff? (WITNESS BAFF) No. R A 7 0 With those additions and corrections that you have made, is this testimony true and correct to the 8 best of your information and belief? 9 10 A (WITNESS BAFF) Yes, it is. MS. POTTERFIELD: I move the admission into 11 12 evidence of the testimony of Ms. Shareane Baff as read. 13 JUDGE GLEASON: Is there objection? (No response.) 14 15 JUDGE GLEASON: Hearing none, the testimony will be received into the record and bound into the 16 record as if read. 17 (The testimony of Shareane Baff follows.) 18 19 20 21 22 23 24 25

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My name is Shareane Baff. I live at 108 Timberlane Ct., Yorktown Hts., N.Y. I have two children aged 4 and 7 living at home. I have been the director of the Yorktown Gymnastics Center for the past four years. There are 250 children aged 2-13 involved in the program which runs between the hours of 9am- 6:15 pm. The children are involved in gymnastics activities with 12 pupils and 2 adults in the room . The children reside in Yorktown, Croton, Garrison, Mahopac, the Bronx, Connecticutand Hawthorne. These areas are both within and outside the epz. The parents may or may not be in the area during class and are not always at home because many parents carpool to the school and then leave, so I cannot always contact the parents. I do not always have more than one car available at the school so I cannot always transport the children myself. I have never recieved any instructions from Con- Ed, Pasny, or the NRC regarding an evacuation of the center. I have no water, food or special medical supplies in the school in case of a sheltering situation, nor do I or my staff have any emergency training. Therefore, I feel that the emergency brochure does not adequately adress my situation. I also have a conflict regarding an evacuation. I would never allow my own children to evacuate anywhere without me. I would go to their respective schools or any other place to get them. Thus, I cannot guarantee that I nor any member of my staff would remain with the gymnastics students and not attend to their own families.

Shareane Baff

Shareane Baff

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BY MS. POTTERFIELD: (Resuming)

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2 Q Ms. Kesselman, would you state your name and 3 address for the record, please?

A (WITNESS KESSELMAN) My name is Judy
5 Kesselman. I live at One Ondedonk Road, Suffern,
6 Bockland County, New York.

Q Do you have before you the testimony you wish
8 to submit to the Atomic Safety and Licensing Board?

9 A (WITNESS KESSELMAN) Yes, I do.

1

10 Q Do you have any additions or corrections to 11 your testimony?

A (WITNESS KESSELMAN) I have one correction. On the second page, seven lines from the bottom, the Hine that starts, "Our phone," that should read, "Our phone breaks down with the first thunderclap," not "Our hone rings." "Our phone breaks down with the first thunderclap."

18 Q Any further additions or corrections?

19 A (WITNESS KESSELMAN) No.

20 Q With that correction, is your testimony true 21 and correct to the best of your knowledge and belief?

22 A (WITNESS KESSELMAN) Yes.

MS. POTTERFIELD: I move the admission into
evidence of the testimony of Judith Kesselman as if
read.

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1		JUDGE GLEASON:	Hearing no objection	, the
2	testimony	of the witness	will be received into	evidence
3	and bound	into the record	d as if read.	
4		(The testimony	of Judith Kesselman fo	ollows.)
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ALDERSON REPORTING COMPANY, INC.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

in the Matter of	
CONSOLIDATED EDISON COMPANY OF NEW YORK) (Indian Point Unit 2)	Docket Nos.
POWER AUTHORITY OF THE STATE OF NEW YORK) (Indian Point Unit 3)	50-247 SP 50-286 SP
(indian Foint onit)))	June 7, 1982

TESTIMONY OF: Judy Kesselman, Coordinator of Suburban Schools, Tiorati Workshop ON BEHALF OF: RCSE/PARENTS RELATING TO CONTENTIONS: 3.1, 3.7, 4.4, 4.7

TNSERT#10

We are an educational center with a large building near Lake Tiorati in Harriman State Park.

Each day groups of up to sixty children come by bus for the day for educational activities planned by one of our staff and the children's teachers. Our staff feels capable of handling normal emergencies that can occur when you take children hiking in the park. We have taken Red Cross first aid courses and can handle accidents which fortunately seldom occur. However, the enormity of the situation in the event of an accident at Indian Point seems beyond coping. Sometimes the bus remains parked outside the building; at other times it goes back to school and returns later in the day to pick up the children. But what would I do in the event of such an accident. If the bus is there, send them home? To Manhattan or the Bronx or Westchester (across which bridge?) or Orange or Rockland County?, to an evacuation center? Keep them in the building? What protection would it be?

RCSE witness Judith Kesselman - 2

If there is no bus, what do I do then? How long would it be before someone would come? What about food? What if groups are scattered in the woods? Should they return to the building or seek shelter? I have no training to deal with the hazards of radiation. What would be the safest way to deal with the children who are my responsibility? I have never received any information as to what I am supposed to do.

Our phone rings with the first thunder clap. What would happen in a real emergency?

I would also have concerns about my own family; my mother, who lives in Peekskill and has no car and needs a wheelchair, and the rest of my family in Rockland. Would I go home?, or to Spring Valley High School (my "home" evacuation center)?, or my house?

Judy Kesselman

1 JUDGE GLEASON: I gather Ms. Fine is not here. 2 MS. POTTERFIELD: Has Joan Fine appeared? Is 3 she in the audience? Ms. Fine? (No response.) 4 MS. POTTERFIELD: Apparently not, Judge. I 5 6 received no message. JUDGE GLEASON: Shall we proceed with cross 7 8 examination? MS. POTTERFIELD: Yes. I am sorry. The 9 10 witnesses are available for cross examination. CROSS EXAMINATION 11 BY MR. CZAJA: 12 13 Q Ms. Burnham, in your testimony you discuss the 14 problem of children being in the library after school, 15 their parents possibly being absent from home. Is that 16 correct? 17 A (WITNESS BURNHAM) That is absolutely 18 correct. Q Is it possible that a medical emergency could 19 20 arise for one of the children while they are at the 21 library and their parents are not at home? 22 A (WITNESS BURNHAM) It is possible. Q Has it ever happened? 23 A (WITNESS BURNHAM) It never has happened while 24 25 I have been there.

1 Q Do you have any plans as to how you would deal 2 with such a situation were it to occur? 3 A (WITNESS BURNHAM) If I couldn't reach the 4 parent, as you say, they are not home, or a neighbor was 5 not available, I would get one of the local doctors to 6 come in. 7 Q You feel you could deal with the situation? 8 A (WITNESS BURNHAM) Well, I am a little puzzled 9 by the legal right or responsibility I have in a 10 situation of that kind, as I am in an evacuation plan. Q You are puzzled both in the case of a medical 11 12 emergency and in the case of an evacuation plan? A (WITNESS BURNHAM) Yes, I would be, but I 13 14 would call a local doctor.

15 Q Have you ever read this brochure?

16 A (WITNESS BURNHAM) Yes.

17 MS. POTTERFIELD: Could that be identified for18 the record?

MR. CZAJA: This is "The Indian Point
20 Emergency Plan and You," the public information
21 brochure.
22 BY MR. CZAJA: (Resuming)
23 Q You have read the brochure?

24 A (WITNESS BURNHAM) I read it completely just25 this morning.

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Q You didn't read it prior to this morning?
 A (WITNESS BURNHAM) Well, I had looked at it
 3 before, too, but I reread it again today.

4 Q Have you ever made any attempts to obtain any 5 additional information or to obtain assistance regarding 6 the problems that you deal with in your direct 7 testimony?

8 A (WITNESS BURNHAM) I am not sure just what you
9 mean by "the problems."

10 Q Well, you are concerned, as I understand it, 11 about how you are going to deal with the problem of 12 children being in the library in the afternoon in the 13 event there were an evacuation, and my question is 14 simply whether you talked to anybody or asked a question 15 of, say, your local government officials, the county 16 government officials, the utilities, anybody.

17 A (WITNESS BURNHAM) No, nobody has come to me 18 with any plan or offered any suggestions, so I would 19 have to handle them as best I could.

20 Q When you read the book for the first time this 21 morning, did you see a telephone number there?

22 MS. POTTERFIELD: I object. That was not her23 testimony.

24 BY MR. CZAJA: (Resuming)

25 Q I am sorry. When did you read the book for

1 the first time, the public information book?

A (WITNESS BURNHAM) I don't remember, but I did
3 reread it this morning.

4 Q I am sorry. You read it previous to this 5 morning?

6 A (WITNESS BURNHAM) Yes.

7 Q When you did reread it, did you note the 8 telephone number in there that you could call for 9 further assistance?

10 A (WITNESS BURNHAM) I did see the telephone 11 number listed there. However, I might say that we have 12 a very antiguated telephone system in Croton. One of 13 our board members says he calls all over the world and 14 gets whomever he wants, but he has trouble reaching 15 Croton, and he is based in New York.

16 Q So this is an 800 number that is in the 17 booklet, and you feel that the Croton telephone system 18 is such that it is not worth trying to call that number?

A (WITNESS BURNHAM) Well, we would certainly20 try, but I am not saying that it would work.

21 Q This is not a number that you have to wait 22 until an evacuation to call them, Mrs. Burnham. Is your 23 understanding that this number could be called at any 24 time if you want assistance?

25 A (WITNESS BURNHAM) I would think so.

1 0 But you have not as yet called? 2 A (WITNESS BURNHAM) I have not called them. 3 0 Ms. Co, do you know an individual named Mrs. 4 Lawrence who has an association with your camp? (WITNESS CO) Yes, I do. She has no longer an 5 A association with our camp. 6 7 0 But she formerly did? (WITNESS CO) True. 8 A 9 0 And what was her role at your camp? MS. POTTERFIELD: I object, Your Honor. I 10 11 don't see the relevance of this. JUDGE GLEASON: What was whose role? 12 MR. CZAJA: Mrs. Lawrence, who -- Mrs. Co 13 14 testified that Mrs. Lawrence was formerly associated 15 with the camp. MS. POTTERFIELD: But she testified about it 16 17 on direct examination over my objection. I don't 18 understand who Mrs. Lawrence is or what the relevance 19 is. MR. CZAJA: My question is who Mrs. Lawrence 20 21 is. MS. POTTERFIELD: But it is not in her 22 23 testimony. MR. CZAJA: I will link it up very shortly to 24 25 her direct testimony.

1 JUDGE GLEASON: Pardon? MR. CZAJA: I will link it up very shortly. 2 3 JUDGE GLEASON: Let's see where he goes. MR. CZAJA: If you want an offer of proof, I 5 will be very happy to give it. 6 JUDGE GLEASON: Go ahead. 7 BY MR. CZAJA: (Resuming) 8 Q Who is, or what was Mrs. Lawrence's connection 9 with your camp? A (WITNESS CO) Mrs. Lawrence was the 10 11 professional field executive with responsibilities among 12 other things for the camp. 13 JUDGE PARIS: Professional field executive in 14 the girl scouts? WITNESS CO: Girl Scouting is basically a 15 16 volunteer organization. We do employ professional 17 executives, referred to as field executives. JUDGE PARIS: And that is her position? 18 WITNESS CO: In management positions. 19 BY MR. CZAJA: (Resuming) 20 Q So Mrs. Lawrence was in effect the 21 22 professional who was running the day to day operations 23 of the camp? Is that a fair statement? A (WITNESS CO) I don't know whether running the 24 25 day to day operations is a fair statement. Hers was the

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1 ultimate responsibility for it. 2 Q Did you ever discuss the problems raised in 3 your direct testimony with Mrs. Lawrence? 4 A (WITNESS CO) Mrs. Lawrence was asked to read 5 this testinony in draft. A brief discussion was held at 6 that time, yes. 7 Q Do you know if Mrs. Lawrence ever had a 8 conversation with a representative of a firm called 9 Parsons, Brinkerhoff? 10 A (WITNESS BURNHAM) No, I have no knowledge of 11 such a conversation. Q Do you know if Mrs. Lawrence ever told the 12 13 firm Parsons, Brinkerhoff --MS. POTTERFIELD: She said she has no 14 15 knowledge of any conversation. 16 MR. CZAJA: Judge, I would like my question to 17 be completed before there is an objection. JUDGE GLEASON: Let him complete his question. 18 BY MR. CZAJA: (Resuming) 19 Do you know if Mrs. Lawrence ever told the 20 0 21 firm of Parsons, Brinkerhoff, Boyd, and Douglas that in 22 her opinion it would take only one hour to locate the 23 hikers at the camp and return them to the base? MS. POTTERFIELD: I object, Your Honor. She 24 25 has said she has no knowledge of any conversation that

whoever this woman is ever had with anybody from
 Parsons, Brinkerhoff, and now I object to Mr. Czaja's
 testifying about it.

MR. CZAJA: Judge, I think I am entitled to direct her attention to a specific conversation that I have reasonable grounds to believe that in fact took place. This may refresh her recollection.

3 JUDGE GLEASON: We will let her go for a
9 little bit here, Ms. Potterfield. You can then move to
10 strike it.

MS. POTTERFIELD: She says she has no
 knowledge of it.

13 JUDGE GLEASON: Well, if she says no, then 14 that ends it.

15MS. POTTERFIELD: She has none. She has16 none. She has testified she has no knowledge of it.

JUDGE GLEASON: If she says no again, that is18 going to end it, isn't it?

19 BY MR. CZAJA: (Resuming)

20 Q Am I correct that you have no knowledge of 21 that conversation?

A (WITNESS CO) You are correct. I have no
knowledge.

24 Q What was Mrs. Lawrence's relationship to you 25 as far as running the camp in July of 1980? Did she

1 report to you, or were you in a different relationship?

A (WITNESS CO) In July of 1980?

Q Yes.

2

3

A (WITNESS CO) I am not sure that Mrs. Lawrence 5 and I would have had any direct official relationship at 6 that date. I have worked for the camp at various times, 7 and we would have had an employee-employer relationship 8 at that time, but I don't believe 1980 was involved.

9 Q Now, your direct testimony raises the problem 10 of Girl Scouts hiking in the event of an evacuation. 11 What provisions have you made to handle a medical 12 emergency in the hiking and picnicking situations?

(WITNESS CO) A medical emergency. Every 13 A troop involved in an outdoor activity is required to 14 have someone with them who is certified by the American 15 Red Cross to have completed a basic first aid course. 16 17 Additionally, troops are supposed to notify the ranger where they are going when they leave camp. Every troop 18 carries a first aid kit, and children who might be 19 expected to require medication in an emergency situation 20 are supposed to turn a supply of that medication over to 21 the leader responsible for them. 22

23 Q What if there is a medical emergency at the 24 other end, say if there is a family member of somebody 25 who is on a hike and has a medical emergency? How do

1 you get in touch with that individual? 2 A (WITNESS CO) The only way to reach a child or 3 an adult on the trail would be to send a runner after 4 them. 0 And do you do that on occasion? 5 A (WITNESS CO) It has never been done, to my 6 7 knowledge. Q Now, have you read the public information 8 pamphlet, "Indian Point Emergency Planning and You?" 9 (WITNESS CO) Yes, I have. 10 A Q Have you taken any steps to obtain assistance 11 12 or to convey your concerns to local officials, town 13 officials or representatives of the utilities? A (WITNESS CO) No. 14 0 Have you called the toll-free number that is 15 16 in the booklet? A (WITNESS CO) No. 17 0 Ms. Baff? 18 A (WITNESS BAFF) Yes? 19 Q I understand your concern is similar to that 20 21 of the situation of children who are at your gymnastics 22 center in the afternoon while their parents may be away 23 from home. A (WITNESS BAFF) Yes, and it could be all day. 24 25 It could be any time during the day.

1 Q I am sorry. Any time during the day, when the 2 parents may be away from home. How do you handle other 3 emergencies that may arise when the children are at the 4 gymnastics center and when the parents are away?

5 A (WITNESS BAFF) If we have ever had a medical 6 emergency, we call the Yorktown Ambulance Corps. We can 7 call the police station. There are a group of doctors 8 around the corner from us. The children are only at our 9 school for an hour or an hour and 15 minutes. We have 10 medical emergency numbers, if there is a medical 11 emergency, to call the father at work, or a friend that 12 has been given permission to give us permission to do 13 whatever we need to do.

14 Q So you do have some sort of records of the 15 parents' business phone numbers or a friend of the 16 parents that you can contact in the event of an 17 emergency?

18 A (WITNESS BAFF) Yes.

19 Q And again, I note that you are of the opinion 20 that the emergency brochure does not adequately address 21 your situation. Have you taken any steps to go beyond 22 the emergency brochure and contact anybody about your 23 concerns?

A (WITNESS BAFF) I called the bus company in
25 Yorktown and asked if a bus would be available to us. I

had spoken to the police department. I had spoken to -Hy center is located in a school which is the community
center for Yorktown, and I asked if there were any
provisions that could be made for us, and there are no
provisions for us.

Q What did the police department tell you?
A (WITNESS CO) They told us that they are
8 unierstaffed, and they have something like 20 cars, and
9 they would not be available to help us.

10 Q Did the police department say they would not 11 be able to provide a car to transport the children in 12 the event of an emergency, or did the police department 13 say they would not be able to help you in any 14 emergency?

A (WITNESS BAFF) No, just that they would not be able to provide a car or any kind of possible transportation, which is what we would need in an evacuation. My understanding was that the best thing for me to do was just stay in the school and wait for the parents to come pick up their children

21 Q Have you called the coll-free number in the 22 emergency brochure?

23 A (WITNESS BAFF) I didn't get a booklet.
24 Q I am sorry. I understood your testimony -25 A (WITNESS BAFF) I had borrowed a booklet from

1 a friend that had received the booklet. I have never 2 received a booklet at my center or at my home. 3 Q I understood your conclusion to be in your 4 testimony that the emergency brochure ices not 5 adequately address your situation. Is that correct? 6 A (WITNESS BAFF) I don't have that in my 7 statement. Q I am sorry. Let's look at six lines from the 8 9 bottom. (WITNESS BAFF) Oh, I see it. A 10 Q You do say that? 11 12 A (WITNESS BAFF) Yes, I say it, but I 13 personally never received a booklet. I had to go out 14 and get a booklet from a friend that had received one. 15 Q But you studied this booklet that you received 16 from a friend sufficiently to reach the conclusion that 17 it does not adequately address your situation? Is that 8 correct? A (WITNESS BAFF) Yes. 12) Q But you did not contact the toll-free number 20 that is contained in the booklet? 21 A (WITNESS BAFF) Yes, that is right. 22 MR. CZAJA: I have no further questions. 23 BY MR. FARRELLY: 24 Q Ms. Co, do the Girl Scouts have a contingency 25

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plan to deal with emergencies other than nuclear
 emergencies? And I am not talking about individual
 medical problems. Large-scale emergencies, chemical
 spills, things like that.

5 A (WITNESS CO) Yes, they do. You are talking6 about with regard to the camp?

7 Q With regard to the camp.

8 A (WITNESS CO) Yes.

9 Q How would you implement such a contingency
10 plan, assuming the buses -- there are no buses to
11 transport the children back?

A (WITNESS CO) I say, yes, they do, because I know from our standards that every camp is required to have written plans of that nature. I know from working at camp what our fire drill evacuation, for instance, calls for. What the situation is with bus transportation out of the area, I do not know.

18 Q Do you know if the plan that you referred to
19 has any provisions for hikers, contacting hikers,
20 getting them off the trails?

21 A (WITNESS CO) I have no knowledge directly, 22 no.

Q Ms. Kesselman, does your educational center
have any contingency plans for evacuating your students
in emergencies other than a radiological emergency?

1 A (WITNESS KESSELMAN) No, we do not.

2 Q Ms. Baff, would you tell me what you would do 3 if there were an emergency other than a radiological 4 emergency that required you to do something with the 5 students under your care, a chemical spill in the area, 6 for example?

7 A (WITNESS BAFF) A chemical spill in the area?
8 You mean, the other people would have to be evacuated
9 also?

10 Q Yes.

A (WITNESS BAFF) I don't know what I would do. I think most likely I would wait for the parents to come. I would not want to take the responsibility of taking the children out. If I had to, what I would do in an emergency, I would call the police department and ask them what they suggest that I do.

17 MR. FARRELLY: No further questions, Your18 Honor.

JUDGE GLEASON: Any redirect? 19 MS. POTTERFIELD: Just a bit. 20 REDIRECT EXAMINATION 21 BY MS. POTTERFIELD: 22 Mrs. Burnham --23 0 (WITNESS BURNHAM) Yes? A 24 0 -- you were asked on cross examination what 25

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efforts, whether or not you had called the toll-free
 number in your brochure to express your concern.

3 A (WITNESS BURNHAM) Yes.

Q My question is, what efforts have you made, if 5 any, to bring your concerns to the attention of the 6 officials involved in the emergency planning effort?

7 A (WITNESS BURNHAM) I just talked to local 8 groups on an informal basis. I haven't really done 9 anything in an organized way. But there just doesn't 10 seem to be bus plans enough for groups like in the 11 library, and I am not sure how much transportation could 12 be provided for them.

13 Q Have you finished your answer?

A (WITNESS BURNHAM) Yes. I was just trying to think of someone else I might have expressed my concerns to, but I think most of the groups feel the same way I do, that there just isn't adequate planning for us.

18 Q Mrs. Co, you have been cross examined about 19 someone named Mrs. or Ms. Lawrence, and you testified 20 under that questioning that you had had a brief 21 conversation with Ms. Lawrence during which you showed 22 her a draft of your testimony. Will you tell us now 23 whether she told you at that time that she disagreed 24 with you?

25 A (WITNESS CO) My question to her was, have you

1 any problem with this? Her answer was, no. 2 MS. POTTERFIELD: Thank you. That is all the 3 questions I have. 4 BOARD QUESTIONS BY JUDGE PARIS: 5 Q Ms. Baff, is your home in Yorktown Heights 6 7 within the EPZ? 8 A (WITNESS BAFF) Yes, it is. 9 0 Is the Yorktown gymnastics center within the 10 EPZ? 11 A (WITNESS BAFF) Yes. 12 JUDGE PARIS: Thank you. 13 JUDGE GLEASON: All right, ladies, you are 14 excused. Thank you for your testimony. (Witnesses excused.) 15 JUDGE GLEASON: Why ion't we take a 16 17 five-minute break? (Whereupon, a brief recess was taken.) 18 19 20 21 22 23 24 25

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1	JUDGE GLEASON: Could we get started, please?
2	MS. POTTERFIELD: Our next witness is Mr.
3	Oscar Cohen.
4	Whereupon,
5	OSCAR COHEN
3	was called as a witness by counsel for NYPIRG and,
7	having been duly sworn by the Chairman, was examined and
8	testified as follows:
9	DIRECT EXAMINATION
10	BY MS. POTTERFIELD:
11	Q Mr. Cohen, would you state your name and
12	address for the record, please?
13	A (WITNESS COHEN) Oscar Cohen, 20 Burd Street,
14	Nyack, New York.
15	JUDGE GLEASON: Would you speak into the
16	microphone?
17	BY MS. POTTERFIELD: (Resuming)
18	Q Do you have before you the testimony you wish
19	to present to the Atomic Safety and Licensing Board?
20	A (WITNESS COHEN) I 10.
21	Q Do you have any additions or corrections to
22	your testimony?
23	A (WITNESS COHEN) At the bottom of page three
24	there is a typographic error. The first should be "do"
25	and not "to".

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1	Q At the bottom of page three?	
2	A (WITNESS COHEN) Yes. "Their cars do not have	
3	calios."	
4	Q So that sentence should read" "Their cars	
5	generally do not have radios, since the radio would have	
6	no function."?	
7	A (WITNESS COHEN) Correct.	
8	Q And with that correction, Mr. Cohen, is the	
9	testimony true and accurate to the best of your	
10	information and belief?	
11	A (WITNESS COHEN) Yes.	
12	MS. POTTERFIELD: I move the admission into	
13	evidence of the testimony of Oscar Cohen as if read.	
14	JUDGE GLEASON: Is there objection?	
15	(No response.)	
16	JUDGE GLEASON: Hearing none, the testimony	
17	will be received into evidence and bound into the record	
18	as if real.	
19	(The prepared testimony of Mr. Cohen follows:)	
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ALDERSON REPORTING COMPANY, INC.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Administrative Judges:

Louis J. Carter, Chairman Dr. Oscar H. Paris Frederick J. Shon

In the Matter of

CONSOLIDATED EDISON COMPANY OF NEW YORK (Indian Point, Unit 2)

Docket Nos. 50-247-SP 50-286-SP June 4, 1982

-MS EA

POWER AUTHORITY OF THE STATE OF NEW YORK (Indian Point, Unit 3)

> TESTIMONY OF OSCAR COHEN 20 BURD STREET, NYACK, NEW YORK

> > RELATING TO CONTENTION 4.4

My name is Oscar Cohen. I reside at 20 Burd Street, Nyack, N.Y. 10960. I have an MA degree from Teachers College of Columbia University in Education. I am Principal of the Lexington School For The Deaf in Jackson Heights, New York.

I have grown up in a family where my parents have been profoundly deaf from birth.

Deafness is an invisible handicap. Deaf persons cannot be identified as disabled, or needing special help, by sight. As a result they are often treated as though they comprehend what is going on around them when they do not. For example, a deaf person in an airport cannot hear a special announcement concerning a delay or

for West Branch Conservation Association, Inc. 443 Buena Vista Road New City, N.Y. 10956 914/634-2327 by Zipporah S. Eleicher

by Zipporah S. Fleisher Secretary change in schedule, or to report to a desk. It would not be possible for an airline employee to identify adeaf person to lend assistance.

There are about 13 million hearing impaired persons in the United States. Their hearing losses range from profound to moderate. These persons experience difficulty in being kept informed of surrounding events, especially in emergencies, due to their lack of access to information communicated through mass media, including radio, t.v., public address systems and telephones. Also, frequently a breakdown in communication occurs when a deaf person talks to a hearing person who is not aware of a hearing impairment. The unusual sounding voice of the deaf person often surprises the hearing person, resulting in increased anxiely and a desire for withdrawal. While this behavior is understandable, it is problematic, especially in times of emergency.

Prelingually severely and profoundly deaf persons experience language acquisition difficulties. Syntactic and semantic difficulties often present obstacles to communication between deaf and hearing persons. American Sign Language is the most common form of manual communication for hearing impaired persons who use manual communication. It is not English and is very difficult to learn by non-hearing impaired persons wishing to learn it.

This background is presented to describe the implications to the hearing impaired community of an emergency evacuation plan.

- 2 -

In the case of an emergency evacuation due to radioactive leakage from a nuclear power plant, notification of the emergency would be primary. T.V., radio and loudspeaker announcements would be made as well as sirens sounded. Deaf persons would not respond to any of these. In the case of t.v. where captions would be flashed on the screen, it must be understood that deaf persons do not find t.v. a popular form of entertainment. This restricts the number of deaf persons watching it at any given time. Watching t.v. for a deaf person is like a hearing person watching it without the sound turned on.

Telephones are ineffective for notifying deaf persons of an emergency. The sender must have telecommunication equipment, as well as the deaf person, receiving the message. Telecommunication equipment is expensive, ranging in price from \$500 to \$1500. Many deaf persons do not have these systems. Telecommunication devices require about three times the amount of time to transmit a phone call as does a regular phone. The time delay, together with the language difficulties of prelingually deafened persons, would create formidable problems in an emergency for this population. Therefore, notification of an emergency to deaf persons through mass communication would be difficult, if not impossible.

Should an evacuation plan be implemented, the deaf person would be at a loss concerning events, receiving directions and in having basic needs met. While many deaf persons drive cars, their cars generally to not have radios, since the radio would have no function. No

- 3 -

instructions could be received by a deaf person while driving in a car.

Living accomodations would present another problem in an evacuation. Deaf persons need light, since communication is visual. Routine provisions for mass housing would not likely take into account the special lighting needs of the deaf. Lack of lighing would also contribute to safety problems, since many instructions concerning where to step, when to duck, and how to proceed in a dark place are done through auditory means.

Hearing impaired persons are dependent on their homes for communication, security and safety. In fact, a deaf person's home, with special devices, is analagous to an emergency shelter. Removal from this special place would result in extensive problems.

It is my opinion that, due to the exceptional communication problems faced by hearing impaired persons, the unpreparedness and lack of training of those likely to come into contact with deaf persons in an emergency situation, the importance of mass media to communicate with the deaf and the unique facility-related needs of this population, evacuation as a means of meeting the needs of hearing impaired persons in a nuclear radiation leakage emergency is inadequate, unworkable and potentially harmful.

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1 MS. POTTERFIELD: The witness is available for 2 cross examination. 3 JUDGE GLEASON: All right. 4 MR. FARRELLY: No questions, Your Honor. MR. CZAJA: I have no questions of this 5 6 witness. 7 JUDGE GLEASON: No questions? This is such a 8 surprise, Mr. Cohen, we have to take a minute to digest this. 9 10 (Laughter.) MR. BRANDENBURG: A pleasant one, I trust, Mr. 11 12 Chairman. (Board conferring.) 13 BOARD EXAMINATION 14 BY JUDGE GLEASON: 15 Q I guess I would ask a general type question. 16 17 Certainly there are people with hearing impairments that 18 live around areas where disaster could occur -- near 19 flood areas, dams that might break and so forth. 20 Generally what kind of precautions are taken with 21 respect to those people in those areas, if you know? 22 How are they put within the mainstream of being 23 notified, if you will, if something goes wrong? A (WITNESS COHEN) Generally they are overlooked 24 25 except if they have friends or relatives who will look

out for them. Otherwise, no precautions are made in
 general.

JUDGE GLEASON: There is no kind of provision 4 that I know of, certainly, where a list of people with 5 hearing difficulties are collected. That is what I 6 thought.

7 All right. Well, thank you very much. Do you8 have a guestion, Judge Paris?

BY JUDGE PARIS:

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10 Q The brochure that was sent out by the 11 utilities with respect to emergency planning had a card 12 attached that could be sent back by physically-impaired 13 persons. I would assume that some hearing-impaired 14 persons returned the cards. Do you know whether any 15 response to those cards, to such cards, has been made by 16 the County or anyone?

A (WITNESS COHEN) I do not. A large number of
profoundly deaf from birth hearing-impaired persons
would not have understood the booklet or brochure
because of their limited English proficiency, but I
don't know the answer to the guestion.

22 JUDGE PARIS: Thank you.

JUDGE GLEASON: Thank you very much, Mr.
24 Cohen. We appreciate your testimony.

(The witness was excused.)

1 MS. POTTERFIELD: Clifford and Nancy Rowley, 2 and Dominic Sbarra. 3 Whereupon, CLIFFORD ROWLEY, 4 NANCY ROWLEY, 5 AND 6 7 DOMINIC SBARRA 8 were called as witnesses by counsel for NYPIRG and, having been duly sworn by the Chairman, were examined 9 10 and testified as follows: MS. POTTERFIELD: Judge Gleason, before we go 11 12 into the testimony, I don't mean this as blackmail but I 13 wondered if I could raise to the Board formally the 14 question of payment for the translator that we arranged 15 to have some from the Office for the Disabled. She is 16 here because it was necessary for these witnesses that 17 she be here, and we would like to make our request 18 formally to the Board for payment for her services. JUDGE GLEASON: All right. We attempted to 19 20 get an answer to whether we have the authority to do 21 that and we believe we might be able to but we are not 22 certain of it. But, in any event, let's try and then if 23 we could get a statement from you for your services, we 24 will attempt to get you reimbursement. MS. POTTERFIELD: Thank you very much. 25

JUDGE GLEASON: We can rationalize this on the 1 2 basis that we are providing it for the Staff to cross 3 examine if the Staff wanted to cross examine. DIRECT EXAMINATION 4 BY MS. POTTERFIELD: 5 6 Q Mr. and irs. Rowley, would you state your name 7 and address or your names and address for the record? 8 A (WITNESS NANCY ROWLEY) My name is Nancy Rowley. I live at 1496 Washington Street, Peekskill, 9 10 New York, 10566. 11 A (WITNESS CLIFFORD ROWLEY) My name is Clifford 12 Rowley. I live at 1496 Washington Street, Peekskill, 13 New York. 14 Q Mr. and Mrs. Rowley, do you have before you a 15 copy of your joint testimony that you wish to present to 16 the Atomic Safety and Licensing Board? A (WITNESS NANCY ROWLEY) Yes, I do. 17 Q Does either of you have any addition or 18 19 correction to that testimony? A (WITNESS NANCY ROWLEY) No. 20 21 Q Is that your answer, Mr. Rowley? A (WITNESS CLIFFORD ROWLEY) Yes. 22 0 Is the testimony true and correct to the best 23 24 of your information and belief? 25 A (WITNESS NANCY ROWLEY) Yes.

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A	(WITNESS CLIFFORD ROWLEY) Yes.
	MS. POTTERFIELD: I move the admission of the
testimony	of Clifford and Nancy Rowley into evidence as
if read.	
	JUDGE GLEASON: Is there objection?
	(No response.)
	JUDGE GLEASON: Hearing none, the testimony of
the witnes	sses will be received into evidence and bound
into the r	ecord as if read.
	(The prepared testimony of Clifford and Nancy
Rowley fol	lows:)
	testimony if read. the witnes

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WESTCHESTER COMMUNITY SERVICES FOR THE HEARING IMPAIRED 1496 Washington Street, Peekskill, N.Y. 10566

June 3, 1982.

INSERT#12 C

This is the statement of Clifford Rowley and Nancy Rowley of Peekskill, N.Y. We are both deaf.

Mrs. Rowley is President of Westchester Community Services for the Hearing Impaired, and Mr. Rowley is President of the New York City Civic Association of the Deaf, a branch of the Empire State Association of the Deaf.

Because we are both active as advocates on becalf of the deaf and the hearing impaired, we are frequently asked to address planners and policy makers.

We would like to inform the Atomic Safety and Licensing Board that present plans for an emergency response in case of an accident at the Indian Point Nuclear Power Station do not adequately address the needs of the deaf and hearing-impaired population.

According to a report by the NYU Deafness Research and Training Center based on figures from the 1970 census, there are 58,000 people with hearing problems in Westchester County. Of these, 6000 are deaf.

The towns of Yorktown, Ossining, Cortlandt, and the City of Peekskill comprise about 13% of the total population of Westchester. Our experience indicates that deaf people are not proportionately represented in the population of Northern Westchester - the cost of living is high and jobs for the deaf are scarce, and where we might expect to find 600 deaf people according to statistics living within the 10 mile emergency planning zone in Westchester.

Some of these individuals are parents of young children. We ourselves have two children who attend schools in Peekskill and Ossining.

Our socilty has not done much to eliminate the formidable barriers which prevent communication between the hearing and the deaf. Obviously we would not be able to hear any siren warnings or radio broadcasts concerning an emergency at Indian Point.

The TTY system is a breakthrough, but very few deaf people have this sophisticated equipment.

Continued...

It is our understanding that Con Ed has a TTY terminal in Brooklyn. We would like some assurance that we and others in the 10 mile planning area would be called in case of an emergency at Indian Point (TV, open caption news etc.) According to FCC ruling, open captions are required on emergency warnings. T.V. stations in the N.Y. City Metropolitan area do not usually broadcast these warnings. The ruling is mandated but our experience has been that this requirement is sometimes ignored.

- 2 -

Lipreading while watching T.V. is an insurmountable task. An expert lip reader can only understand about 30% of what is said in a face-to-face conversation, and much less of what transpires on T.V. <u>It depends on</u> the individual, but in most cases, lipreading produces gross misunderstanding.

All our communication systems, the T.V., the TTY, and our doorbell, depend on flashing electric lights. We are very concerned about what will happen to our power supply in case of an accident at Indian Point. Even the siren warning system for the hearing population may be vulnerable on this point.

Our involvement with the deaf community has taught us that the deaf are reticent about themselves. In general, deaf people do not come forward demanding benefits, but must be sought out in order to be advised of available services. It will take a determined search to notify all the deaf and hearing-impaired people of the emergency plans and of any special help which might be provided.

Our family received an emergency planning brochure and we sent in the post card advising of our special needs. To date we have not had a reply.

Deaf children frequently have emotional problems due to the frustrations of communication. They may become more easily frightened than a hearing child who can comprehend to some degree the nature of the emergency.

We are a very unusual family. Since we are both highly expert in the field of deafness and our home is equipped with a TTY, we are in the best position of any of the deaf population to respond quickly in an emergency. Yet we are concerned about getting accurate information and warnings to protect ourselves and our children.

1 BY MS. POTTERFIELD: (Resuming) 2 Q Mr. Sbarra, do you have before you -- would 3 you state your name and address for the record, please? 4 A (WITNESS SBARRA) My name is Dominic Sbarra, 5 14 Pershing Avenue, Ossining, New York. 6 Q Do you have before you, fr. Sbarra, a copy of 7 the testimony that you wish to present to the Atomic 8 Safety and Licensing Board? A (WITNESS SBARRA) Yes. 9 10 Q Do you have any additions or corrections to 11 your testimony? 12 A (WITNESS SBARRA) No. 0 Is the testimony true and accurate to the best 13 14 of your information and belief? A (WITNESS SBARRA) Yes. 15 MS. POTTERFIELD: I move the admission into 16 17 evidence of the testimony of Dominic Sbarra as if read. 18 JUDGE GLEASON: Is there objection? MR. CZAJA: Judge, we have stated our 19 objections in our written motion. If you want me to go 20 through them again, I will. 21 JUDGE GLEASON: I don't believe that is 22 23 necessary. The Power Authority has an objection also --24 I mean, Con Edison has an objection also. 25 Mr. FARRELLY: Yes, we stated our reasons on

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1 page 14 of our motion, Your Honor.

MS. POTTERFIELD: Con Edison has objected,
Your Honor, that the testimony of Dominic Sbarra does
not allege non-compliance with NRC and FEMA guidelines
and that it only deals in general terms with the
problems developing in an evacuation plan. Further, Con
Edision challenges the testimony because Mr. Sbarra does
not himself present any improvements that should be made
in that plan.

I submit it is patently frivolous. The Power Authority challenges all of Mr. Sbarra's testimony, I think, beginning with line nine on page one. Can you help me out, Mr. Czaja as to whether or not that goes all the way to the end of the testimony?

15 MR. CZAJA: No, it doesn't.

16 MS. POTTERFIELD: Will you tell me where it 17 enis?

18 MR. CZAJA: The first objection ends at line
19 16 on page one. The second objection ends at line
20 seven. Do you want me to read the line to you?

21 MS. POTTERFIELD: That's all right. I am 22 counting while you are talking.

MR. CZAJA: Line seven of page two -- "the
other real and insurmountable problem". The next
objection begins at "the best feasible plan" and ends at

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1 "public control."

2	MS. POTTERFIELD: It ends where?
3	MR. CZAJA: After "public control."
4	MS. POTTERFIELD: As to the relevance
5	objection, it our argument that Mr. Sbarra's
6	understanding of the emergency response plans for Indian
7	Point is entirely relevant. The objection is to his
8	testimony that it is reported that Con Ed is requested
9	to come up with a workable plan within 120 days and also
10	that Westchester has received 100 percent cooperation
11	from officials in several neighboring counties, 100
12	percent, when these officials are at a complete loss to
13	know what to do in case of an emergency.
14	There is little or no cooperation from the

There is little or no cooperation from the concerned parents and grandparents of beautiful innocent children, from the sick and the elderly, from the deaf and other handicapped people living comfortably in their sown homes. It is our argument that that testimony and that the remaining part that is objected to is certainly relevant.

As to the objection that begins on line 17 --22 oh, I see. That is what I just read. That was objected 23 to as being hearsay and speculative. It is Mr. Sbarra's 24 testimony as to his understanding of the plan and since 25 it is his understanding of the plan, it is not

1 necessarily hearsay unless we learn from which source he 2 has that understanding. It may well be his 3 understanding from the brochure or otherwise. 4 My argument about the relevance of the 5 testimony remains. JUDGE GLEASON: What was the second-to-last 6 7 comment that you made, Miss Potterfield? MS. POTTERFIELD: That we submit, as we did in 8 9 response to the Con Edison argument that the testimony 10 is irrelevant that it certainly is relevant since it has 11 to do with the problems of this deaf individual in being 12 adequately protected by these emergency plans. (Board conferring.) 13 14 15 16 17 18 19 20 21 22 23 24 25

JUDGE GLEASON: The Board's ruling is that the testimony of Mr. and Mrs. Rowley is admissible. They talk about problems of the deaf dealing with this plant. The testimony of -- and so therefore -- well, there was no objection to that anyway.

6 The testimony with respect to Mr. Sbarra, the 7 Board's ruling is that the testimony is not material, 8 ani it does not talk about the problems of the deaf in 9 dealing with this emergency plan, and therefore has to 10 be excluded, and the licensees' motion is granted to 11 that extent.

12 So, Mr. Sbarra, we will have to excuse you. 13 MS. POTTERFIELD: Judge Gleason, I understood 14 that the licensees, or you are granting Con Edison's 15 objection to Mr. Sbarra on the ground that Mr. Sbarra --16 all of Mr. Sbarra's testimony is immaterial?

JUDGE GLEASON: That is right. Mr. Sbarra, we
18 will have to excuse your testimony. We thank you for
19 coming.

20 (Witness excused.) 21 JUDGE GLEASON: The testimony of the other 22 witness -- well, I think it has already been received. 23 MR. CZAJA: I have no questions for the 24 Rowleys.

25

MR. BRANDENBURG: We have no questions, Mr.

1	Chairman.
2	MR. HASSELL: I have one general question, if
3	I may.
4	CROSS EXAMINATION
5	BY MR. HASSELL:
6	Q Mr. and Mrs. Rowley, my name is Mr. Hassel,
7	counsel for NRC staff. Are you familiar with the
8	ten-mile plume exposure pathway emergency planning zone
9	for Indian Point?
10	A (WITNESS NANCY ROWLEY) Yes, we are.
11	MR. HASSELL: I have no further questions.
12	JUDGE GLEASON: Thank you, Mr. Hassell.
13	BOARD QUESTIONS
14	BY JUDGE PARIS:
15	Q Mr. and Mrs. Rowley, did you receive the
16	emergency planning brochure that was sent out by the
17	utility companies?
18	A (WITNESS NANCY ROWLEY) Yes, we did.
19	Q Did you return the card that was attached to
20	that brochure?
21	A (WITNESS NANCY ROWLEY) Yes, we filled it out,
22	but we haven't heard a word.
23	Q You returned the card, and you have heard
24	nothing back from them?
25	A (WITNESS NANCY ROWLEY) That is right.

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JUDGE PARIS: Thank you.

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2 WITNESS CLIFFORD ROWLEY: According to this 3 brochure, there is this -- there is a statement about special service needs in time of emergency. They will 4 5 notify us how we will be informed of the evacuation 6 plans or of the emergency through all kinds of radio 7 stations. We are not able to hear radio. And then they 8 also said something about people being notified, and we 9 sent the card to them. It is 13 months since we got 10 this brochure, and we have not heard one word from Con 11 Edison. We want to know what their plans are. To this 12 day we have no idea how they want to help us. We are 13 willing to help them, but have not heard from them yet. JUDGE GLEASON: All right. Well, we thank you 14 very much for your testimony. We appreciate your 15 16 coming. Thank you. 17 (Witnesses excused.) JUDGE GLEASON: Does that bring us up to this 18 19 evening's session? MS. POTTERFIELD: Judge, we have completed our 20 witnesses for today. However, we would request that Mr. 21

22 Sbarra be permitted to give his testimony as a limited23 appearance.

24 JUDGE GLEASON: All right. That will be fine.
25 MR. BRANDENBURG: No objection from Con

1 Edison.

2 MS. POTTERFIELD: Mr. Sbarra is called to the 3 stand to make a limited appearance statement.

JUDGE GLEASON: Why don't you lead him, Ms.
5 Potterfield?

6 MS. POTTERFIELD: Mr. Sbarra, the Atomic 7 Safety and Licensing Board would like to hear your 8 testimony as a limited appearance statement, so that 9 they would like you to explain, to summarize your 10 statement, so that they can note what it says, although 11 they won't ask you any questions about it necessarily, 12 but we want you to give us a summary of your statement, 13 if you will, please.

14 Whereupon,

15

DOMINIC SBARRA

16 was called as a witness, and having been previously duly17 sworn, was examined and testified as follows:

18 LIMITED APPEARANCE STATEMENT

19 WITNESS SBARA: My wife, Carolyn, and I have20 been deaf since birth.

21 MS. POTTERFIELD: Excuse me. Could the
22 translator use a microphone?

23 WITNESS SBARRA: She is -- Starting again, my
24 wife, Carolyn, and I have been deaf since birth. She is
25 64 and retired. She had operated a luncheonette

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business for 23 years. I had been an employee of Hudson
 Wire Company for 46 years.

After seven months' retirement, I was employed by Patricia Apartments as maintenance manager. People of all walks of life live in these 100 apartments. The sick and the elderly, young couples with robust children, and business people, all overlooking the Indian Point station.

9 We are grandparents genuinely concerned about
10 Indian Point. We have two beautiful grandchildren
11 living at Patricia Apartments. They is not understand
12 the harsh reality of life, the possibility of being
13 maimed permanently in case of a nuclear mishap.

Working as maintenance manager, I can from
high ground see the imposing domes of the nuclear plant
a mere stone's throw away. Every time I look at the
domes, I think of Three Mile Island. It is a scary
thought.

19 It is reported that Con Edison is requested to 20 come up with a workable plan within 120 days and also 21 that Westchester has received 100 percent cooperation 22 from officials in several neighboring counties. One 23 hundred percent, when these officials are at a complete 24 loss to know what to io in case of an emergency? There 25 is little or no cooperation from the concerned parents

and grandparents of beautiful, innocent children, from
 the sick and elderly, from the deaf and other
 handicapped people living comfortably in their own
 homes.

5 They have no desire to be uprooted and 6 evacuated even if a real emergency exists and severe 7 logistical problems have been resolved. No official is 8 able to foresee all the possible consequences of an 9 evacuation, housing and feeding problems, looting, 10 security, traffic jams, panic, and other real 11 insurmountable problems.

12 The Con Ei plan, or any other plan, for that 13 matter, is no real plan because destruction by radiation 14 is qualitatively different from destruction by flood, 15 earthquake, or fire.

16 The best feasible plan is to shut down this 17 atomic monster and keep it shut down until it is made 99 18 percent safe. This is possible only under public 19 control. It is only the federal and state governments 20 that have the necessary financial resources to institute 21 very expensive but vital safety measures. Private 22 profit and public safety do not mix.

23 The evacuation plan, if carried out, would be
24 a needless, terrible waste of taxpayers' good money.
25 Money that originally built Indian Point, this good

money could be put to better use running Indian Point
more safely. Several serious nuclear mishaps have
occurred at Indian Point in the space of several years.
A number of times, Con Ed officials who operate under
the aegis of the Nuclear Regulatory Commission have
failed to report a nuclear accident for many days. This
is unconscionable and all the more reason for public
ownership.

JUDGE GLEASON: Thank you very much.
(Witness excused.)
MS. POTTERFIELD: I don't know if there is
another limited appearance statement, Judge, but our
next witness panel is scheduled to come at 6:00
o'clock.

MR. GLASS: Your Honor, just as a point of 15 clarification. I have been in touch with Mr. Feinberg of 16 New York State. Mr. Feinberg has indicated to me that 17 the New York State Exhibit Number 9 does contain 18 information as to the schedule of training that took 19 place between March of 1982 and February of 1983, 20 including the county in which the training took place, 21 the class of people that were trained, that is, police, 22 fire, volunteer ambulance drivers, the date the training 23 took place, and the number of people who attended that 24 25 we inquired into.

1	These witnesses will be available at the time
2	scheduled to answer those questions.
3	JUDGE PARIS: Thank you, Mr. Glass.
4	JUDGE GLEASON: All right. I guess we will
5	stand in recess until 6:00 o'clock, and proceed at that
6	point.
7	(Whereupon, at 4:20 p.m., the Board was
8	recessed, to reconvene at 6:00 p.m. of the same day.)
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NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the matter of: CONSOLIDATED EDISON COMPANY OF NEW YORK (Indian Point (Unit 2) - POWER AUTHORITY OF THE STATE OF NEW YORK (Indian Point Unit 3)

· Date of Proceeding: March 16, 1983

Docket Number: 50-247 SP and 50-286 SP

Place of Proceeding: _____White Plains, New York

were held as herein appears, and that this is the original transcript thereof for the file of the Commission.

Ray Heer

Official Reporter (Typed)

Official Reporter (Signature)